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AGRANULOCYTIC ANGINA—A GENERAL DISCUSSION OF THE DISEASE AND TREATMENT

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OUR first knowledge of agranulocytic angina comes to us through Werner Schultz in Germany, who discovered an apparently new syndrome which is described by A Leon in August, 1923, and he states that Schultz has since discovered five other such cases. In a paper published by W. Schultz and L Jacobowitz in October, 1925, they had encountered to date ten cases of agranulocytic angina and regarded only thirteen other cases in the literature as belonging to the category. Dr. J H Skiles, in January, 1925, reports a case and refers to an article by Dr. Beatrice R Lovett in the *Journal of the American Medical Association* as the first case described in America. Dr Lovett, before describing her case, remarks on the findings from reports of cases made in Germany and from her case draws a similarity to the symptoms of those previously described. Since these dates there has been a great deal in the literature about agranulocytic angina which seems to be generally accepted as a clinical entity. It should have an essential foundation for its characteristic blood picture, namely a marked reduction in the leukocytes and almost an absence, or extremely low percentage, of granulocytes. This, with a close similarity in the symptoms and pathological changes of the many cases described, permits a classification under the name of the blood picture and angina. In an article in the Bulletin of the Johns Hopkins Hospital for 1930 on Recurrent Agranulocytosis, it is stated by the writers, "Within the last several years the literature on agranulocytic angina and on agranulocytosis in general has become voluminous." This is very true. How strange it is that more had not been written on this subject long before, and not left to just these recent years, when careful studies of the blood were in existence long ago. It is unlikely that it is a new disease since 1922 or that recently new etiological factors have come about to produce it.

I have collected thirty two distinct cases described in the literature as agranulocytic angina besides five cases that have occurred in St Luke's Hospital, New York, and one reported to me by Doctor James R Scott in his practice, and one

case of my own of agranulocytosis without angina, following pneumonia. In 1927, V. Weiss in the *Zeitschrift für Klinische Medizin* reports 41 collected cases, and in 1928 C Aubertin and R Levy in the *Archives des Maladies du Cœur* report fourteen similar collected cases to the one they describe as agranulocytic angina, and U Friedemann in 1928 in the *Zeitschrift für Klinische Medizin* reviews 29 cases of the same. All this shows there has not been a scarcity of material in recent years for the compilation of facts.

There has not been any etiological factor proven in the decrease in leukocytes and granulocytes and the accompanying clinical syndrome. G Blumer, in the *American Journal of Medical Sciences*, in 1930, showed there are cases of local and general sepsis with an agranulocytic blood picture aside from the recognized group of agranulocytic anginas, and states that it is not clear whether the sepsis or the loss of power of the bone marrow to form granulocytes is the primary lesion. N Christof, in the *Wiener Klinische Wochenschrift* for March 14, 1929 reports a case of pyoderma two weeks after birth, and two weeks later hemorrhagic gastro enteritis and suppurative adenitis, and tonsils swollen and red without membrane or pus. The child recovered completely after several weeks. Christof believed the case was due to a streptococcus which was cultured, and states the study of the case proved that agranulocytosis is not a disease sui Generis, but rather a symptom of generalized infection. Dr Eugene C Plette, from observation at necropsy of Dr Skiles' case (reported in the *Journal of the American Medical Association* of May 9, 1925) noted a marked development in the cytoplasm of the sinus endothelium and an increase in the size of the reticular cells. Also bacterial emboli were found in capillaries of the liver, and in the cortex of the kidney, and some in the medullary substance. In the stomach a number of superficial foci of necrosis penetrated in places as deep as the muscularis mucosa. Gram stain of the ulcers showed gram positive streptococcus and staphylococcus and gram negative bacilli. He believes the necrotic changes made conditions favorable to a mixed in-

tion. He thinks these ulcerations were evidently due to bacterial emboli that had occluded the corresponding vessels, and further suggests the mouth lesions and ulcerations in the vagina of this case were due to bacterial emboli and were secondary lesions as a consequence of the septicemia. He states that they were unable to obtain a positive culture and thus identify the causal organism. Morphologically, they were gram negative in paraffin sections, two to four microns long, and about one micron thick, with rounded edges.

Sachs, in 1928, reported a case in which a pure culture of streptococcus was obtained from the throat of the patient. L. K. Gundrum in March, 1928, in the *Archives of Internal Medicine* reported a patient with agranulocytic angina. He states that at necropsy a pure culture of *B. coli* communis was obtained from the heart's blood and from the cervical lymphnodes. U. Friedemann, in the "Deutsche Medizinische Wochenschrift," December, 1927, on a paper on healing following roentgen irradiation of the long bones in four cases of agranulocytic angina, thinks it probable the disease is not an infection but originates in endogenous disturbance, perhaps of endocrine nature. H. L. Dwyer and F. C. Helwig in the *American Journal of the Diseases of Children* for 1928 report a case under observation for anaemia with enlarged salivary glands and spleen, that developed Vincent's angina, leukopenia, and a loss of polymorphonuclear cells in the blood. At necropsy, bacterial emboli were seen to have invaded the heart muscle, liver and kidneys.

In May, 1928 in the "Zeitschrift für Klinische Medizin" Berlin, U. Friedemann published an article on twenty-nine cases of agranulocytic angina. In 26 cases blood cultures anaerobic and aerobic were taken. In twenty cases the blood was negative, the streptococcus was found twice, the pneumococcus, staphylococcus, pyocyanus and colon bacillus one each.

J. Zikowsky, in the "Wiener Klinische Wochenschrift," Vienna, July, 1928, reported two cases in which streptococci were found in the blood. Herbert W. Dasse (in the *Journal of the American Medical Association*) in December, 1928, reports a case similar to that reported by Doctor Werner Schultz in 1922, in which almost a pure culture of *B. pyocyanus* was obtained from the throat. He also stated that injections of *B. pyocyanus* were made subcutaneously into guinea pigs and produced a slight reduction in the leukocytes and always a relative reduction in the granulocytes. A local ulcer formed at the site of inoculation, with a center of necrosis and slight inflammatory border. W. Schultz reported a case in 1927 with recovery in which the tonsillitis appeared late, which he states speaks for the theory that the tonsil is only a point of localization of the disease and not a portal of entry. Two cases were reported by G. J. Kastlin among 43 cases reviewed in the *American Journal of Medical Sci-*

ences. He says that the differential diagnosis in agranulocytic angina presents points similar to the reaction to specific poisons, lymphatic leukaemia, and cases of sepsis with leukopenia, and that it does not fall within the classification of these conditions but with the evidence at hand it cannot be called a clinical entity.

Joseph A. Moore and Henry S. Wieder in the *Journal of the American Medical Association* for 1925 report a case which showed staphylococci in cultures from the mouth and tonsils. Dr. Beatrice R. Lovett reports in the necropsy of her case that large numbers of bacteria, all gram negative, of different forms and sizes, infiltrated the necrotic tissue to the deepest parts. Also, *B. pyocyanus* was cultivated from the lesions in the throat and vagina after death. This, and a pneumococcus, were obtained from cultures in the spleen. Experiments on guinea pigs were made by intra-peritoneal injections of broth cultures of *B. pyocyanus*, containing an exudate. It had a toxic effect on the leukocytes, producing vacuoles and irregular staining. In July, 1929, in the *Missouri State Medical Association Journal*, J. C. Kopelowitz, in reporting a fatal case of agranulocytic angina, says that he does not believe agranulocytic angina is a distinct angina. He feels that there must be some factor, allergy, or possibly endocrine factor, that renders the haematopoietic system susceptible to a noxious agent. Leon Bromberg and Paul Murphy, in the *Journal of the American Medical Association*, describe a case following 12 days after the first injection of dead typhoid bacilli for prophylaxis, and four days after the second injection took place. They suggested in this case that the agranulocytosis may have resulted from an overwhelming foreign protein reaction in a sensitive individual. Of the five cases at St. Luke's Hospital, New York and the sixth of Dr. James R. Scott, the throat cultures obtained showed a variety of organisms — staphylococcus, streptococcus, streptococcus haemolyticus, non-haemolyticus and viridans, also Vincent's organisms. Only one case showed a positive blood culture, and that was a streptococcus haemolyticus. From the evidence at hand, nothing gives sufficient proof to attribute the disease to any one particular organism. As cases of agranulocytosis have been reported with ulcerations in other parts of the body than the tonsils or pharynx, it seems unlikely that the tonsils are necessarily the portals of entry. In Bromberg and Murphy's case a sore throat developed 12 days after the first injection for typhoid prophylaxis, and five days later occurred an ulceration with a necrotic base around the left upper molar, and a pustule of the right nasal orifice with cellulitis, a necrotic ulcer on the hard palate, and induration of the left major labia. This case showed almost a complete absence of granulocytes, and two eosinophiles. It was suggested from this the granulocytosis may have resulted from an overwhelming protein reaction in

a sensitive individual. It seems likely any bacterial protein could be responsible for producing such a condition in the blood when there is a susceptible bone marrow.

In the histopathological report of Eugene C. Piette on the case of Dr. James H. Skiles, which showed ulceration in the stomach and cervix as well as the throat and gums, enormous development was found in the sinus endothelium of the spleen. In some of the sinuses small masses were found which, when stained, proved to be mycotic emboli. Numerous bacterial emboli were found in the cortex of the kidney and some in the medulla. In the outermost liver of the necrotic focus of the ulcers of the stomach, gram stain showed gram positive staphylococci and streptococci. In this case it was suggested the mouth lesions and vagina and stomach were due to bacterial emboli, and were secondary lesions as a result of the septicaemia. In a case not included in this series of six I am reporting, a woman had had a mild jaundice for six months. She developed a pneumonia which had almost entirely cleared up, but with it a typical picture of agranulocytosis, very little anaemia, no reduction in the red blood cells, white blood cells ranging from 2,900 to 3,400 and polymorphonuclear leukocytes from 4 to 8%. She died in convulsions and had several attacks of haematemesis the day of her death. No ulcerations were found at necropsy. There was a subacute yellow atrophy, a haemorrhagic condition of the entire gastric mucosa and the oesophageal veins and the anastomoses between the mesenteric and parietal veins were greatly dilated. Very likely, the septic condition of the pneumonia had an action upon the bone marrow in depressing the granulocytes but did not result in ulceration or sore throat.

The disease, as first described, was said to occur in middle aged and old women starting in suddenly with high fever and general malaise soon followed by ulcerations and gangrene affecting always the pharynx (especially the tonsils) sometimes the tongue, larynx and vagina. The disease ended fatally in 3 to 14 days and the bone marrow did not contain leukocytes or myelocytes. As many more cases have come to light we see they are not limited to women and no age is exempt. Of 29 cases reviewed by Friedemann 5 were men and 24 women. Undoubtedly, the most frequent site of ulceration is the pharynx and mouth, but many other locations have been affected. I have found no record of ulceration of the colon and small intestine. Skin ulcerations have been reported, and ulceration of the vagina, vulva, and anus are not uncommon. Robert W. Buck of Boston reports a case of agranulocytosis where the only lesion that was found was an indolent ulcer of the anus. Of the six cases I report there was ulceration and gangrene of the tonsils or pharynx, or both, in four and redness and oedema in the other two cases. Two showed

enlarged cervical glands and one enlarged salivary gland with suppuration. As to duration of the disease, it varies, although if death occurs it is usually rapid. Of these six, one died on the second day and the others on the sixth, eighth and thirty-sixth day. The one dying the second day had a positive blood culture of streptococcus haemolyticus. The two other cases recovered. All but one of the cases ran temperatures from 103.8 to 106°F. That of Dr. Scott's was normal until a few days before death, when the temperature reached 102°F.

Jaundice has been described in a number of cases by different writers. The only one I have seen is the case I have mentioned of acute yellow atrophy. It is generally accepted that the disease is without haemorrhagic diathesis, and although a number of cases show a marked secondary anaemia, anaemia is not an outstanding feature. In some cases the erythrocytes have been increased. The platelet count is normal or slightly increased, which was found in all 29 cases of Friedemann. The outstanding feature of the blood count in the disease, and of the disease itself, is the leukocyte count and the granulocytic reduction. This, of course, is outstanding in all the case reports and is a necessary factor in the diagnosis. The lowest count in each of these six cases ranged from 525 leukocytes to 1,300 and granulocytes from zero to 16%. One case of 600 leukocytes and 4 granulocytes, and another of 1,100 leukocytes and 2 granulocytes, recovered. Lovett shows in her case that leukocytes on an average of four counts reached only 900 and never rose above 1,350. The bulk of the white cells were lymphocytes but with a high percentage of plasma cells 37%. Polymorphonuclear leukocytes were always below 5%. From absolute counts it appeared the reduction affected the lymphocytes as well as the granular cells but, of course, to a less extent. Blumer draws attention to the difficulty of diagnosis in cases of local and general sepsis with an agranulocytic blood picture, aside from the recognized group of agranulocytic angina, and says it is not clear whether the sepsis or loss of power of the bone marrow to form granulocytes is the primary lesion. Such cases, he says, cannot be differentiated clinically from acute aleukaemic lymphatic leukaemia with terminal infectious processes, and in some instances he says it may be difficult to differentiate between aplastic anaemia with terminal infection. On the other hand, Moore and Wieder comment on the differential diagnosis from aplastic anaemia, aleukaemic leukaemia, monocytic angina and septic angina and septic processes, by its frequent occurrence in middle aged women, absence of pallor, absence of marked anaemia, lack of haemorrhagic tendencies and a normal platelet count. And further, in the bone marrow, absence of neutrophils, myelocytes, myeloblasts, and the presence of erythro-

tes, erythroblasts and megacaryocytes are conclusive evidence of the disease.

Aubertin and Levy, on the agranulocytic syndrome of 14 cases from the literature, speak of the absence of (1) Important modifications in the number and quality of the erythrocytes and blood platelets, (2) Signs of haemorrhagic diathesis, (3) Metaplasia of the haematopoietic organs, (4) Common mechanisms of defense about the ulceronecrotic lesions, and characterize it by the presence of (1) A marked predominance in the female sex, (2) A severe infectious condition, (3) Ulceronecrotic lesions which are usually most marked in the bucco-pharyngeal mucosa, (4) A slight or intense icterus in the majority of the cases, appearing any time during the evolution of the process, (5) Marked leukopenia with similar disappearance of polymorphonuclears, (6) Course almost always fatal in a short time, (7) An alteration in the bone marrow, characterized essentially by the disappearance of granular white cells.

Of our six cases, four were females. Only one case was below 59 years. All showed an angina or stomatitis or both. Two showed only inflammation and oedema of the pharynx, the others ulcerations of the mouth, trachea, or tonsils, and gangrene of the pharynx in two. Four cases showed cervical adenitis and one swelling of the salivary glands. Two cases were complicated by pneumonia, one of these had a large sacral abscess, the latter case recovered. One case had a cellulitis around the ear with suppuration of the submaxillary gland and this, too, got well. The pneumonia that recovered showed an anaemia of a moderate degree and recovered from the agranulocytosis in one month. One other case showed a very slight anaemia, and the other four cases none at all.

A number of cases of recurrent agranulocytosis have been reported. R. H. Rutledge, O. C. Hausen-Pruss and W. S. Thayer, report a case of 20 years of age presenting a cyclic agranulocytic angina, beginning at the age of two and one-half months and recurring at intervals of approximately three weeks during his entire life. They found during the height of the attacks a large number of large mononuclear and transitional cells present in the blood and during the last two days of the illness, which lasted from 6 to 10 days, immature myeloid cells appeared. The red blood cells seemed unaffected and their number per cubic millimeter and haemoglobin remained normal. They mention a slight increase in the eosinophilic leukocytes. This case also showed as the commonest physical manifestations, a sore mouth with swelling and reddening of the gums, and shallow ulcerations of the gums, tongue, and buccal membranes, and lips, associated with a moderate degree of regional adenitis. L. K. Gundrum reports a case of a patient that died, that had had two previous at-

tacks. Dr. Minot is reported to have seen instances of recurrent agranulocytic angina with as many as four attacks, never more. In 29 cases reported by Friedemann, three recurrences took place. In one, the recurrence that took place six months after the first attack, proved fatal. Joseph A. Moore and Henry S. Wieder gave a case with two attacks, two years apart. The patient in this instance died the 16th day of the disease.

As to the pathology of the disease the findings are variable, but with definite outstanding features. Included in the etiology, description and course of the disease, the inflammation of the mouth and pharynx with ulcerations, and ulcerations in the gastro-intestinal tract, skin, and mucous membranes, have been discussed, also the association of bacterial emboli. It would seem that the ulcerations are more liable to occur in places that are exposed to trauma. In one of our cases that recovered, the duration of the disease being 28 days, a large abscess developed over the sacrum, as well as deep ulcerations of the tonsils. Regional swelling of the lymph and salivary glands frequently occur, and sometimes suppuration. Several authors report increase in the size of the spleen and liver. In one of our six cases an autopsy was obtained, and this showed an enlarged spleen with the characteristic swelling of acute infection. In the autopsy described by Piette, mention has been made of the enormous development of the sinus endothelium of the spleen (Irritation of the reticulo-endothelial system) at the expense of the lymphatic tissue. Not a single polymorphonuclear leukocyte was seen in the spleen or any other organ. Cytoplasm of the sinus endothelium was greatly developed and many mitoses present. In the liver in some places were seen diffuse perivascular lymphatic infiltration, while the capillaries and lymphatics were somewhat distended. In the liver, spleen and kidneys bacterial emboli were seen. Degenerative changes were found in the cells of the kidneys but no inflammatory changes. One writer reports cloudy swelling of the viscera with no changes in the bone marrow, but from the evidence gathered here it would appear there is an alteration in the bone marrow, characterized essentially by the disappearance of the granular white cells and their precursor, or that they are greatly diminished, while the lymphoid and red cell forming elements are slightly, if at all, reduced. Megacaryocytes have been present. Friedman, in his fourteen autopsies, states that erythroblasts and megacaryocytes were present in normal number. In three cases there was fatty marrow, and in seven cases red marrow, and in four cases the information was lacking. He also states the spleen, liver, and lymph glands were normal macroscopically and microscopically.

As to complications, pneumonia has not infre-

quently been mentioned. Abscesses and suppuration of the lymph and salivary glands have been brought in as in association with neighboring infected or ulcerated foci. One of our cases, that died on the 8th day of the disease, showed old pinhead purpuric spots over the lower extremities. Thrombo-poenic purpura is described by a number of authors as occurring quite frequently in the disease.

There is no doubt that agranulocytic angina presents a very grave outlook. But since the early descriptions by Schultz and Leon, with the increasingly large number of cases reported, it would seem to be of a much lower mortality than was first supposed. Leon, in speaking of Schultz's discovery of an apparently new syndrome in 1922, states in 1923 that he has since observed five other cases, and says that the disease ended fatally in 3 to 14 days. Of the 29 patients studied by Friedman, in half the cases that died death occurred within the 8th day. The mortality of the total number of cases was 21.06 per cent. The outcome of 32 separate reported cases I have investigated was 20 deaths and twelve recoveries. Adding to this the two recoveries and four deaths of the present reported series gives a percentage mortality of 58.3%. From the observation of our own cases and those reported by others, as well as their opinions, it seems that the fatality of the disease is greatly enhanced by extensive ulcerations and gangrenous necroses.

There is nothing to show, from the literature that has been reviewed, that there is any outstanding or specific therapy for agranulocytic angina. As one author emphasizes, who reported two cases of agranulocytosis that recovered without any special blood treatment, that as therapeutic measures are successful only in a small number of cases, despite this, as agranulocytosis is usually a grave condition, all therapeutic measures should be attempted, especially blood transfusions and radiotherapy. In 1927, Friedemann reported four cases treated with roentgen ray irradiation of the long bones, all of whom recovered, and in his review of 29 cases in 1928 he mentioned five cases that recovered. Walters and Firor in the Johns Hopkins Bulletin for May, 1931, draw attention to two cases reported later by Friedemann that survived irradiation of the long bones, and four which resulted fatally. These men point out that Friedemann has recently reported a series of 43 cases most of them treated with roentgen irradiation. Twenty-three of the patients died from complicating sepsis, and five within thirty-six hours after irradiation. Of the remaining fifteen uncomplicated cases, thirteen were reported as cured. They suggest it is possible that irradiation may aid in the formation of new bone-forming tissue in the long bones. Their experience has been limited to five cases. Four of them, treated from June

to November of last year, are still living. The fifth case treated by them was in extremist condition and in an institution where modern therapeutic measures were not available, and died two days following the first treatment. They say it is impossible to find the role played by the x-ray as all these patients had had other types of therapy, but they feel that the results of irradiation of the bone marrow in agranulocytic angina justify a trial with such therapy when necessary.

Dr. Louis F. Hamburger, in an article on the same subject and in the same number of the Bulletin, also advocates the cautious irradiation of the skeleton by an experienced roentgenotherapist.

Wyatt, in reporting the first case at the Peter Bent Brigham Hospital in 1928, states that despite the low leukocytic count (1,800), the case recovered without any attempt at specific therapy, aside from surgical drainage of the various localized areas of infection. It is not within the purpose of this paper to go into the local treatments of our cases, except that local drainage was necessary in several. Peroxide of hydrogen, sodium perborate, and peroxide of hydrogen with Fowler's solution, were used, and throat irrigations of hot saline. L. M. Plab, Vienna, observed in a case of his, a man 31 years old, that blood transfusion had no effect on the rapid decrease of white blood cells.

T. N. R., one of the present cases under consideration, received his first transfusion of 500 c.c. of blood (Linderman method) the 7th day from the initial onset of the disease, the 2nd on the ninth, and the 3rd on the eleventh day, when the blood count the previous day was 700 white blood cells and the polymorphonuclear neutrophils 20%. The day following the third transfusion the white blood cells were 850 and the neutrophils 24%. The fourth day the white blood cells and neutrophils had risen to 3,500 and 42% respectively. The fourth transfusion took place the 16th day of the disease and two days following the white blood cells were 5,300, the polymorphonuclear neutrophils 76%, lymphocytes 22% and myelocytes 2%. Myelocytes first appeared in the blood picture to the amount of 8% two days after the third transfusion and persisted up to the fourth day after the fourth, and last transfusion. The patient was at no time anaemic. The temperature reached normal and remained there on the 23rd day after onset. The blood persisted in its normal course and the patient left the hospital forty-eight days from the beginning of his first symptoms.

A. J., a woman aged 59, with deep ulcerated tonsils, complicated with pneumonia, presented a white cell count of 600, with polymorphonuclear neutrophils 4%. Two days later a transfusion of 500 c.c. of blood was given, and the following day the leukocytes were 1,100 and polymorphonuclear neutrophils 5%. On this same day, liver

tract, one ampoule five times a day, was started. Two days after transfusion the leukocytes and polymorphonuclear neutrophils were 2,100 and 2% respectively, and five days after 6,600 and 8%. Three days after the 2nd transfusion, the leukocytes rose to 12,800 and the polymorphonuclears to 76%. This case records no myelocytes after transfusion. Six days later the full count was red blood cells 3,550,000, haemoglobin 69%, white blood cells 20,400, polymorphonuclear neutrophils 89%, eosinophils 1%, lymphocytes 4%, and large mononuclears 6%. There is a very noticeable change as to the reaction of the leukocytes and granulocytes. This high leukocyte count may be explained by the broncho-pneumonia or sacral abscess, or both, that persisted after the bone marrow had begun to react to infection. This patient showed a moderately well-marked anaemia. She recovered from her granulocytosis one month from the onset of her disease. These two cases show at least an association, with the rise in granulocytic reac-

tion and transfusion, and the reactions in the two cases are similar. In the first case there was little response to the first transfusion but, after the third transfusion two days later, there was a very definite rise in the granulocytes and the first myelocytes appeared. In A. J., the second case, the rise in granulocytes came two days after the first transfusion.

A third case treated with transfusion died the following day, and undoubtedly the transfusion was too late in this case to judge of its efficiency as to causing a response of the myeloid-forming cells.

The three of our remaining cases did not receive transfusions. One died the day the agranulocytosis gave its first evidence. Another was given Squibb's leukocytic extract subcutaneously every day and stopped after nineteen treatments. It was quite apparent that this extract had little, if any, effect upon increasing the number of granulocytes. Of these six new cases, three were treated with transfusion. Two of them lived

TABLE OF SIX NEW CASES REPORTED—Continued on page 7

Name	Sex	Age	Duration Disease be- fore enter- ing hospital	Mouth and Tonsils	Skin and other ulcerations	Glands	Outcome
B. S.	Male	21	4 days	Ulceration of al- veolar margins. Tonsils and an- terior pillars gan- grenous.	Old pinhead purpuric spots on lower ex- tremities.	Tonsillar nodes swollen.	Died 8th day of disease.
T. N. R.	Male	62	5 days	General redness of whole pharynx.		Swelling left salivary gland.	Recovered com- pletely 13th day.
A. J.	Female	59	28 days	Deep ulceration of tonsils (3 days be- fore admission to hospital)		Enlarged sub- maxillary nodes	Recovered of agranulosis in about 1 mo.
L. M.	Female	73	Symptoms developed in hospital	Autopsy. Trachea dark and red with greenish membrane on mucosa. In right pyriform fossa, on lateral wall, a small ulcer. Spleen enlarged, showing character- istic swelling of acute infection.			Died 6th day of disease.
M. C.	Female	67	Sore throat and agranu- locytosis developed in hospital	Pharynx very red and oedematous.			Died 2nd day following sore throat and first evidence of agranulocytosis.
Case of Dr. Scott	White Female	78	3 days be- fore taking history	Ulceration of tonsils.		Large anterior cervical gland enlarged and tender.	Died 36 days after onset of disease.

and a third died three days after coming to the hospital and one day after the only transfusion. All the other three who did not receive transfusion died.

It seems well worth careful consideration, from the results of the cases I have reported here, and from favorable reports of other writers in treating the disease, to regard transfusions given only a few days apart and at the earliest available moment of the disease, as one of the most valuable adjuncts in the treatment of agranulocytic angina.

SUMMARY

It seems reasonable to accept agranulocytic angina as a definite clinical picture.

No etiological factor has been proven as the causative agent in the disease, and there is some doubt whether sepsis, or the loss of power of the bone marrow to form granulocytes, is the primary lesion. Many different types of bacteria have been found in the blood stream as well as the local lesions. Such a variety of findings does not permit of any conclusions as to a specific organism being the causative agent.

Experimental work on guinea pigs has shown that B pyocyaneus has some effect upon the granulocytes both in reducing the number and in having a toxic effect on the cells.

Sepsis undoubtedly plays a role. With recur-

rent agranulocytosis it would seem the bone marrow of some individuals is very sensitive. A reasonable explanation, and one most likely, is that an overwhelming protein reaction on the bone marrow of a sensitive individual takes place, or that a sensitive granulocytic system is affected by the noxious agent of a septic process.

It is unlikely the tonsils are the necessary portals of entry, when ulcerations appear in other parts of the body. In some cases ulcerations have occurred without affecting the tonsils, or the tonsils have been a later manifestation, 12 days following foreign protein injection.

The great majority of cases occur in women past middle life, but occur in both sexes and is not limited to any age.

It is characterized by ulcerations, which are most frequently in the mouth, pharynx, and buccal membranes, and which have occurred not infrequently in the skin, vagina, and anus and have been described in the stomach.

The disease, if fatal, is usually short. Jaundice is seen not infrequently. It is generally accepted to be without hemorrhagic diathesis although a number of cases show a secondary anaemia. Anaemia is not an outstanding feature. In some cases, the erythrocytes have been increased. The platelet count is usually normal. The reduction of leukocytes and granulocytes is the outstanding

TABLE OF SIX NEW CASES REPORTED—Continued from page 6

Name	Temp	Complications	Anaemia	Throat Culture	Blood Culture	Treatment
B S	104 to 105	Pneumonia	Slight	Staphylococcus long and short chain streptococci		Tracheotomy. Local to mouth. Day before death blood transfusion 500 c c Linderman method
I N R	To 103½	Cellulitis of ear Suppuration left Submaxillary gland			Staphylococcus hemolyticus	4 transfusions 500 c c each Linderman method Incision and drainage left submaxillary Soda cacodylate 3 days after third transfusion
A J	To 104	Bronchio pneumonia, abscess over sacrum	Moderate anaemia		Vincent's organisms on four examinations	Abscess opened and drained Liver extract 2 blood transfusions Alpine light treatment
L M	To 105	Acute dachryocystitis				
M C	To 106				Streptococcus hemolyticus	Local throat treatment
Case of Dr Scott	100 to 102				Strep hemolyticus " Non hem viridans diphtheroid bacillus Negative for Vincent's	Squibb's leucocytic extract subcutaneously daily Stopped after 19th day Peroxide throat irrigations with Fowler's solution

feature. The extremely low leukocyte count, along with the absence, or almost absence, of granulocytes, the absence of haemorrhagic diathesis, the slight change, if any, in the number of erythrocytes and platelets, the ulceronecrotic lesions, a severe infectious condition, the predominance in females, sometimes an icterus, are the important factors in making a differential diagnosis.

Recurrent agranulocytosis with angina has been reported by a number of authors. The pathological reports are variable. Bacterial emboli with ulcerations, resulting from the occluded blood vessels, are significant findings. Frequently, changes of the viscera have been seen which go with a septic condition. The most persistent finding has been an alteration in the bone marrow, with almost complete disappearance of the granular leukocytes.

Pneumonia, abscesses and suppurations of the lymph and salivary glands are the most frequent complications noted.

The mortality is high, but it can no longer be considered a hopeless disease. Cases have been reported as recovered without any specific therapy. From past and recent reports of irradiation of the long bones, it would seem this form of treatment deserves careful consideration when it is in the hands of an experienced roentgenotherapist. Transfusions have been sufficiently tried to give favorable comment, when they are given at the earliest available moment of the disease, at only two or three day intervals.

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THE EFFECT OF X-RAY ON THE WHITE BLOOD CELLS

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THE effect on the white cells of the blood is directly dependent on such factors as the quantity of X-Ray and the length of time administered; the size of the surface area (portal) of the body through which the rays pass; the region or organs of the body which are exposed and the frequency of repetition of the exposure.

In brief, the effect of the X-Ray on the leukocytes depends on the dosage. The greater the quantity, the more frequent the application of the rays and the larger the portal, the more profound the reaction. There may be a daily exposure of the entire body as a doctor while fluoroscoping and only a slight amount of X-Ray be absorbed if the machine is manipulated properly. Years of experience teaches that there is no perceptible change in the leukocytes IF certain rules of protection are followed. Too often fluoroscopic machines are installed with no other thought than its possible helpfulness in diagnosis. No one warns the doctor that it is a lethal machine using high voltages which may harm the user or patient unless certain precautions are observed. Patients as well as doctors have been accidentally killed and many more have been injured by fluoroscopes utilized without proper working knowledge. An absolute requisite is a built-in filter between the tube and the patient. Lead glass in front of the fluoroscopic screen is also essential to protect the doctor. The fluoroscopic diaphragm should be kept closed as far as permissible while the machine is in use in order to properly observe the region being examined so that as small a portal of entry of X-Ray into the body of the patient be employed as practicable. It is highly important to wait in a darkened room until the pupils are entirely accommodated before starting to use a fluoroscope in order to lessen the amount of X-Ray employed and to obtain a clearer image. Acquiring complete accommodation is often the real reason why one fluoroscope seems superior to another when in truth the machines are equally efficient. Failure to comply with this essential means that the examiner in order to obtain clear screen visualization immediately, uses much more current than he should and risks harming the patient and himself by a prolonged exposure. Lead gloves should always be used even if only infrequent examinations are made. A lead apron is also indispensable, its objectionable weight being overcome by hanging it over the back of a chair and then straddling the chair with the apron in front of the examiner's body. It is only infrequently that fluoroscopy alone is persisted in to such an extent that actual changes occur in the white blood cells. One doing fluoroscopy for prolonged intervals should have frequent blood counts taken. He should

also try Pfahler's test (1) by carrying around in his pocket a dental film facing outwards for two weeks; if upon development there is any fogging or blackening of the film he should improve his protective appliances as his present are inadequate. Oil-immersed fluoroscopic units are ideal because they are shock-proof and afford maximum protection. Danger of explosion when anaesthesia is being used during fracture reduction is also minimized. In such installations an oil-immersed foot-switch is also requisite.

The roentgenologist or worker constantly exposed to X-Ray needs additional protection such as a lead-lined control booth which is located as far as possible from the tube being energized. A lead-glass bowl or tube with auto-protective covering is a necessity to prevent undue exposure. The new high-milliamperage outfits particularly need these protective devices for the operator. A periodic blood count preferably monthly is advisable and in institutions with proper protection where this has been done only slight changes have been found in the counts limited usually to a higher proportion of lymphocytes and sometimes a leukopenia. A. E. Barclay of Cambridge Medical Schools (2) as well as other investigators have found that when the usual protective devices are used the amount of X-Ray absorbed by the technician is practically negligible and does not seriously affect the blood count. Dr. Barclay aptly compares the known slight effect on the blood count in cancer cases where there is prolonged X-Ray treatment consisting of massive doses frequently repeated over some years time with the small daily doses which the average technician receives. It is Dr. Barclay's opinion that proper ventilation is the most important preventive factor in combating the effects of the X-Rays upon the blood cells.

Senn (3) in 1903 was the first to observe and report the reaction of the leukocyte count in leukemia following X-Ray exposure.

Heineke (4) in 1904 from animal experiments first demonstrated a decrease in the lymphocytes in the circulating blood and destruction of lymphoid tissue in the spleen and lymph glands. He found that white cells were decreased after large doses of X-Ray and that the polymorphonuclear cells were proportionately increased. After several days the lymphocytes disappeared almost entirely. The normal proportion was regained later if no more X-Ray were administered.

Roentgen therapy usually decreases the number of white blood cells especially the lymphocytes and increases the relative number of polymorphonuclear neutrophils. A leukopenia may ensue after repeated irradiation. Very small doses act as a stimulus to the lymphforming organs and

cause a lymphocytosis. The lymphocyte is regarded as the most radiosensitive cell in the blood. Levin (5) explains the mechanism of the action of the rays on the leukocytes as a "destruction of the lymphocytes which is then followed by the release of the polymorphonuclear leukocytes from the bone marrow or by an overproduction of this type of cells by the blood-forming organs."

MacKee (6) notes that "after intensive irradiation, hyperplastic changes have been observed in the bone marrow, while the spleen and lymphatic glands show atrophy and reduction in size." Warthin (7) demonstrated that the X-Rays had the same effect on bone marrow as on the circulating lymphocytes but to less degree.

Isaacs (8) believes that "the quickest response in reduction of the white blood cell count after adequate therapy comes when the bulk of the cells are small and medium-sized (i.e. relatively mature) lymphocytes, and the response is but slight when the bulk of the cells are large lymphocytes and lymphoblasts (young cells)." The explanation is that "exposure to roentgen irradiation during the primitive lymphoblast and lymphoblast stages, causes the cells to reproduce with the rapid production of additional primitive lymphoblasts. As the bulk of the cells are in this stage in acute lymphatic leukemia and the terminal stage of chronic lymphatic leukemia, roentgen irradiation does not lower the white blood cell count appreciably. When the bulk of the cells are medium or small-sized lymphocytes, roentgen irradiation stimulates them to grow old and the count is lowered."

Minot and Spurling (9) find that the "most important effect of the customary therapeutic doses of irradiation is to decrease the number of white blood cells especially lymphocytes so that leukopenia may occur." If the white cells fall below 3000, however, treatment is usually not advisable with the exception of cases of agranulocytosis in which the granular white cells are very few in number or missing entirely in the blood stream. Thomas, Taylor, and Witherbee (10) from animal experiments found that polymorphonuclear cells were increased in number for a short time after X-Ray application. Friedeman in 1927 (11) reported improvement in cases of marked leukopenia after irradiation of the bone marrow by X-Ray. Waters and Firor (12) have also been successful in combating agranulocytosis with roentgen therapy.

Therapeutic doses of X-Ray in the treatment of blood cell disorders are employed with benefit mainly in the leukemias, lymphomata, lymphosarcoma, Hodgkins, polycythemia and recently in agranulocytosis. Anemia whether primary or secondary is usually considered a contraindication especially if advanced changes are present.

SUMMARY

1. Protective devices are an absolute necessity in every fluoroscope; also for radiography and treatment.

2. Periodic blood counts should be taken on every roentgen worker and patient receiving X-Ray therapy. A leukopenia or increased proportion of lymphocytes or an anemia is indication that inadequate protection is in use.

3. Irradiation is beneficial in certain blood dyscrasias either by reducing the number of lymphocytes or stimulating formation of granular cells.

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THE DIAGNOSIS OF CORONARY OCCLUSION*

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OWING to the many communications that have appeared in recent years on various phases of the subject, knowledge of coronary occlusion as clinical entity has become widely diffused. It seems quite certain that there has been an increase in the incidence of this lesion in all western countries, far greater than may be accounted for by enhanced diagnostic acumen. Coronary occlusion is now known to be one of the most common causes of sudden death and comprises most of the fatal cases diagnosed as acute indigestion or acute dilation of the heart. The diagnosis of coronary occlusion is made so readily by physicians and surgeons that the question may now be raised, whether or not the problem has become too simple and the diagnosis made too frequently. For that reason it has seemed advisable at this time to review the diagnostic criteria and to consider differential diagnosis.

The typical picture of acute occlusion of a large vessel, which includes severe pain, shock, fever, leucocytosis, and myocardial failure is now familiar to most practitioners. The symptoms of coronary occlusion may be apportioned to three inter-related sources; the occlusion itself, the subsequent infarction of the myocardium, and involvement of the nervous system. Pain, localized tenderness, hyperesthesia, and certain disorders of the cardiac rhythm are due to disturbances in nervous pathways. As to the mechanism of pain production, many words have been used, such as vascular spasm, vessel distention, arteritis, aortitis, muscle cramp, ischemia, anoxemia, acid metabolites, but a wholly satisfactory explanation has yet to be given. This criticism is based on the simple fact that there are many more examples of advanced coronary sclerosis, aortic disease, coronary occlusion, and myocardial insufficiency than there are of cardiac pain. The mechanism is probably not the same in all types of heart disease. The actual vascular occlusion is responsible for the state of shock which occurs early, with fall in blood pressure, dyspnea, and perhaps the early signs of heart failure. Infarction in the myocardium is responsible for fever, leucocytosis, pericardial friction rub, changes in the electrocardiogram, the later appearance of congestive heart failure, embolic phenomena, and certain alterations in rhythm, e.g., heart block when the artery to the A-V node has been obliterated. From the clinical standpoint coronary occlusion may be divided into two main groups, as was done by von Leyden many years ago, those whose onset is accompanied by severe pain, and those which begin

with acute heart weakness and in which dyspnea is the outstanding symptom.

Pain which has its origin in the heart or aorta is for the most part referred to those areas which are supplied by the eighth cervical to the seventh dorsal nerves, inclusive. There are also connections with the vagus, and in some instances with sensory branches of the fifth cranial nerve. The most frequent site of pain is substernal, especially beneath the upper sternum. Epigastric pain is not uncommon. Radiation occurs to the shoulders, the arms, more commonly the left and most often the inner aspect, the neck, face, lower jaw, and rarely the mastoid area. The character of the pain is subject to wide variation. It may be of a burning or gnawing type, called "heart burn" and attributed to indigestion. It may be short and stabbing, or gripping and vise-like in character, with a sense of intense thoracic constriction. Neither the character of the pain nor its severity are constantly related to the size of the coronary vessel involved or to the extent of the lesion produced.

Relatively less frequent but actually quite numerous are those cases of coronary occlusion in which pain is entirely absent, or insignificant, and severe dyspnea is the dominant symptom. These cases are usually diagnosed asthma, or cardiac asthma and the underlying pathology is not appreciated. When an attack of severe dyspnea occurs suddenly in a patient past 45 years of age who has not been subject to attacks of bronchial asthma, and when there are no reasons for suspecting pulmonary embolism, coronary occlusion should be considered. The following example illustrates non-anginal occlusion:

The patient was a man 56 years of age. For several years he frequently had epigastric pain which came on about one hour after meals and which was usually relieved by bicarbonate of soda. For one year prior to his final illness he was subject to dyspnea on exertion. On the evening of May 20th, 1930, he was taking his family for a motor drive when an attack of severe dyspnea came on suddenly. He got out of the car and for some minutes sat on the running board panting for breath. Finally he was able to drive his car home. When he returned, he took soda, expelled a large amount of gas, and fell momentarily unconscious. There was no pain associated with this attack. The subsequent course was one of progressive congestive heart failure from which he died on September 21st, 1930. Examination of the heart showed an occlusion of the main left coronary artery about 2 cm. from the mouth, which had resulted in extensive infarction in the left ventricle. There were large patches of replacement fibrosis. A

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thrombus was present in the apex of the cavity. The circumflex branch was also entirely occluded. In the pyloric ring of the stomach were two areas of ulceration with hard indurated walls; the base of one of these was adherent to the pancreas. These ulcers explained the digestive distress from which the patient had long suffered.

Pain may occur in any form of heart disease and all possible types will be described by patients. In the present discussion, the problem will be limited to the differentiation of pain associated with coronary thrombosis from that related to simple anginal attacks, a problem which has been created largely by the loose usage of the term *angina pectoris*. Herberden coined this term for those who suffered from breast pang which occurred on exertion—"while they are walking, more especially if it be up hill or shortly after eating." *Angina pectoris* should be limited to those painful seizures which are produced by effort, emotion, food, or cold. If that be done, the problem then narrows itself to the differentiation of occlusion of small or of large vessels. When pain is related to occlusion of a vessel, it is usually of longer duration, and is more difficult to relieve; rest or nitrites, which terminate simple anginal attacks, are insufficient. One or several doses of opium may be required. Individual sensitivity to pain must be taken into consideration. Long continued severe pain, or a series of frequent pains occurring at rest or on slight provocation and which continue for several days—the *status anginosus*—is diagnostic of coronary occlusion. The later symptoms that result from infarction have already been mentioned. When a small vessel is involved, signs of myocardial insufficiency probably will not appear. The electrocardiograph may render important service in differential diagnosis. Changes in the electrocardiogram during attacks of simple angina, as far as is now known, do not occur or are limited for the most part to changes in the direction of the

"T" waves. Following the occlusion of a vessel of any considerable size, there is a characteristic alteration in the ventricular complexes of the electrocardiogram which has been described by Pardee and others. In typical examples, there is a fusion of the "R" and "T" waves in which "T" takes off from the descending limb of "R" before that wave has returned to the base line (Figure 1). The change in the ventricular complex is dependent, at least in part, on the extent

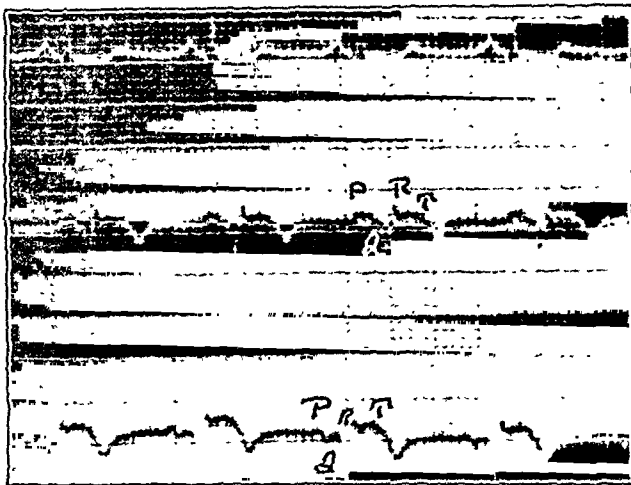


FIGURE 1

Electrocardiogram with ventricular complexes characteristic of coronary occlusion.

of the muscle involved and so variations from the typical occlusion complex are to be expected. There is also a time factor to be considered, for these characteristic changes may not appear until twelve or more hours after the onset of the attack (Figure 2). A syndrome called "*angina decubitus*" to describe painful seizures which occur at rest has been stressed by French clinicians. That it is a distinct form of "*angina*" may be doubted. Such attacks are probably either simple

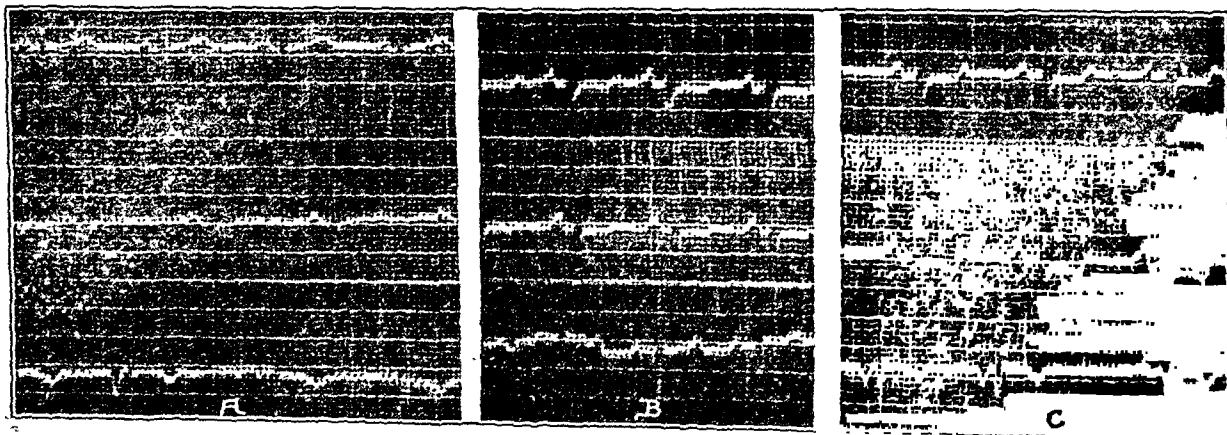


FIGURE 2

A. Normal electrocardiogram, before coronary occlusion.

B. Three hours after onset of pain.

C. Twenty-four hours after onset.

anginal attacks for which the exciting cause is not apparent, or they represent occlusion of small vessels. However, there will doubtless occur many painful seizures in which the differentiation between a simple anginal attack of the effort type and an occlusion of a small vessel will be impossible.

The sudden replacement of a normal cardiac rhythm by auricular fibrillation may be followed by a state of partial collapse, fall in blood pressure, rapid engorgement of the liver, and epigastric pain. This clinical picture has been mistaken for some acute abdominal trouble. In a recent case of hypertensive heart disease it was found impossible to decide whether the same sequence of events resulted from thrombosis of one of the branches of the right coronary artery, or whether all the symptoms were due to the onset of auricular fibrillation. In this instance the fibrillation lasted for less than forty-eight hours. Electrocardiograms taken a few hours after the attack and during the subsequent weeks showed ventricular complexes that were similar in all detail to those recorded before the attack, nor was there any later clinical evidence which pointed to thrombosis. The leucocyte count rose to 28,600 three hours after the attack; neutrophils constituted 80 per cent of the white cells, and eosinophiles and basophiles, which were not reported on admission, were present. It may be noted in passing that leucocytosis is probably a constant accompaniment of vascular accidents. The maximum number of white cells varies widely, but in proved cases a high percentage of neutrophils and the absence of eosinophiles has constantly been observed. The various factors responsible for leucocytosis are not clearly understood, but that this white blood picture is not characteristic of infection is now certain. The rôle of the sympathetic nervous system is probably an important one. A second example in which the onset of auricular fibrillation was associated with symptoms similar to coronary occlusion may also be given. A young woman, 27 years of age, who was known to have had mitral stenosis for many years, experienced severe twisting pain in the arms and later chest soreness, simultaneously with the onset of auricular fibrillation. She stated that the attack did not "knock her out" and she continued up and about for an hour or more when her physician arrived. He made a diagnosis of coronary occlusion and ordered her to bed. The subsequent clinical course has brought forth no evidence of such an accident. Levine⁴ has frequently encountered auricular fibrillation after coronary occlusion, but in my own experience it has been rarely observed. In the two examples cited there is no proof of absence of occlusion. The failure of the electrocardiogram to show changes in the first case does not exclude occlusion. Occlusion does seem unlikely in the second case; the pain was doubtless

of cardiac origin, but not necessarily caused by occlusion of a vessel. Because of the profound disturbance that may follow the onset of auricular fibrillation it is not unreasonable to consider that at times the picture may imitate coronary occlusion.

There are a number of other vascular accidents which at the time of onset may simulate coronary thrombosis. Rupture of the aorta may be mentioned; this accident, also, may occasionally occur without pain. In two instances supposed coronary thrombosis was found to be thrombosis of the pulmonary artery. However, both of these conditions are promptly fatal and the differentiation is not practical. Occlusion of a mesenteric vessel, particularly when it occurs in a patient who has heart disease, may suggest coronary thrombosis, but this will soon be followed by signs of peritoneal irritation, which never appear after coronary occlusion. Occlusion of a splenic vessel, such as commonly occurs in subacute bacterial endocarditis, may suggest coronary occlusion, but usually the pain is definitely localized in the left side of the abdomen. Likewise, occlusion of a renal artery by a mural thrombus has raised the question of a coronary occlusion. The later course of these accidents makes their nature clear.

Of great importance is the differentiation of substernal pain which is of cardiac or aortic origin from that which arises in some viscus of the alimentary system. The problem results from the fact that not only disturbances originating in the esophagus but in any part of the alimentary canal may reflexly give rise to pain which will be referred beneath the sternum. Moreover, there is some overlap in the spinal connections of the heart and those of certain alimentary viscera. However, the radiation of pain is usually not the same. It is the consensus of most observers that substernal or epigastric pain which has its origin in the digestive tract does not radiate into the arms. This is to be expected, for the sensory spinal connections for the esophagus, stomach, gall bladder and small intestine are through the fifth to the tenth thoracic nerves. The direct relation of pain to effort and its radiation to the arms speaks for cardiac pain. But many occasions will arise in which the differentiation of cardiac from alimentary pain will be at the same time difficult and important, and in this connection it should be borne in mind that coronary occlusion by no means always occurs as an acute accident. In the following case substernal distress was erroneously attributed to indigestion. The history also illustrates the mildness of symptoms in certain cases of coronary occlusion.

Mr. T. K. had been perfectly well since an appendectomy was performed when he was twenty-two years of age. At the age of forty-four years, he began to suffer from a burning sensation beneath the sternum. This was often

accompanied by sweating of the head and face. At that time he had unusual business worries and had become nervous. The substernal distress was attributed to nervous indigestion, and it subsided after about three months during which symptomatic treatment was given. The heart was said to be normal at that time, although a thorough examination had not been made. There were no definite cardiac symptoms and the man was not incapacitated. Some months later he began to experience palpitation on exertion and still later, dyspnea. He died at the age of forty-six from an easily recognizable coronary occlusion. From the examination of the heart it seemed quite certain that the period of nervous indigestion corresponded with occlusion of the main left coronary artery which had later become canalized, but which had resulted in extensive fibrosis of the wall of the left ventricle. There was also an old occlusion of the descending portion of the left coronary artery. The final event, which occurred two weeks before death, caused infarction of the interventricular septum and the formation of a mural thrombus.

There are both functional disturbances and organic diseases in the esophagus which may give rise to substernal pain. The severity of the pain when it first appears will usually lack the intensity of the pain of coronary thrombosis. Pain caused by carcinoma of the esophagus is related to swallowing movements, at least early in the disease, and regurgitation of food or saliva is apt to occur. Examination of the esophagus with a barium bolus will be helpful. Esophageal pouches are usually painless. It is conceivable that a cardiospasm may suggest coronary thrombosis. However, according to Walton,² cardiospasm is usually insidious at the onset and presents a long history. The pain at first is intermittent, and follows the ingestion of each mouthful of food. When the esophagus becomes distended there may be dyspnea, together with a stifling sensation, and at such times confusion with cardiac pain may arise. By this time characteristic vomiting is usually present. Likewise, spasm of the pylorus may simulate coronary occlusion.

This problem presented itself once in the case of a highly nervous woman of nearly sixty years of age. She had taken no breakfast and later in the morning, following a bath, ate a pear. After fifteen minutes she began to have severe epigastric pain, much flatulence, and later abdominal distention. The blood pressure at first rose considerably above the patient's normal, and then fell below normal. Heat was helpful in relieving the pain, but pantopon and atropine were finally necessary. The following day a second attack occurred; abdominal distention was not marked and it was possible to palpate a tender mass in the epigastrium which was believed to be the pylorus. There was neither fever nor leucocytosis, and no subsequent changes in the electrocardiogram.

One week later a calcified thyroid tumor was removed and the patient made an uneventful recovery. The severe painful seizures were attributed to pylorospasm.

Inasmuch as coronary thrombosis may be accompanied by nausea and vomiting as well as severe epigastric pain, there are occasions when the differentiation between this lesion and some acute surgical condition of the abdomen will be of utmost importance. At the onset, coronary occlusion, rupture of gastric or duodenal ulcer, acute intestinal obstruction, or acute pancreatitis may present a similar clinical picture. Epigastric tenderness and rectus rigidity usually are not present following coronary thrombosis, and when they do occur these symptoms are comparatively mild. To differentiate a cardiac accident from an "acute abdomen," one must consider on the one hand the radiation of the pain, the absence of rigidity and the appearance of signs of myocardial failure; and on the other hand, early rigidity, followed by other signs of peritoneal involvement. The electrocardiogram may be of great value in such cases and should be obtained before laparotomy is performed. The early differentiation between coronary occlusion and acute pancreatitis does not seem possible. Two examples will illustrate the foregoing points.

A hardworking farmer, 38 years of age, who had never had any serious illness and was thought to be in perfect health was seized with acute pain beneath the lower end of the sternum while sawing wood. Breathing became difficult because of increased pain. Partly by walking and partly by riding he was able to return to his home. When he reached there he was perspiring profusely and was nauseated. After taking soda he vomited a little food and mucus. The pain was not referred to the back or to the arms. He arrived at the hospital eight hours later. A preliminary diagnosis of ruptured gastric ulcer was made, and he was admitted to the surgical service. Morphine was necessary to relieve the pain. The leucocyte count on admission was 16,400, with 86.7 per cent neutrophils and 13.3 per cent lymphocytes. Fever was only slight. Nine hours after the onset of the severe pain the physical examination of the abdomen was practically negative. The electrocardiogram was highly abnormal (Figure 3). The diagnosis was then revised to coronary occlusion. Eleven weeks later the patient died suddenly. An examination of the heart revealed a plaque and fibrinous material obstructing the left main coronary artery, two areas of softening in the left ventricle and a large mural thrombus on its inner wall.

An elderly man who was under observation in the hospital because of an advanced carcinoma of the bladder was suddenly seized with severe upper abdominal pain and went into a state of partial shock. Previous examination of his heart had shown nothing of significance. The history

of digestive disturbances had not been impressive, and because of his age and the mode of onset of the attack, coronary thrombosis was considered. Within one hour the abdomen became tender and rigid and, although his condition became rapidly worse, no signs of cardiac failure developed, so that it was believed that the trouble arose in the abdomen. Death occurred within

The patient, a man 58 years of age, was known to have suffered from hypertensive heart disease for some years. He was admitted to the hospital two days after the onset of an attack of abdominal pain. There were some signs of congestive failure; the blood pressure had fallen, auricular fibrillation was present, and the ventricular complexes in the third lead of the electrocardiogram suggested the possibility of coronary occlusion. Because of the condition of the heart and the fact that the abdominal symptoms had been varying, it was decided to delay operation until the following morning. By that time the heart had definitely improved, but the abdominal signs had progressed and tenderness and rigidity were definitely localized in the right lower quadrant, so that a diagnosis of appendiceal abscess was certain. The patient died from general peritonitis. The coronary arteries were patent, and save for an area of fibrosis which included the base of the papillary muscle in the right ventricle, the condition of the myocardium was good.

SUMMARY

Substernal or epigastric pain which arises in the heart or aorta is related to effort, and radiates into the shoulders and arms, in contradistinction to pain referred to the same sites but which originates in other thoracic or in alimentary viscera. Pain due to coronary occlusion is usually more severe, of longer duration, and more difficult to relieve than cardiac pain not associated with obliteration of a vessel; the so-called status anginosus is characteristic of occlusion. The subsequent appearance of fever, leucocytosis, pericardial friction rub and signs of myocardial insufficiency is evidence of cardiac infarction, secondary to occlusion.

When the onset of auricular fibrillation is accompanied by pain, the clinical picture may suggest coronary occlusion.

Certain other vascular accidents, rupture of the aorta, pulmonary thrombosis or embolism, or occlusion of certain abdominal vessels may simulate coronary occlusion.

The differentiation of coronary occlusion from one of those lesions comprised by the term "acute abdomen" may at times be necessary. The former is characterized by radiation of pain to the arms, absence of abdominal rigidity, and signs of cardiac failure; the latter group, by early rigidity and signs of peritoneal involvement.

The electrocardiogram may be of great help in differentiating pain associated with occlusion of a vessel from other types of cardiac pain of less moment. It may also be of value in the differentiation of cardiac from abdominal lesions by indicating myocardial disease.

Coronary occlusion frequently occurs without pain, but with severe dyspnea as the dominant symptom. The true nature of these cases should

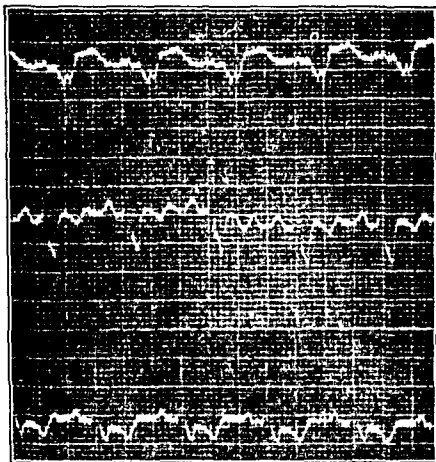


FIGURE 3

Electrocardiogram from a case of coronary occlusion which simulated a ruptured gastric ulcer.

four hours and when the abdomen was opened a perforated duodenal ulcer was found.

Coronary occlusion may at times resemble cholelithiasis, but Faulkner, Marble, and White³ who have investigated this phase of the problem considered that usually it did not. Coronary disease is more common in men, while gall stones are more frequent in women. In gall stone colic the pain is usually referred to the back and beneath the right shoulder, and this pain is followed by muscle tenderness and rigidity in the region of the gall bladder. Here again, pain is not referred to the arms. Except when rupture of the gall bladder occurs, immediate surgical intervention is not required, and there is time to establish a diagnosis.

There is ordinarily little likelihood that coronary occlusion and acute appendicitis may be confused, but when the latter appears in a patient in whom one might anticipate coronary occlusion the question of differentiation may arise. The recognition of abdominal complications in cardiac patients must always be more difficult than when they occur in normal individuals. In a recent patient this difficulty was encountered.

be recognized; they should not be dismissed with a diagnosis of "asthma."

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A STUDY OF THE RESULTS OBTAINED BY THE USE OF ARTIFICIAL ULTRAVIOLET RADIATION IN TWO HUNDRED NON-TUBERCULOUS CASES

By SAMUEL I. MULLER, M.D., LONG ISLAND CITY, N. Y.

FOR the purpose of this study we have gathered two hundred cases. The age began with an infant at nine months and extended to a limit of 65 years in the adult. The large majority came between the age limits of 15 to 30 years. The sex was almost evenly divided. By occupation, the large majority was non-laboring. The social status was almost equally divided between single and married individuals, in moderate to comfortable circumstances. Nationality played no part in this series. The conditions treated were divided into the following three classifications: 1. *Nutritional*. 2. *Infectious*. 3. *Nervous*. These made up 30 per cent, 65 per cent and 5 per cent of our series respectively. The classification was made on the most prominent underlying condition to be treated by radiation. The series was further divide into individuals who received artificial ultraviolet radiation and those who were advised a change of environment at seashore or mountains, with rest, diet, proper regimen and medication. A comparative study of results of both methods was then made in like cases.

Since we are primarily interested in a study of results of this application, the principles of its action, technique and contraindications are passed over, as elementary and very thoroughly considered in available texts. Concerning its application, however, the following points are of value. A very thorough study of the individual is made preliminary to any treatment. The necessary regimen of living, diet, rest, activities, etc., is instituted together with whatever medical or surgical treatment may be indicated, prior to or during the course of radiation. No radiation is undertaken, where a sufficient time is not available, a minimum of two months, to exhibit results from its use. The preliminary study of the individual may include laboratory and x-ray examinations, where indicated by the condition under consideration. We consider treatment by this modality successful, when we have achieved the following results: 1. A destruction of infection and its demonstrable changes within the tissues. 2. General nutritional effects, as better absorption

and utilization of foods, with an increase of weight and invigoration of the body. 3. When general complaints of fatigue and depression are overcome and replaced by a feeling of well-being and we have an individual, able and willing to resume his or her usual occupation and social activities. Clinical studies will serve to illustrate the three classifications of conditions treated.

Nutritional: Baby C. was first seen at the age of nine months. She was treated for bronchitis, clearing up in five days. During general examination, weight was noted, nine pounds, two ounces. She was five pounds 8 ounces at birth. Breast fed for two months and bottle formula fed by direction of a prominent pediatricist to nine months. The child would not thrive and at the time was taking only four ounces feeding with difficulty. At baby's first visit, history disclosed regurgitation of curd. Formula was modified to overcome this. Ultraviolet radiation was begun and given three times weekly. It is to be noted that when the baby was given viosterol by the pediatricist, she would take no feeding at all. In less than three weeks the baby had gained 13 ounces. At six weeks the baby was taking seven ounces to a feeding. At 9 weeks the baby had gained one pound, ten ounces and had cut six incisors, where before radiation there were no teeth. Where baby was gaining an average of 1.3 ounces weekly since birth to the time of this study, she gained 4.3 ounces for the first three weeks and then dentition cut the average down to 2.9 ounces for the balance of the two months period. At this time excessive heat of the summer affected the baby, it began to lose weight, the mother had previously stopped radiation of her own accord and for better nursing care hospitalization was advised. With cool days baby immediately resumed feeding, but our study was discontinued. We note further that from an apathetic, fretful baby, we developed a cheerful, lively baby which began to take formula feedings and cereal gruels in a manner hitherto thought impossible.

Infectious: Mr. M., age 35, married, white, firemen, 170 pounds, was treated for grippe, until another physician disclosed a right otitis media

and mastoiditis. He had a very hectic post-operative course being treated for a suspected meningitis and later developing fluctuation in the right iliac region, which upon incision drained for two months. He received three transfusions of blood. On discharge from the hospital his weight was 108 pounds. He was advised a convalescence in the country, from which he shortly returned because of no improvement, no gain in either weight or strength. He came to the writer, was placed on proper diet, hematinic medication and given artificial ultraviolet radiation. In one month he had gained 18 pounds and at the end of six months he was 208 pounds, without evidence of infection, absorption of toxins or residual complaint.

Nervous. This classification is further divided into 1 *Local* 2 *General Local*. Mrs. W., age 64, widow, houseworker, complained of very severe pain over the right side of forehead, face and neck. Examination disclosed a herpes zoster. She had received local treatment and narcotic for pain without relief, having spent three sleepless nights. One exposure to ultraviolet radiation gave immediate relief of severe pain and two more cleared the condition up entirely, without any medication. **General.** Mrs. H., age 21, married, school teacher, had lost 14 pounds and came to the writer with a diagnosis of pulmonary tuberculosis. X-ray and sputum examination proved negative. A careful history elicited the fact that she suffered from dyspareunia and that her complaints began with this factor and her marriage, finally involving her nutrition and causing a neurasthenia. Appropriate advice was given to correct the dyspareunia and the neurasthenia was treated by exposure to ultraviolet radiation. She gained seven pounds in six weeks and began to look on life more cheerfully. The dyspareunia abated with the measures resorted to. During the course of radiation Mrs. H. stopped for an interval of one week going to Atlantic City. While there she rested, ate according to her own description "ravenously." On her return she had lost two pounds. 2 Another case which came in without any physical complaint but with a set of conditions which arose following a physical examination for life insurance, is the following. Mr. H., age 41, married, interior decorator, weight 144 pounds, rejected by an insurance company on his application. He had lost ten pounds since and presented a very definite neurasthenia. Cause of rejection was a very mild mitral stenosis with complete compensation and function. He was reassured concerning his heart condition and received ultraviolet radiation. His symptoms disappeared and he gained 22 pounds.

While the study of the above results as case records, is interesting, a proportion of the 200 cases have been studied from a different angle. Comparison has been made between the results of ultraviolet radiation, with proper regimen diet,

medication and change of climate, environment or vacation, with regulation of activities, diet and medication. *Examples follow.* Mr. B., age 30, single, an accountant, weight 115 pounds, 25 pounds underweight for years, had taken positions out of the city and annual vacations, in an effort to overcome this deficiency, otherwise in good health and without complaint. He had given up all idea of increasing his weight. The condition was brought to attention again by recovery from a bronchitis. Artificial ultraviolet radiation was started. Within two months he had gained 15 pounds, while retaining his position in the city. He continued his usual diet, activities and mode of living and after radiation had stopped gained another 25 pounds. This gain has remained and the increase is permanent. 2 Mr. L., age 24, single, mechanic, normal in weight, but complaining of a tired, easily exhausted feeling, with a family history of pulmonary tuberculosis left this city to live with a sister in rural New Jersey, to overcome any pre-disposition inherited from his family and received other medical supervision, to further aid the condition. He felt well while not working and resumed lighter work. His improvement continued until he resumed his usual occupation, when all his previous complaints returned. He came for the treatment of a relative and in a discouraged way brought up his own complaints. He was exposed to artificial ultraviolet radiation. After two months he left New Jersey to return to this city, resumed his usual occupation and had gained 15 pounds. He does no longer complain. Prior to each winter season he voluntarily presents himself for a course of radiation lasting one month, to maintain his physical condition. 3 Mr. A., age 21 years, single, broker's clerk, lives in the country, had a prolonged convalescence from broncho pneumonia following grippé infection. He did absolutely no work for a year, had the benefit of all the best milk and eggs, cared for, climate, rest, sunshine, outdoor sleeping porch and other advantages calculated to completely restore his health, besides medication. When well his top weight was 155 pounds. Following pneumonia his weight was 121 pounds, that is, after three months. He was unable to leave his bed before two months. His improvement did not advance over the stage of loss of cough, increase in weight, five pounds and increased red cell count. He was unable to shake off fatigue, irritability and restlessness, in spite of all his advantages and after a constitutional benefit to himself of residence in the country for ten years prior to his pneumonia. His improvement remained stationary. X-ray examination of his chest was negative. He was exposed to ultraviolet radiation and after two weeks was able to come to the office himself. After three months his weight was 172 pounds. He was able to resume such activities as tennis, swimming, driving

and working in his father's manufacturing plant. Every year prior to winter season he receives a course of two month's exposure to ultraviolet radiation and has maintained his condition without even a cold for three years.

Comparison of Results: Climate, environment and vacation involving changes in humidity, altitude and air cause improvement in 50 per cent. Radiation involving the use of ultraviolet light alone improves 90 per cent. In both, best results are secured when proper regulation of activities, diet and habits of living are added. Medication further aids the benefits from either. In a study of the 50 per cent benefited by climate, etc., ten per cent of these are benefited directly by climate, etc., while the balance or forty per cent attribute their improvement to these factors plus especially, proper regulation of activities, diet and habits of living, to which they are not amenable or are unable to achieve at home. With radiation this is not a prominent factor since these individuals are at home. Seventy per cent of those receiving radiation follow their usual occupations. As against this change of climate, etc., involves cessation of occupation and disruption of family life in nearly all cases. Change of climate, etc., is particularly adapted to the treatment of those who are easily quieted by unfamiliar surroundings and environment. Ultraviolet radiation is particularly adapted to individuals who desire to retain their usual occupation and mode of living and yet receive medical care. The mental attitude of the individual sometimes indicates the choice of methods.

Our greatest personal satisfaction with results from the use of this modality lies in the field of preventive medicine, in addition to curative and actual treatment. As an example, *Preventive:* Mrs. E., age 22, four months postpartum, came in with a diagnosis of pulmonary tuberculosis. She had a normal delivery, but her history disclosed the fact that she had not ceased to have a uterine discharge, at times blood tinged, since delivery. Digital pelvic examination showed a soft, enlarged uterus, congested adnexa and tenderness over the entire pelvis. X-ray examination of the chest showed marked thickening of the stroma, the glands of the lung and at the hila, with no evidence of infiltration of the lung by tuberculous infection. Clinical examination of the chest gave dullness over the right base with crepitant rales. Weight was 109 pounds. We have here a picture of a low grade chronic pelvic infection, infiltrating other organs of the body, non-tubercular in type. The baby was placed on a formula and bottle fed. Appropriate measures were taken for the pelvic infection, rest, diet,

medication and ultraviolet radiation given. At two months, the uterus was firm, small, normal in size, the adnexa not palpable and the pelvis not tender. The lung sounds had cleared up entirely and this woman had gained 14 pounds, normal for her height and age. Examination of the lung showed evidence of absorption of the infection. There was at no time a positive sputum or a temperature. There are others who come with the same complaints, from other causes, but it is singular that all come with the diagnosis of pulmonary tuberculosis. X-ray examination in these discloses one or more of the following conditions: thickening of the stroma or bronchial tissues, thickening or enlargement of the lymphatic glands at the hila or in the lungs, thickening or evidences of inflammation at the hila, residual evidences of pneumonia, bronchitis, dry pleurisy, etc. In some there has been a history of chronic intestinal absorption or infection, gall bladder disease, supported or unsupported by x-ray findings of irritability, bowel spasm or atony. Others have disclosed focal infection of the mouth, sinuses, pelvis of the kidney or as in Mrs. E.'s case, chronic pelvic infection. When the host shows evidences of effects on nutrition as a result of this harbored infection, when more particularly the lung becomes secondarily involved or when this infection is primarily located in the lungs and familial or personal history further causes concern, then the use of ultraviolet radiation is preventive as well as curative. We do not go into the further measures in regard to these infections, since our study concerns only ultraviolet radiations and we take for granted these measures are available in texts and fully known. Our study has further brought out the fact that many young adults, the host of infections, particularly in the chest, whose familial or personal history has been suspicious, whose nutrition has been affected so that careful men have made tentative diagnoses of pulmonary tuberculosis, without confirmation by x-ray or laboratory tests by sputum, have by appropriate measures and the use of artificial ultraviolet radiation, been restored to health and actually been saved from becoming the victims, while in lowered vitality, of pulmonary tuberculosis. This is particularly true because these individuals could not by their own personal means avail themselves of cessation of occupation, rest, proper diet, regulation of living and habits, change of climate or environment. Ultraviolet radiation here becomes a potent preventive therapeutic measure by its ability to destroy infection, create better nutrition and overcome fatigue and depression in lowered vital pre-tubercular states.

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For list of officers of County Medical Societies see this issue advertising page xxxviii

Annual meeting Hotel Statler Buffalo N.Y., May 23-25 1932

COMMITTEE ON THE HEALTH COMMISSION'S REPORT

The Joint Committee authorized by the House of Delegates on June 1, 1931, has spent several months in a study of recommendations of the Special Health Commission appointed by Governor Roosevelt on May 1, 1930, for the purpose of suggesting amendments to the public health laws especially those relating to health administration by public officials, in distinction from the practice of medicine by physicians.

Early in the year 1931, the Commission issued a preliminary report which was summarized in the Journals of January 15, 1931, page 106, and February 15, 1931, page 230, and was printed in full in the Journal of October 15, 1931, page 1208. It is important to remember that this report was "Preliminary," and that a final one has not yet been issued. However, the preliminary report contained recommendations which were

formulated into legislative bills. Some of the bills were enacted into laws during the legislative session of 1931, and others were deferred until the session of 1932.

When the House of Delegates of the Medical Society of the State of New York met on June 1, 1931, the information before it consisted of the preliminary report of the Governor's Health Commission and the legislative bills which the Governor had signed. The House, therefore, authorized the committee on Public Health and Medical Education to act jointly with the committee on Public Relations and formulate a report by the first of January, 1932. The report of that Joint Committee is printed on page 29 of this Journal, and copies have been sent to the officers of the County Societies and to the members of the House of Delegates. The report will be considered by the House of Delegates which will hold a special meeting on Thursday, January 14, 1932, in the Hotel Ten Eyck, Albany.

The feature which seems to have aroused the greatest discussion is that relating to the form of organization of local health departments. The Governor's Health Commission strongly recommends that the fundamental unit be the county, instead of the town, village, or city as at present.

The Joint Committee not only approves the general principle of a county health department, but also emphasizes the value of local home rule. It recommends the gradual adoption of the county plan as experience and natural evolution point the way. It objects to the compulsory feature of the Commission's proposal.

Physicians of New York State will be interested in the public health developments in the State of Maine, in which a Governor's Commission brought about a consolidation of about forty scattered commissions into four departments, including one on Public Health and Welfare. An account of the enactment of the law begins on page 40 of this Journal.

SCIENTIFIC EXHIBIT AT THE ANNUAL MEETING

A scientific exhibit will be an important feature of the annual meeting of the Medical Society of the State of New York to be held on May 23-25, 1932, in the Hotel Statler, Buffalo. The plans of the Chairman of the Committee on Scientific Work, Dr. Arthur J. Bedell of Albany, and his associates, will eliminate the defects of previous exhibits and will attract visitors. It is not sufficient to place specimens and charts on view,—there must be some one on hand to explain them. The Committee plans that a demonstrator shall be in constant attendance at each exhibit ready to explain the points that are to be emphasized.

The plan of demonstrators has been followed with striking success at the American Medical Association meetings. When a demonstrator was present, even at a booth of statistical charts, a number of doctors were gathered; while spectacular exhibits without demonstrators were unnoticed. The psychology of the spectators will be readily understood on an analysis of two conditions applying to a study of the exhibits.

In the first place, an exhibit is the concentrated

essence of information; and a great amount of time and thought has been given to the presentation of essentials and the elimination of unimportant features. Every part of an exhibit has an important relation to all others, and yet a visitor must grasp each part in order to comprehend the whole.

An exhibit must be labelled and charted, like a map, but it takes time and effort for a visitor to read a written description and identify the important parts. What would require five minutes to read and comprehend, a demonstrator can show in five seconds.

An exhibit is like a picture in a book, or a diagram of a machine. It is merely an illustration that affords transient pleasure, unless it is either studied or explained. A demonstrator relieves the visitor of the work and strain of deciphering the labels, and enables him to concentrate his mind on the lesson to be taught, rather than on the labor of acquiring the knowledge. Moreover, a demonstrator will attract scores of listeners who would pass a silent exhibit unnoticed.



MEDICAL WARES

A doctor's success depends largely on the medical wares which he uses. His instruments and office equipment, his books and his medical journals, his automobile and his clothes are parts of his personality, for a physician is known by the tangible work of his tools. A doctor without a well equipped office is like one whose mind is not well furnished with medical information.

Medical research is constantly adding new information and new instruments for applying it. Medical schools and medical societies are insistent in urging physicians to apply themselves to graduate courses of study in order to keep their mental equipment up to date. Doctors are also offered graduate courses in medical wares without cost and in their own offices. It happens that the manufacturer of medical wares has a financial interest in their sale and use, and he is therefore willing and anxious to come to the doctor and instruct him in his own office. Every doctor has a list of salesmen whom he respects for the extent and reliability of the information which they bring.

The manufacturer also uses the pages of medical journals in order to inform the doctor of his wares—their standards of excellence and the scientific methods of their use. Manufacturers and dealers are constantly raising the scientific standard of the literature which they supply to the advertising pages of the *NEW YORK STATE JOURNAL OF MEDICINE*, and are sincerely grateful for the same kind of editorial advice that is given to the authors of scientific articles. The advertising pages of a medical journal are essential for the graduate education of physicians in medical wares and their use.

A third method of graduate instruction in medical wares and their use is that of exhibits at meetings of medical societies. An outstanding example of such an exhibit was that at the annual meeting of the American Medical Association in Philadelphia last June. There a whole floor was given to those of a purely scientific nature, and another to commercial exhibits—and both were conducted in accordance with the strict standards of medical ethics. Doctors absorbed information regarding the use of baby foods and ray machines and the newer publications as eagerly as they did the information given in the scientific exhibits on how to treat rheumatic heart disease and how to estimate the sugar in the blood of a diabetic. There is no dividing line between the exhibits in medical wares and those in the scientific department.

It is the policy of the *NEW YORK STATE JOURNAL OF MEDICINE* to recognize manufacturers and dealers in medical supplies as essential in the practice of scientific medicine. The Journal accepts articles on commercial products, and has conducted an editorial department on the subject of medical wares which it is ready to renew when it receives the proper papers written from a scientific standpoint.

The subject of medical wares is closely connected with that of medical economics, and finances are entirely compatible with science and ethics. Those who are directly concerned with the management of the *NEW YORK STATE JOURNAL OF MEDICINE* recognize the advertisers and exhibitors as friends of the medical profession and essential supporters of scientific research and the practice of medicine.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

The Reorganized State Society. This Journal of January, 1907 contains the following editorial on the first year of the new State Society, which had been formed by the union of the two rival societies:

The *de jure* unification of the profession of the State was accomplished a year ago, the *de facto* unification has gone on continuously ever since and this annual meeting will be a proof of the solidarity of the reorganized State Society and of the wisdom of reorganization.

"The county societies have already felt the impulse of the new regime and the quickening influence of the larger advantages of membership has contributed much to the prosperity of these organizations. The day is here when every reputable physician must affiliate himself with his county society. The combination of these societies into the State Society represents an influ-

ence so potent for the protection of the people of the State and a power so great for the conserving of the interests of the medical profession and the fostering of high standards in medical practice that no sincere physician can afford to withhold his sanction or aid. The doctor who desires to serve the State and his profession can best do so by becoming a part of the organized effort which has that service as its aim. The doctor who desires the improvement of the conditions of medical practice and the mitigation of the evils which hamper his work can best serve his personal interests by becoming a part of the great movement which makes for these ends. Every member of the county society should feel it his duty to urge upon his unaffiliated neighbor the importance of his joining with the whole profession. He has a field of missionary usefulness very near at home."



MEDICAL PROGRESS



Electrical Treatment of Neuritis and Writer's Cramp.—On the basis of an experience of nearly 100 cases W. Black Jones recommends the galvanic treatment of neuritis and writer's cramp. He employed a slight modification of the method advocated by Naughton Davies some thirty years ago. The faradic current is so regulated that it will excite pain in the diseased spot, but will not cause pain in a healthy nerve. When a spot is touched with the electrode and pain is felt, the position is marked. For the treatment the galvanic current is used. An insulated needle is connected with the negative pole, the large pad being positive. A local anesthetic is injected under the dermis, the needle is inserted, being directed to the most painful point, and the current is turned on. The amount of current used does not exceed 1 milliampere, frequently it is 0.2 of a milliampere. Five minutes duration is sufficient for the treatment. Two painful spots are often treated at one sitting. Generally where only one or two spots occur on a particular nerve the current gives immediate and permanent relief. Three patients with writer's cramp came under the author's observation, the most severe being that of himself; in two the condition was mild and responded easily to the treatment. In his own case eleven points were treated on the right forearm. Improvement was at first very slow. Tincture of iodine was administered and massage was applied. In a few weeks movement improved, and later the whole trouble gradually cleared up and there had been no recurrence. When the number of spots is multiple, and they are close together, relief is often only partial, and then the internal administration of iodine is of assistance. —*British Medical Journal*, September 19, 1931, ii, 3689.

The Poisoning Appendix.—James McDonnell presents investigations into the histories, together with roentgenographic findings, in 18 cases of acute appendicitis which suggest that our views on appendicitis should be recast. Instead of visualizing appendicitis as acute or subacute, to be followed by chronic disease, we should realize that the first evidence of trouble in the appendix is made manifest by nebulous symptoms which cannot be accounted for by any other than a toxemic origin. The clinical picture is one of symptoms arising from a condition of either slow general toxicity—e.g., lassitude, general malaise, loss of energy—or one of a more advanced toxemic state showing pyrexia, with the additional complication of vomiting, should a subacute local inflammation of the peritoneal tissues have oc-

curred. None of the author's patients have had pain, tenderness, or discomfort in the right iliac fossa, except when pressure has been applied to a full cecum during x-ray examination. The "poisoning appendix" gives a physical sign which has not hitherto been described, namely, increased resistance of the upper segment only of the right rectus, in an otherwise normal abdomen. This resistance is not easily appreciated, but does not in any way simulate the form of resistance found in epigastric lesions. The roentgenological evidence in these cases can be summed up in the expression "a non-functioning appendix"—an appendix which, on account of some pathological changes, will not fill, or, per contra, will not empty within the somewhat elastic time limit accepted as being the rate of filling or emptying of normal appendices; or one of which the outline or limitation of movement is due to obstruction from within or without—e.g., concretions, constrictions, kinks, or adhesions. Other causes having been eliminated, a "poisoning appendix" is a non-functioning appendix, with a toxemic symptomatology for which the only treatment is appendectomy. Investigations into the histories of patients with acute appendicitis have invariably shown evidence of toxemic origin over a period, either long or short, before the onset of acute symptoms. Acute appendicitis must, therefore, be regarded as a preventable calamity, not as a "bolt from the blue."—*The Lancet*, September 12, 1931, ccxxi, 5637.

Treatment of Migraine with the Anterior Lobe of the Hypophysis.—Irma Klausner-Cronheim reports that she has treated a number of cases of migraine with anterior lobe of hypophysis administered orally. She avoided treatment with injections except in one case, as she wished to exclude the known effect of parenteral administration of protein. All the patients were persons of active mentality, who had never succeeded in aborting an attack when it made its appearance. The dosage was as a rule 1 tablet 3 times a day, being the equivalent of 450 units of anterior lobe. In 3 cases the results were negative; in 7 they were unequivocally good. The attacks either stopped or were so much weaker and less frequent than before that the patients regarded themselves as greatly benefited. Four of the patients thus improved or cured experienced no secondary effects; the other 3 developed some menstrual disturbances which made it seem advisable to reduce the dosage at times or to stop treatment altogether. Any purely suggestive effect of the treatment can safely be excluded.

since these were patients who had been treated in the most various ways previously, and who had a quite natural intense distrust of the value of any kind of therapy. It cannot be said with certainty to which of the hormones contained in the anterior lobe the effect of the treatment is attributable. But since, as Zondek has shown, one hormone, called prolán B, is never present in the climacterium, and since one of the most significant cases was in a woman at this period, it seems probable that it is the hormone called prolán A which is responsible. This would agree with the fact of experience that in men too at the age in which migraine attacks are wont to stop, the latter hormone is demonstrable in the urine. That 7 of the 10 patients responded well to the treatment demonstrates that the theoretical basis from which the author took her point of departure was a correct one. The reason for the complete failure in the other 3 cases may be that while there was the same symptom-complex, the nature of the affection present may have been different in essence. The administration of anterior lobe is not advisable under all circumstances, because of its effect upon the ovaries. The author did not venture to employ it in children or in young girls around the age of puberty, fearing that a sexual precocity or too strong a sexual excitement might be the result. Even in later years the hormone may cause disturbances in the sexual function.—*Deutsche medizinische Wochenschrift*, August 21, 1931.

Fracture of the Neck of the Femur in the Aged: The Over-Slung Traction Saddle a Substitute for Plaster Spica.—In pointing out the defects of the usual methods of treatment of fracture of the femur in the aged, Earl D. McBride states that even the Whitman method, which is scientifically sound as a surgical procedure, requires the use of an anesthetic which seriously jeopardizes the physiological reserve of the patient. He has devised a modification of the Bradford frame and the Jones abduction splint which makes possible suspension of the legs and traction without cumbersome splinting and has the following advantages: The fracture is reduced anatomically and thoroughly, without an anesthetic or without any physical strain on the constitution. Fixation in abduction, internal rotation, and extension is constant. Traction is added to fixation. The sitting posture is possible. The frame may be used as a stretcher in transporting the patient. The frame offers no obstruction to the taking of an x-ray. The knee does not get stiff and the hip retains much of its normal range of motion. The apparatus consists of two sections forming a rectangular frame. The upper section contains an adjustable headrest and a canvas sheet for support of the torso. The lower section is attached to the upper section at the level of the hips by two upright bars and is suspended out

over the legs. Attached to this section are two adjustable angle-iron arms, from which the legs are suspended in muslin hammocks or by straps attached to the pulley rope. Countertraction is secured by two stirrups of padded duraluminum attached by webbing straps to the crossbar above the hips and buckled to the canvas sheet on which lies the trunk. The leg is not manipulated and the position of election is gradually attained by frequent adjustments of the leg bar and pulleys. The duration of immobilization does not differ from that of the cast treatment.—*Southern Medical Journal*, October, 1931, xxiv, 10.

The Spontaneous Cure of Malignant Neoplasms.—In an age in which the etiology and pathogenesis of malignant neoplasms are still obscure, there is no justification, says Mariano Cusani, for rejecting without investigation certain observed clinical facts which point to the possibility of the spontaneous regression of such tumors. He has recently had under his care a man of 65, of robust constitution, who had upon the antero-inferior aspect of the dorsum of his right foot a lesion which had the macroscopic and clinical character of an epithelioma, and which was confirmed as such by biopsy. The patient refused operation, and was accordingly treated with topical medication and sterile gauze dressings applied to the bleeding surfaces. After the lapse of 2 months this entirely negative form of therapy was followed by a regression of the process: there was a gradual decrease of the extensive ulcerated zone, with formation of new epidermis at the borders. A second biopsy was now performed, and at the end of 6 months, when epithelization was complete, a third was carried out. It was thus possible in a series of biopsy examinations to compare the different stages of involution of the neoplastic process, which ended in a definitive finding of practically normal epidermis. We have to admit that the defensive forces of nature, whether endogenous, congenital, or acquired during the course of years of immunization following repeated attacks of fever and of local and general infection to which every growing organism is more or less subject, are so extraordinarily great as to exceed the bounds of our imagination. They include organic humoral conditions, the biochemical constitution of the cell, nervous factors, etc., capable of providing resources still undreamed of, and of awakening such aggressive activity against a local or even a relatively generalized process as to justify fully the concept of a spontaneous cure even of a tumor whose character is malignant. The fact that no form of treatment was applied that could logically overcome the blastomatous stimulus shows that if this stimulus ceased or even diminished, such effect was due solely to the defensive power of the organism.—*Riforma medica*, August 10, 1931.

Measles Serum.—In an article on the "Prevention and Control of Measles, Scarlet Fever, and Diphtheria in Institutions and the Home," David N. Nabarro and A. Gordon Singy report their results with the prophylactic use of convalescent measles serum in 625 children. In this series 98.1 per cent of the children were apparently protected, while in Gunn's series protection was afforded in 95.7 per cent of the cases. These figures give striking and sufficient proof that, until an efficient animal serum is prepared, convalescence measles serum is the best weapon at our disposal for preventing measles, and should be more widely used than it is at present. In the few cases in which the serum failed to protect, the attack of measles was very mild. As children are not suitable donors of adequate quantities of blood, the authors obtained their supply from adults, only normal uncomplicated cases of measles being utilized for this purpose. The greatest care was taken to exclude the possibility of any other infection, particularly syphilis or tuberculosis. From seven to fourteen days after defervescence patients were bled aseptically to the extent of 200 to 400 c.c. into sterile oxalate solution, this procedure yielding as much as 60 per cent of serum, after precipitation of the oxalate with calcium chloride. After testing the serum for a Wassermann reaction, 0.5 per cent phenol was added and the serum pooled with several other serums, to ensure a uniform potency of the final product. In order to ensure the production of complete protection, the authors have increased the dose of serum to 5 c.c. intramuscularly for children under three years of age and to 7 c.c. for those over three. Injected before the fifth or sixth day of incubation, the serum affords complete protection; injected on the sixth to the ninth day of incubation, protection is only partial, and a very mild attack of measles usually ensues. If injected after the ninth day, no benefit may be expected from the serum. Whole blood may be used instead of serum, in which case the blood of a convalescent is injected intramuscularly into the recipient, the amount injected being double the serum dose.—*British Medical Journal*, October 3, 1931, ii, 3691.

Results of the Use of Stramonium in Parkinson's Disease and Postencephalitic Parkinsonism.—O. J. Menard and L. M. Hurxthal report their experience with the use of stramonium in 23 cases, a few of which seemed to be cases of true Parkinson's disease. Only the powdered leaves, at first in capsules, then later in pill form, were used. No worthwhile results can be obtained in giving less than 5 to 7 grains per day. At first $2\frac{1}{2}$ grains are administered three times a day; later this dose may be raised or lowered as seems necessary. A few of the patients took as much as 15 grains a day, and one took $22\frac{1}{2}$

grains. At first most of the patients complain of dryness of the mouth and visual disturbance. The use of citrus fruits or candy helps to offset the excessive dryness. No harmful effects from the drug have been noted. Muscular rigidity, mental retardation, and excessive salivation are almost invariably relieved. Tremor and oculogyria may be lessened. The masked facies and stare are rarely changed, although there may be a distinct change in the countenance, conveying the impression of a more optimistic state of mind. Of the 23 patients in the group, 6 experienced marked improvement, 6 moderate improvement, while 6 received slight benefit, and 4 obtained no help from the drug. The authors conclude that stramonium in adequate doses is helpful in alleviating some of the symptoms of Parkinson's disease and postencephalitic Parkinsonism, and should be tried in all such cases.—*New England Journal of Medicine*, October 15, 1931, ccv, 16.

The Course, Diagnosis, and Treatment of So-Called Chronic Appendicitis.—The expression "chronic appendicitis," according to Albert Oppenheimer, embraces a number of different anatomic and functional changes in the region of the appendix which the roentgen ray alone can present objectively. This is the only method that can establish in each individual case the kind of disturbance present, whether, for example, the condition is one of irritation or is due to adhesions, and if the latter is the case, in what way these interfere with the normal mechanism. The demonstration of cicatrices in the appendix is by no means enough for a diagnosis; functional disturbances must also be present, to justify one in incriminating this organ. Three cases of chronic appendicitis are outlined, all having in common the fact that disturbances supposedly "nervous" had existed over a number of years without any acute attack until a fulminating attack suddenly necessitated appendectomy. Every unfilled appendix and, still more, every appendix too slow in emptying is open to suspicion. When the roentgen picture shows either one of these, one should think of adhesions; but the diagnosis must not be made if there is free mobility with complete absence of functional disturbances. What the roentgenologist has to show in the appendix is cicatricial changes or their functional sequels. Not the establishment of isolated organic lesions, but the pathologic function following these is what determines the nature of the disease. A cicatrix is not a disease until it interferes with function. In chronic appendicitis the manifold localizations of the pains, their varying intensity and the more diffuse sensations that are not localized at all are explained by the widely separated points of attachment of periappendicular adhesions. A deformed appendix may give rise to the most varied clinical symptoms, such

as spasm of the cecum, the sigmoid, or the pylorus; the author has even seen a total spasm of the transverse colon due to the condition of the appendix. Less frequently are states of irritation of the mucous membrane and musculature of the large intestine recognized in the picture of atypical movements. The roentgen findings give precise indications for treatment. Stasis in the appendix always calls for appendectomy. Retention, affecting the cecum also, should be treated with laxatives (paraffin). If spasm predominates (pylorus, colon, colitis symptoms) bland diet and atropine often bring relief until some fresh attack makes operation necessary.—*Deutsche medizinische Wochenschrift*, September 18, 1931.

Progressive Exophthalmos Following Thyroidectomy; Its Pathology and Treatment.—Howard C. Naffziger, writing in the *Annals of Surgery*, October, 1931, xciv, 4, finds that there is no concurrence of opinion as to the underlying mechanism of the exophthalmos which is characteristic of certain types of goiter and which occasionally persists after thyroidectomy. The following case, he believes, throws some light on this subject. In a woman, 47 years of age, protrusion of the eyeballs increased after thyroidectomy. She became nearly blind, the optic discs became choked, and there was a considerable degree of optic atrophy. It was felt that decompression of the orbit offered both an opportunity to relieve the exophthalmos and perhaps to determine its cause. When the orbital fascia was opened and the orbital contents were exposed it was found that the tension of the extraocular muscles was extreme, and it was felt that the explanation of the exophthalmos must lie here. On deepening the incision it was found that instead of a normal muscle, perhaps 1.5 mm. in thickness, there was a deep mass of muscle filling the entire retrobulbar space. Muscle splitting was continued backward until the optic nerve was exposed, and the muscle became progressively more fibrous and even gritty. Following complete decompression of the orbital contents and the optic nerve, the eye receded markedly. At the end of a week it was found that vision was returning rapidly, and in a short time the patient was able to read addresses on letters. She returned a month later, insisting that the same operation be performed on the opposite side. The second operation was equally as successful as the first. Portions of the extraocular muscles on both sides were removed for microscopic examination, which showed round-cell infiltration, marked edema, destruction of the muscle fibers, complete loss of muscle architecture with increase in fibroblasts and generalized fibrosis. In speculating as to the cause of this condition, the author notes that most of the patients described in the

literature as suffering from progressive exophthalmos have had abnormal or low basal metabolism. In the case here reported the basal metabolism was low and thyroid had been given. Kunde has reported that exophthalmos can be produced in rabbits after thyroidectomy by feeding thyroid. It is also noted that in the patient both jugulars had been tied. The fact that the venous return from the orbit had a double channel to the systemic circulation, one by the intracranial route, and the other through communicating veins to the facial vein, might have been one factor in the production of the protrusion.

Agranulocytosis and Aplastic Anemia as Varieties of Bone-Marrow Failure.—F. Parkes Weber, writing in the *Practitioner*, October, 1931, cxxvii, 5, holds that aplastic (hypoplastic) anemia should properly signify any anemia due to deficient formation of red cells in the bone-marrow. Deficient production of red cells is usually accompanied by deficient production of other blood elements derived from the bone-marrow, namely, the granulocytes and the thrombocytes. Between the blood pictures of agranulocytosis and aplastic anemias there are no well defined boundaries, and the blood picture of agranulocytosis may terminate as one of aplastic anemia. Aplastic anemia may be due to old age or exhaustion, to a septic process or a toxin (arsenobenzol, benzol poisoning, etc.) or to both combined, and the same causative factor may be followed sometimes by the blood picture of agranulocytosis, sometimes by that of aplastic anemia. Another reason for regarding agranulocytosis as a variety of aplastic anemia is that in some stages of lymphatic leucemia the blood picture may show hypoplastic anemia, as in a case here described. At one time it was suggested that all patients with acute aplastic anemia, without obvious cause, were in reality in a stage of acute lymphatic leucemia with a fatal termination before the typical changes in the blood picture had developed. This can no longer be maintained since patients with aplastic anemia may be kept alive by blood transfusions for indefinite periods. That x-rays or radium may cause aplastic anemia and agranulocytosis is shown by various published accounts. To these the author adds a case of Hodgkin's disease in which x-ray treatment was responsible for the development of aplastic anemia, and says he would hesitate to advise the same treatment in a similar case. He suggests the use of blood transfusion for aplastic anemia caused by x-rays or radium. He also cites a case in which the application of radium was followed by extraordinarily rapid generalization of a lymphosarcoma-like growth. This case may possibly have been one of Hodgkin's disease in which enlarged lymph glands at times present a lymphosarcomatous appearance.



LEGAL



FEDERAL AND STATE TAXATION OF GIFTS MADE PRIOR TO DEATH

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The enormous expenses of our State and Federal governments have led to constant endeavors to devise legislation by which taxes may be imposed to provide additional and adequate revenue to meet the expenses so incurred. A very clear illustration of the trend in our tax laws is found in those statutes, both State and Federal, which seek to tax gifts made by a decedent prior to his death.

These statutes fall into two classes: First, those which create an artificial presumption that every gift or transfer made by a decedent within a certain number of years of his death shall be deemed to have been made in contemplation of death, and hence be taxable as part of his estate. With the meaning of these statutes, a gift causa mortis or in contemplation of death is a gift of property made by the donor who, at the time of the making of the gift, is in imminent expectation of death and makes the gift mindful of the expectancy of death in the near future. The presumption created by such statutes can, of course, be rebutted by proof that at the time of the making of the gift the donor was not in danger of death and did not make the gift with the expectancy that he was going to die in the near future.

The second class of statutes dealing with the subject under consideration makes a transfer of property in excess of a certain sum, within an arbitrary limit prior to death, absolutely taxable. In other words, in this class of statutes the tax does not depend upon whether or not in fact the donor was in danger of death; and even if proof could be offered that the donor was at the time of the making of the gift in perfect health, under these statutes if the gift is made within a certain time prior to death it is taxable as part of the estate of the donor. The statutes in question represent the natural development of attempts to evade and avoid the tax on decedents' estates through the medium of gifts prior to death.

In the State of New York the pertinent provision of our tax law reads as follows:

"Any transfer of a material part of his property made by the decedent within two years prior to his death, without such consideration shall, unless shown to the contrary, be deemed to have been made in contemplation of death within the meaning of this article;***" (Tax Law, Sec. 249-r.)

It will be noted that under this statute the presumption there created may be rebutted by proper

proof. With respect to the constitutionality of such an enactment the Supreme Court of the United States has said:

"***the establishment of presumptions and of rules respecting the burden of proof, is clearly within the domain of the state governments, and that a provision of this character, not unreasonable in itself and not conclusive of the rights of the party, does not constitute a denial of due process of law."

As illustrative of how far some States have gone in their endeavors to place a tax upon transfers made at any time prior to death, it is interesting to consider a statute of one of our mid-Western States passed a few years ago. This statute declared, in substance, that all gratuitous transfers of a material part of a decedent's estate made within six years prior to death should be treated and taxed as though made in contemplation of death. This statute, unlike the statute in New York, did not merely create a presumption but laid down the arbitrary rule that all gifts made six years prior to the decedent's death were taxable as gifts made in contemplation of death. Under this statute it was not possible to introduce proof showing that the donor was in perfect health and that the gift was not made in expectancy of death in the near future. The constitutionality of this statute was challenged on the ground that it was violative of those clauses contained in the Fourteenth Amendment of the Constitution of the United States guaranteeing due process of law and equal protection of the law.

The Supreme Court of the United States, dealing solely with the statute in question, held that to tax gifts within a six-year period of time was to deprive the donees of their property without due process of law, and that the statute did not afford to them the equal protection of the law. The court was divided on the question, Mr. Justices Holmes, Brandeis and Stone dissenting from the majority opinion. The dissenting opinion of Mr. Justice Holmes is important in the light of the Federal statute which we will discuss in this editorial. The dissenting opinion said in part:

"If the Fourteenth Amendment were now before us for the first time I should think that it ought to be construed more narrowly than it has been construed in the past, but even now it seems to me not too late to urge that in dealing with State legislation upon matters of substantive law we should avoid with great caution attempts to

substitute our judgment for that of the body whose business it is in the first place with regard to questions of domestic policy that fairly are open to debate

The present seems to me one of those questions I leave aside the broader issues that might be considered and take the statute as it is written, putting the tax on the ground of an absolute presumption that gifts of a material part of the donor's estate made within six years of his death were made in contemplation of death. If the time were six months instead of six years I hardly think that the power of the State to pass the law would be denied as the difficulty of proof would warrant making the presumption absolute, and while I should not dream of asking where the line can be drawn since the great body of the law consists in drawing such lines, yet when you realize that you are dealing with a matter of degree you must realize that reasonable men may differ widely as to the place where the line should fall. I think that our discussion should end if we admit, what I certainly believe, that reasonable men might regard six years as not too remote. Of course many gifts will be hit by the tax that were made with no contemplation of death. But the law allows a penumbra to be embraced that goes beyond the outline of its object in order that the object may be secured. A typical instance is the prohibition of the sale of unmixing malt liquors in order to make effective a prohibition of the sale of beer. The power is not to be denied simply because some innocent articles or transactions may be found within the proscribed class. In such cases and they are familiar, the Fourteenth Amendment is invoked in vain. I am not prepared to say that the legislature of Wisconsin, which is better able to judge than I am, might not believe, as the Supreme Court of the State confidently affirms, that by far the larger proportion of the gifts coming under the statute actually were made in contemplation of death. I am not prepared to say that if the legislature held that belief, it might not extend the tax to gifts made within six years of death in order to make sure that its policy of taxation should not be escaped. I think that with the States as with Congress when the means are not prohibited and are calculated to effect the object we ought not to inquire into the degree of the necessity for resorting to them.

"It may be worth noticing that the gifts of millions taxed in this case were made from about four years before the death to a little over one year. The statute is not called upon in its full force in order to justify this tax. If I thought it necessary I should ask myself whether it should not be construed as intending to get as near to six years as it constitutionally could and whether it would be bad for a year and a month."

The Federal Revenue Act of 1926 contains similar provisions to those embodied in the stat-

ute just discussed, except that instead of a six-year period the Federal Act reduces the period to two years. The tax is not based on any presumption, but is an absolute tax not capable of being rebutted by proof that the gift was not made in contemplation of death. This statute provides

"Where within two years prior to his death*** the decedent has made a transfer*** not admitted or shown to have been made in contemplation of or intended to take effect in possession or enjoyment at or after his death, and the value or aggregate value, at the time of such death, of the property or interest so transferred to any one person is in excess of \$5,000, then to the extent of such excess, such transfer or transfers shall be deemed and held to have been made in contemplation of death within the meaning of this chapter."

Within the last year this statute has been the subject of attack on the ground that it is unconstitutional in three cases in the lower Federal courts, and in each case the court held the law unconstitutional. The facts before the courts in these decisions illustrate the operation of the statute.

In the first case the deceased, within two years of his death, had made a wedding gift of certain securities to one of his daughters and at the same time had given a like amount to another daughter. There was no evidence that the gifts were made in actual contemplation of death. The collector of internal revenue assessed a tax upon the gifts, and suit was brought to recover the amount paid under protest. The court ruled that the section of the act under which the tax was imposed was unconstitutional.

Within a few days another district court made a similar ruling. In that case the decedent had died in December, 1928, having in 1927 made certain advancements to his sons evidenced by notes. In the suit to recover the amount of a tax paid under protest, the collector conceded that the gifts were complete and irrevocable gifts by the decedent to his children during his lifetime which were not made in contemplation of death, but contended that they were taxable under the statute.

In the third case, which arose in one of the district courts of this State and was decided but a few months ago, the action arose out of a transfer by the decedent a little less than a year and a half before his death, of a half-interest in a piece of real estate in New York City to his son. The record showed that the gift was not made in contemplation of death, but as a provision for the son upon his marriage. The judge decided that the tax paid under the statute should be refunded, stating that the statute was unconstitutional as having fixed a purely arbitrary period of time, and working as a tax upon a gift without regard to the facts or the actual intent

Unless the law is in the meantime repealed, the validity of this tax is almost certain to be ruled upon eventually by the Supreme Court of the United States. The ruling by the court already referred to, declaring unconstitutional a

statute where a six-year period preceding death was involved, is not necessarily conclusive on the question of the present Federal statute which limits taxation to a period of two years preceding death.

ALLEGED NEGLIGENCE IN TREATING FRACTURE

A man about fifty-five years of age received an accidental injury to the lower third of his left leg near the ankle, as a result of a kick from a horse. Immediately after the injury, a nearby general practitioner was called to attend him and upon examination found the leg to be in a very serious condition, the injury appearing to be a compound fracture of both bones of the leg and both bones being shattered. The doctor placed a temporary splint on the leg, put the patient in his car and drove him to the nearest hospital. X-rays were immediately taken and disclosed a compound comminuted fracture of the tibia and fibula.

A surgeon who specialized in the treatment of fractures was called in to take charge of the case. He examined the leg and the X-ray pictures, and informed the patient that the fracture was such an extremely bad one that better function of the leg would probably result from amputation. The patient refused to consent to an amputation and thereupon he was put under a gas ether anesthesia, and with the aid of a fluoroscope the surgeon, assisted by the general practitioner, as best he could under the circumstances reduced the fracture, moulding the bones into the best possible position. A forcible extension of the leg was undertaken and a light plaster of Paris cast was applied after the foot and leg had been well protected and padded with sheet wadding, and the wound cleaned thoroughly with alcohol and iodine. The cast covered the whole foot and leg and extended well above the knee. A window was provided in the cast over the point where the flesh was lacerated by the protruding bone.

The plaintiff then remained in the hospital for several days under the care of the surgeon. During the entire time of his stay at the hospital the patient continually requested that he be permitted to go home to convalesce so that he might avoid the expense of hospitalization. The patient's progress was extremely good under the circumstances; no evidence of sepsis or suppuration developed in the wound.

At the end of nine days, at the insistence of the patient, the surgeon permitted him to be

removed to his home with explicit directions that he should immediately place himself under the care of the first doctor for further observation and treatment. The patient did not communicate with said doctor for nearly three weeks, when the doctor promptly called at the patient's home and examined the leg. He found that the wound had healed, and removed the upper part of the cast for the patient's comfort. About a week later the doctor again called and removed the rest of the cast and bandaged the ankle carefully for support, at that time warning the man not to undertake to place any weight on the leg for some time and, if he attempted to walk, to do so with the aid of crutches.

The doctor returned a few days later and found that the patient had moved from the locality. The next he heard of the case was about six months later when the patient called at his office to solicit aid from the doctor that he might enter the county home. At that time examination disclosed that the leg was in very good condition considering the nature of the injury.

Nearly two years later an action was started against both of the doctors in question, in which it was claimed that due to their negligence in setting the fracture the plaintiff's leg became stiffened, permanently malformed and shortened. It was also claimed that as a result of the negligence and malpractice of the defendants the plaintiff had been unable to perform any work and had become dependent upon charity for his support. When the action came on for trial before a judge and jury, the plaintiff appeared in court with his leg somewhat misshapen, but he was able to walk upon the same with a very slight limp. The plaintiff failed to present any medical testimony to the effect that either of the doctors had in any way departed from proper practice in their treatment of the patient, and upon the motion of the attorney for the defendants the complaint was dismissed at the close of the plaintiff's case, thereby terminating the matter in favor of the doctors without requiring them to put in their defense.



NEWS NOTES



REPORT OF THE JOINT COMMITTEE TO STUDY THE REPORT OF THE GOVERNOR'S SPECIAL HEALTH COMMISSION AND MAKE RECOMMENDATIONS UPON ALL OR ANY OF THE SUBJECTS PRESENTED

To the House of Delegates:

Organization

In accordance with your instructions given at your last annual meeting that "the Committee on Public Health and the Committee on Public Relations study the report of the Governor's Special Health Commission and make recommendations upon all or any of the subjects presented and that the said committees report their recommendations to the House of Delegates not later than January 1, 1932," these two committees met in Albany in the office of the Legislative Bureau on September 11, 1931, and after deliberating upon the instructions, decided that you intended the two committees should combine and undertake the study as a joint committee. Accordingly, each committee met separately and voted in favor of such action. The two committees then organized as a Joint Committee which hereafter shall be the term used in referring to the committees in this report. Dr. Thomas P. Farmer was elected Chairman, and Dr. Joseph S. Lawrence, the Executive Officer of the State Society, was elected Secretary. The Joint Committee granted Dr. William H. Ross' request, transmitted through Dr. James E. Sadlier, that Dr. Ross, although a member of the Public Relations Committee, be excused from sitting with the Joint Committee for the reason that he is a member of the Governor's Special Health Commission. At the next meeting a sub-committee was elected, consisting of Dr. Farmer, Dr. Sadlier and Dr. Lawrence, to arrange details of the meetings of the committee and such other necessary matters as had to be transacted between the meetings of the committee.

Definition of Scope

The Joint Committee decided that its scope of study should include; (1) the Preliminary Report of the Governor's Special Health Commission dated February 19, 1931, and known as Legislative Document Number 65 of 1931, and which hereafter will be referred to as the Preliminary Report; (2) any legislation bearing upon the report; and (3) such other matters as appear in the minutes of the House of Delegates (Section 41) of the annual meeting of the State Society on June 1, 1931, in the discussion preceding the adoption of the resolution directing this study.

Methods of Study

After careful deliberation the Joint Committee decided that it could best obtain information for its study from four sources:

1. The Preliminary Report of the Governor's Special Health Commission.
2. Members of the Governor's Special Health Commission.
3. Individuals well informed and experienced with the subjects or activities considered in the Preliminary Report.
4. Representatives of county medical societies.

The sections of the Preliminary Report were assigned to individual members of the Joint Committee for intensive study. The following members of the Governor's Special Health Commission, upon invitation, appeared before the committee: Dr. Livingston Farrand, Commissioner Thomas Parran, Jr., Dr. George W. Cottis, Dr. Matthias Nicoll, Jr., Dr. Linsly Williams, and Mr. Homer Folks. Dr. William H. Ross was invited as a member of the Governor's Special Health Commission, but was unable to be present. Dr. Edward L. Keyes was invited as a member of the Governor's Special Health Commission, but was unable to be present and requested that the Joint Committee invite Dr. William F. Snow, a member of the Sub-Committee on Social Hygiene of the Governor's Special Health Commission. Dr. Snow was, therefore, invited and appeared before the Joint Committee. The following persons were asked to appear before the Joint Committee because of their special knowledge of and experience in certain health subjects or activities: Dr. Burton T. Simpson, Director of the State Institute for the Study of Malignant Disease; Dr. Daniel R. Reilly, Commissioner of the Cortland County Health Department; Dr. Arthur T. Davis, Commissioner of the Suffolk County Health Department. Dr. Reginald M. Atwater, Commissioner of Health of Cattaraugus County, was invited but was unable to be present. The president and secretary of each county medical society were notified of the times and places of meetings of the Joint Committee, at which a report from their county society might be presented. Statements either through personal representation or by correspondence were received from all county medical societies except Columbia, Delaware, Fulton, Livingston, Oswego, St. Lawrence and Schuyler.

Meetings

The Joint Committee has held eight regular meetings. The first two were devoted to organization, preparation for study, and the consideration of the various sections of the Preliminary Report of the Governor's Special Health Commission. These meetings were held in Albany and New York City. The next four meetings were held in Buffalo, Syracuse, Albany and New York City. The morning session of each of these four meetings was devoted to executive business of the Joint Committee, the Joint Committee's study of the report of the Governor's Special Health Commission, and hearings for members of the Commission and other persons especially invited by the Joint Committee. At the afternoon session of each of these meetings one member of each county medical society represented was heard by the Joint Committee, after which all members from county medical societies represented were given an opportunity to speak. The subsequent meetings of the Joint Committee have been concerned with the correlation of all the data obtained by the Joint Committee and formulation of its conclusions. A complete record of the proceedings and hearings of the Joint Committee has been prepared and filed with the secretary of the House of Delegates.

Study of Report of Governor's Special Health Commission

The report of the Governor's Special Health Commission which the Joint Committee has studied, is designated a Preliminary Report. The Joint Committee has learned that a complete report is yet to be made by the Governor's Special Health Commission. Your Joint Committee finds that their instructions from the House of Delegates definitely refer to the Preliminary Report as printed, since the wording of the minutes of the House of Delegates is: "Study of the volume that was printed." The Joint Committee reviewed the entire printed volume known as the Preliminary Report, discussing it section by section, and after obtaining as much information as possible, discussed the Preliminary Report as a whole. The Preliminary Report is prefaced by a message to the legislature from the Honorable Franklin D. Roosevelt, Governor of the State of New York, which states reasons why the study was made. The Governor calls attention to the accomplishments in public health work in New York State, making this statement: "The progress which we have made in the last fifteen years is nothing short of phenomenal," and he evidently believes that much of this is due to "legislation passed in 1913 upon recommendation of a state health commission." Calling attention to the piecemeal amendments made to the public health law since 1913, the rapid strides in medical science, and experience gained in public health ad-

ministration since that time, the Governor gives these as reasons for the present study which, in the opinion of the Joint Committee, justifies his decision. As the Governor's letter again refers to the "outstanding achievements and accurate knowledge of modern medical science," it is the opinion of the Joint Committee that the Governor distinctly had in mind the necessity for representation of the medical profession on the Commission. In his letter to the legislature the Governor refers to the recommendation regarding the organization of county boards of health as the outstanding feature. Our study of the Preliminary Report indicates that this recommendation has been the one of greatest importance.

State Aid

The Preliminary Report of the Commission recommends that state aid be continued for the development and operation of county health work. The Joint Committee has given much consideration to this recommendation and also to the general question of state aid. It realizes that state aid may stimulate communities to action earlier than might otherwise be had and that it may be of particular assistance to some communities to obtain service which otherwise they might not secure. The Joint Committee cannot foresee the ultimate limits to which this debatable principle may be extended nor where control may ultimately center. The Joint Committee, therefore, feels that it has not the necessary information to make a definite pronouncement on the general subject of State Aid, but believes this subject is of great importance and merits study by medical, economic and legislative authorities.

Local Health Organizations

The section of the Preliminary Report entitled "Local Health Organizations" considers the advantages of county health units and recommends their organization in all counties. From a study of the report itself, from information obtained from members of the Commission, and from information received from county medical societies, it is apparent that the major feature of the Preliminary Report deals with this particular recommendation. As a result, a large part of the time of the Joint Committee has been occupied with a review of this subject. In considering county health units it must be remembered that the standards of such organizations vary considerably. The Joint Committee has had in mind as desirable only a county health unit which would be efficient, economical and progressive,—an organization which through the cooperation of the medical profession should benefit the community. The State Medical Society approved such an organization at its annual meeting of the House of Delegates on May 9, 1927. The Joint Committee does not feel that establishing county

boards of health without regard to standards is a progressive step.

The Joint Committee, from its study and from information furnished by county medical societies, finds that many of the societies have given this matter serious consideration and that many are making progress toward the inauguration of county health departments of the proper type under the present permissive law. The information obtained from the county medical societies has been instructive and inspiring. Advantages claimed for a properly organized county health unit are: Centralization of authority within the county itself; coordination of health activities within the district; elimination of duplication and overlapping; economies in administration; provision for adequate public health nursing under medical supervision; provision for safeguarding milk and water supplies; better opportunity for proper health education; opportunity for the county medical society to make its services available in an efficient health program.

Objections offered to a county health unit are: Fear of political interference on the part of the governing bodies of the county; possibility of the county health commissioner assuming absolute authority if the county board of health fails to meet its proper obligations and duties, and the possibility of such an organization becoming bureaucratic and invading the field of the practice of medicine. It is interesting to note, however, that some county societies feel that a county health unit is a step away from any bureaucratic organization or the possibility of state medicine. It should be observed that certain county medical societies, while approving the general principle of the county health unit, specifically object to the adoption of this principle in their own counties because of geographical or political conditions, the heavy demands of taxation at the present time due to mandatory conditions or because of expense. In some counties it is feared that the work in outlying districts in unfavorable seasons would not be done as well under a centralized form of administration as under the present method. Objection has been offered in certain counties that public health nurses might exceed their authority. The information obtained from county medical societies indicates that there is no great opposition to the principle of the county health unit, but a majority of those which have expressed an opinion oppose the mandatory proposal.

In view of the advantages offered in favor of a county health department, we believe that the county is a proper governmental area on which to base public health work and that the existing village and township plan is too disconnected and lacks the unity essential for proper administration. Since much legislation is mandatory, we see no reason why a measure which has to do with such a vital problem as public health should not have

the force given it by a mandate. We regret that the Commission could not submit its plans earlier to the leaders, both lay and professional, so that there might have been more time for deliberate consideration and discussion before legislative action was requested. Furthermore, we consider that in a period of great financial depression it may be temporarily injudicious to encourage legislation which of necessity, if it is effective, must entail an additional burden upon the taxpayers.

We are impressed by the fact that several counties are on the point of developing county health departments under the permissive act and we think they should be given a chance to work out such plan in advance of any mandatory procedure. Therefore, whilst we are in definite accord with the recommendation of the Governor's Special Health Commission with reference to the development of county departments of health, we would suggest that the mandatory provision be deferred. With mandatory action deferred we recommend that the Medical Society of the State of New York requests its Public Health Committee to carry on a campaign of education so that the various component county medical societies will become fully acquainted with their duties and responsibilities and be capable of exercising their leadership, which is essential in the development of any public health program. We also recommend that county medical societies encourage the development from their own societies of physicians who may qualify as county health commissioners and thereby preserve the principle of home rule.

Calling attention again to the desirability of home rule, the Joint Committee recommends that some plan be developed whereby small counties might have a commissioner of health of their own selection, possibly by combination with other counties or by formation of a consolidated health district. Your Joint Committee realizes the legal difficulties involved in this recommendation, but is of the opinion that they can be surmounted by proper legislation.

Your Joint Committee strongly emphasizes the desirability of retaining the present local health officer as a deputy under the county commissioner of health.

The Joint Committee is of the opinion that at least three physicians should be members of the county board of health and recommends that the present law be amended whereby county medical societies may have the opportunity of nominating a panel of physicians from which the county board of supervisors may make appointments of medical members to the county board of health.

Regarding any provision for excluding small cities from county health districts or for providing retention of boards of health in villages over five thousand population, your Joint Committee feels that if the advantages set forth for a county health department are well founded, then the en-

tire population is entitled to the benefits of such an organization. Only communities of fifty thousand population or more, or in which a full-time health officer is in charge, should have the option of exclusion from county health units.

The attention of your Joint Committee has been called to the apparent irregular and infrequent meetings of the county board of health in one county. Believing that this fact may be responsible in part for the unsatisfactory conditions under which that particular county board of health is operating at the present time, as well as for many other reasons, we recommend that the present permissive law be amended so as to provide that county boards of health meet at regularly specified monthly intervals.

It has been suggested to the Joint Committee that an advisory board of from three to five physicians (depending on the size of the county) be appointed by the county medical society to advise with the county commissioner of health on such matters as he may desire. Your Joint Committee feels that such an advisory committee would be not only an aid to constructive health work, but would be also an important factor in maintaining harmonious relations between the medical profession and the county health department. The accomplishments to be obtained through such harmonious relationships are well exemplified in the splendid work now being done by physicians in several counties. Your Joint Committee favors the retention of that part of the present law providing for dissolution of county boards of health.

Health Administration in Cities

In regard to health administration in cities, the Joint Committee reports that it is in favor of the principle that full-time health officers be provided for cities of fifty thousand or more population.

Tuberculosis

The main recommendations of the section on Tuberculosis have already been enacted into law. The Joint Committee is in accord with these recommendations. It feels that the counties from which patients come to the new state sanatoria should assume complete financial responsibility for the maintenance of such patients. The Joint Committee regrets that provision for the building of preventoria has not received consideration from the Commission. The importance of managing bone and joint tuberculosis in such a way as to avoid crippling deformities is discussed in this report of the Joint Committee under the heading Orthopedics.

Venereal Diseases

The Joint Committee is opposed to the principle of treatment of non-indigent cases by public authorities. It is in accord with the principle of giving public health authorities control of any

infectious disease while in a communicable stage, but this does not mean that it should necessarily follow that the treatment in such stage should be provided by public health officials. Furthermore, from reliable information obtained, the Joint Committee feels that greater progress will be made in the control of venereal diseases especially in rural and small communities when treatment is given by an individual physician rather than in clinics.

Cancer

The Joint Committee is in accord with the recommendations regarding cancer and suggests the need for maintaining the identity of the State Institute for the Study of Malignant Disease, located in Buffalo, and that provision should be made whereby the qualifications for a director of that institution are not made the same as might suffice for a director of a division of cancer in the State Department of Health. The Joint Committee is conscious of what has been accomplished among the medical profession from an educational campaign directed against cancer and carried on by the Medical Society of the State of New York. Your Joint Committee recommends that educational work either public or professional on the subject of cancer should be done in close cooperation with the Medical Society of the State of New York and the American Society for the Control of Cancer.

Maternal and Infant Hygiene

No disagreement can be found with the statement contained in the Preliminary Report "that among the most vital public health problems of the present day is that of adequate protection of mothers and infants" and "that adequate care during pregnancy and childbirth will save the lives of many mothers as well as reduce materially the deaths among infants in the first months of life."

Improvement in child hygiene and better medical care have brought about a great reduction in the death rates in small children, but other surveys show the undoubted need of more effective methods of detecting errors of growth and development in the pre-school and school child. This requires intimate cooperation between public health agencies and physicians and continued efforts are necessary to secure this.

An effective program of maternity care must be coordinated so as to include every stage of the process from early pregnancy to the restoration of the mother to normal health after delivery. The efforts at providing pre-natal care have unbalanced the scheme of pregnancy supervision, and fault must be found with lay agencies in particular which stress this period to the exclusion of the intranatal and postpartum care. This fact does not appear to be sufficiently or satisfactorily

brought out in the report under consideration. The fact must not be lost sight of that the high death rate associated with pregnancy does not involve alone the classes of our population that would be reached by public agencies. There must be some other factor at work to account for the high death rates associated with childbearing aside from the lack of public clinical facilities. The confirmation was amply brought out at the recent White House Conference and elsewhere, that the improved education of doctors and nurses was one of the most important factors in providing safe and satisfactory obstetric care. It is essential that this be recognized, and this recognition is of greater consequence than the recommendation that adequately organized county-wide health services constitute the most important element in providing the needed services for reduction of the maternal and infant death rates. The function of a health department should be rather of a supervisory character, by establishing standards for proper obstetric practice and by making studies of state wide conditions, the results of which may be applied to the solution of local problems.

School Hygiene

No recommendations are made in the Preliminary Report under the section on School Hygiene. Your Joint Committee is of the opinion that the underlying principle of this section is a satisfactory mutual agreement between the State Department of Health and the State Department of Education. It will be necessary for this mutual understanding to extend to cities and it is to be hoped that the same definition of authority can exist in both state and municipal departments of health and education.

The Joint Committee approves of the principle that school children should be examined more thoroughly and that these examinations should be made frequently. We suggest that efforts be made to develop satisfactory cooperation between the public health authorities and the practicing physicians of the community for the conduct of these examinations and of treatment.

Orthopedics

Of the recommendations in the section entitled Orthopedics, your Joint Committee approves of enlarging the Reconstruction Home at West Haverstraw. We believe that its services should be limited to the unimprovably crippled and to the indigent crippled or handicapped children from counties that cannot develop their own orthopedic services. Furthermore, there could be included those requiring long periods of months or years of educational and corrective treatment, thus taking from the counties particular classes of cases which could not be cared for in their own locality. It is the feeling of the Joint Committee that this section is not properly worded, and that

greater consideration should have been given to the prevention of the onset of disabling conditions as well as their later cure, and that local and private institutions furnishing corrective care should not be hampered by the state's program.

Public Health Nursing

The recommendations in the section on Public Health Nursing are general and indefinite and require no special comment.

Industrial Hygiene

In the section on Industrial Hygiene, three recommendations are made, with the first and third of which the Joint Committee is in accord. The Joint Committee feels that recommendation No. 2, extending the schedule of occupational diseases "to include all diseases arising out of employment and giving authority to make awards in cases of such occupational disease when it is established that the particular disability in fact arose out of employment," needs clarification and further study by a commission.

Sanitation

The Joint Committee approves all the recommendations made under the section on Sanitation, but regrets that the Commission did not give greater attention to the subject of pollution of streams by sewage.

Public Health Personnel

The Joint Committee is of the opinion that the Public Health Council is the proper body to establish qualifications for physicians in public health work wherever required, but that such authority should be given only when positions are created or the necessity arises.

Your Joint Committee also recommends that provision be made in the public health law to require the Public Health Council to hold open hearings upon proposed regulations or changes in the sanitary code before their adoption.

Realizing the importance of authoritative medical representation on the Public Health Council, your Joint Committee recommends the consideration of a plan whereby the State Medical Society shall have the privilege of submitting to the Governor of the State of New York a list of suitable names from which he may make appointments when filling the place of a medical member of the Public Health Council. It is felt that this procedure will be found advantageous to the Governor and to the public.

General Matters

The discussion in the House of Delegates in connection with the adoption of the resolution directing this study mentions general matters regarding the Preliminary Report of the Gover-

nor's Special Health Commission as specific reasons for making this study. In this regard, your Joint Committee offers the following information which it has obtained: In his message to the legislature the Governor has stated amply, as previously mentioned, his reasons for appointing a Health Commission at this time. The Special Health Commission was appointed by the Governor and consisted of fourteen members, eight of whom are physicians. Three of the medical members of the Commission are in active medical practice, two are public health officials, one is a research worker of renown, one is an executive officer of a medical organization, and one is the president of a large university. However, your Joint Committee feels that the question of the personnel of the Commission should not be a matter for or against any real benefits which have been derived from or may grow out of their study. The cost of the study of the Commission was financed by the Milbank Memorial Fund and by a small contribution from the Association of Women's Clubs. The point should be made clear that the Special Commission is a Governor's commission and not a legislative commission.

Present Status of the Public Health

The Joint Committee desires to comment on that portion of the Preliminary Report entitled "Present Status of the Public Health," which it

has studied very carefully. The Joint Committee agrees with the Commission that the "notable progress which has been made in the prevention of sickness and of death has been due to a variety of factors." The Joint Committee cannot agree with the Commission in its last sentence that "Any further progress will depend upon strengthening the weak links in the chain by the establishment of a satisfactory system of local health administration." Further progress in public health, and in the prevention of disease, certainly depends upon a multitude of factors.

The personnel of the Joint Committee is as follows:

Thomas P. Farmer, *Chairman*

From the Committee on Public Health and Medical Education:

Thomas P. Farmer

George W. Kosmak	Martin B. Tinker
Mahlon H. Atkinson	Clayton W. Greene
Leo F. Schiff	Edward C. Whipple
William A. Groat	Nellis B. Foster

From the Committee on Public Relations:

James E. Sadlier

Oliver W. H. Mitchell	George M. Fisher
Augustus J. Hambrook	William H. Ross

COUNCIL MEETING

A meeting of the Council of the Medical Society of the State of New York was held on Thursday, December 10, 1931, in the rooms of the Society in New York City. The business of immediate importance was action on the resolution adopted by the House of Delegates on June 1, 1931, and printed in the Journal of July 1, 1931, page 828, instructing the Committee on Public Health and the Committee on Public Relations to act as a joint committee to study the report of the Governor's Health Commission (see page 1208 of the Journal of October 1, 1931) and to report to a special meeting of the House of Delegates to be called by the Council.

GOVERNOR'S HEALTH COMMISSION

Dr. T. P. Farmer, Chairman of the Joint Committee on the Governor's Health Commission, reported that the Committee had completed its investigations; and that in the near future it would submit a formal report.

The Council decided to call a special meeting of the House of Delegates on Thursday, January 14, at 2 P.M., in the Hotel Ten Eyck, Albany, N. Y., to act upon the report.

The report of the Joint Committee is printed

on page 29 of this Journal, and a reprint has been mailed to every member of the House of Delegates and to every County Society.

GRADUATE EDUCATION

Dr. T. P. Farmer, Chairman of the Committee on Public Health and Medical Education gave a report on the work of the Committee during the Fall, as announced in the program printed in the Journal of November 1, 1931, page 1344.

The work in Graduate Education was described as follows:

"Since July first post-graduate courses have been given in the following county societies with the subjects and number of lectures for each county as listed:

Monroe County (including Livingston, Genesee and Ontario)	Pre-Clinical Medicine	4 lectures
Rockland	Internal Medicine	4 lectures
Cortland	Traumatic Surgery	6 lectures
Schoharie	Dermatology and Syphilology ..	6 lectures
Otsego	Dermatology and Syphilology ..	6 lectures
Seneca	Traumatic Surgery	6 lectures
Wayne	Traumatic Surgery	6 lectures

All of these courses have been completed except those in Schoharie, Otsego and Cortland counties. The course in Cortland County will be completed on December eighteenth. In Schoharie and Otsego counties the lectures are being given once a month so that these courses will not be completed until May, 1932. Because of these facts it is impossible to obtain the detailed information necessary to make the usual statistical comparison of the work of the Committee for the year with the preceding year as has been the custom in the past. In the annual report of the Committee this information will be given.

An innovation is being tried in Schoharie and Otsego counties in the addition of a clinical day to the regular course. In Schoharie County the day is to be given over to the subject of Pediatrics and the clinic is to be conducted by Dr. H. L. K. Shaw. In Otsego County one day in December will be given over to surgical subjects and one day in January to medical subjects. Dr. A. W. Elting will conduct the Surgical Clinic and Dr. Nellis B. Foster the Medical Clinic. On these days the lecturer will not only talk on subjects assigned to him but will give a practical demonstration in examining cases and formulating diagnoses. In a general way the amount of work in graduate education for the first half of this year is about the same as for the preceding two years.

The Committee has already arranged for two courses in its Spring program, one in Sullivan County, and one in Onondaga County. Both of these courses will start shortly after January first.

POLIOMYELITIS

Dr. Farmer also described the work of the subcommittee on poliomyelitis whose organization was described in this Journal of August 15, 1931, page 1048. Dr. Farmer reported:

"The subcommittee considered the question of the collection, control and use of immune serum arrangements for consulting diagnostic service and arrangements for medical meetings at which talks on poliomyelitis were to be given. A letter was promptly sent to officers of all county medical societies, and to the chairman of the Public Health Committee of the same societies, advising them on matters regarding poliomyelitis and requesting the arrangement of special meetings when an outbreak of the disease seemed imminent in their locality. Meetings were immediately arranged for all the county societies in the region of the Hudson River. These meetings were addressed by Dr. Draper, whose services were secured by the State Department of Health. The meetings, however, were arranged by Dr. Shaw for this committee and included the following county societies: Schenectady, Albany, Rensselaer, Saratoga, Warren, Washington, Ulster, Sullivan, Orange, and Dutchess. Putnam. Dr. Aver of Syracuse addressed the counties of

Broome, Tompkins, and Chenango. Dr. Ludlum arranged for a meeting in Kings County and a meeting was held in Nassau County. The reports indicate that these meetings were all well attended and that the activity of the committee met with most favorable reception from the profession especially in the sections where the disease occurred. There is no question but that the committee's efforts in organizing the medical profession brought about excellent cooperation upon the part of the profession with the Health Department in the latter's efforts to control the disease. It is hoped that the Commissioner of Health will later arrange another meeting with the subcommittee on poliomyelitis for the purpose of studying the experience during the epidemic of last summer and with the thought of making recommendations for the control of future outbreaks."

HEALTH EXAMINATIONS

Dr. C. W. Crampton, Chairman of the Special Committee on Periodic Health Examinations, reported that the committee held its regular Fall meeting on October 22nd. The committee had continued its radio work and had broadcast addresses as follows:

November 5, Dr. Walter L. Niles, New York, on "Keeping the School Girl Fit."

November 12, Dr. Thomas P. Farmer, Syracuse, on "Why the Health of the High School Girl Is so Important to Her Future Welfare."

November 19, Dr. Nathan B. Van Etten, on "Modern Medicine for the Modern Girl."

December 3, Dr. Harlow Brooks on "The Importance of Health Examinations for Developing Young Women."

December 10, Dr. John A. Card, "The Greatest Gift."

December 17, Dr. William W. Herrick, "The Periodic Health Examination and The Health Record."

PRESS PUBLICITY

The Council passed the following resolution: "RESOLVED, That the principles governing publicity adopted by the Press Publicity Committee and published in the NEW YORK STATE JOURNAL OF MEDICINE on December 1, 1931, shall be binding upon every member of the Medical Society of the State of New York, and be it also

"RESOLVED, That any member of the Medical Society of the State of New York who knowingly violates those principles or is guilty of a violation of them after warning by competent authority, shall be subject to investigation by the Censors of his county medical society and be subject to such discipline as the Comitia Minora of the County Society may determine."

SCIENTIFIC EXHIBIT AT THE ANNUAL MEETING

Arrangements are being made for a scientific exhibit to be held in conjunction with the annual meeting of the Medical Society of the State of New York, to be held in the Hotel Statler, Buffalo, May 23-25, 1932. Those who wish to participate are urged to send in their requests to the Chairman of the Committee on Scientific Work.

All applications must be received before March 1st. They will be acted upon by March 15th. Notification of acceptance or rejection will be mailed shortly after that date.

Each exhibit must be in charge of a competent, well-informed demonstrator. The exhibits must be completely installed before 9:00 a.m. Monday, May 23rd, and must remain intact until 5:00 p.m. Wednesday, May 25th.

Those whose applications have been accepted will receive a letter of instruction as to the location of their exhibit space.

In sending the application, state the exact title so that it may be published in the program and appear in our Journal. Describe the exhibit so that we may know exactly what you wish to present. State the amount of floor space you desire, and also the minimum amount necessary for you to display your material adequately. Also state if a paper dealing with the material is to be read before a section. The Committee invites the co-operation of physicians in making up the exhibit.

ARTHUR J. BEDELL, M.D., *Chairman,*
Committee on Scientific Work.

OSWEGO COUNTY

The one hundred and tenth semi-annual meeting of the Medical Society of the County of Oswego was held at the City Club, Hotel Pontiac, Oswego, Nov. 24th, 1931, with the President, Dr. G. A. Marsdeen, in the Chair.

A discussion was held on the chiropractic and osteopathic activities in this county, and various complaints by the members against these cults who practice medicine and surgery without knowledge thereof were cited. A committee, with Dr. S. D. Keller of Fulton as Chairman, was formed to interview the Oswego County Assemblyman and the State Senator, and bring before them these complaints, and also to urge them to vote against any bill introduced which would be of benefit to these cults.

On motion it was decided that the Medical Society of the County of Oswego will not adopt a fee schedule formulated by the Committee of Medical Economics of the County of Oswego.

On motion it was decided to hold our meetings quarterly instead of semi-annually.

The following officers were duly elected and committees appointed for the year 1932:

President—Dr. E. A. Galdman, Fulton, N. Y.
Vice-President—Dr. S. M. Burns, Oswego, N. Y.
Treasurer—Dr. J. B. Ringland, Oswego, N. Y.
Secretary—Dr. J. J. Brennan, Oswego, N. Y.

Delegate to the State Society—Dr. G. A. Marsdeen, Oswego, N. Y.

Board of Censors—Dr. A. C. Calisch, Dr. L. F. Hollis, Dr. H. Albertson

Medical Economics Committee—Dr. S. M. Burns and Dr. S. D. Keller

Publicity Committee and Reporter—Dr. J. J. Brennan

Public Health and Relation Committee—Dr. Clifford Hervey, Chairman

Physical Therapy Committee—Dr. H. Wallace, Dr. Reuben LaVine, Dr. J. J. Brennan

On recommendation of the Board of Censors, the following new members were elected to the Society: Dr. Wm. Fivaz, Fulton, N. Y.; Dr. Wm. Birrell, Central Square, N. Y., and Dr. J. F. Burden, Oswego, N. Y.

A very interesting and instructive symposium on gall bladder disease was presented from an internist's viewpoint by Dr. Henry Haft, Syracuse, Asst. Physician to the University and Free Dispensary; the surgeon's viewpoint by Dr. H. D. Mitchell, Rochester, N. Y., Staff Surgeon to the Genesee Hospital; the roentgenologist's viewpoint by Dr. C. F. Potter, Syracuse, N. Y., Roentgenologist to the Crouse Irving Hospital.

J. J. BRENNAN, *Secretary.*



THE DAILY PRESS



REFUGE FOR SHORE BIRDS ON LONG ISLAND

The medical profession includes many nature lovers who hunt with the camera as well as the gun. Long Island doctors are familiar with the snipe, ducks and other migratory birds which visit the bogs and marshes in such numbers that their extermination seems impossible. Moreover, many kinds, such as terns and bitterns, which have been rare for years, are now plentiful because of the protection afforded to them by law, and public sentiment. But the abundance of wild birds is due largely to the position of Long Island at right angles to the line of migration of the birds, so that in the fall the birds find it to be the last resting place before the long flight to the Chesapeake marshes. It is therefore welcome news that a bird refuge will be established almost within sight of Greater New York. The New York *Herald Tribune* of December 14 says:

"The Department of Agriculture has arranged with the Town of Hempstead and the Hempstead Development Commission to lease 2,274 acres between Woodmere and Hewlett, L. I. for a migra-

tory bird refuge and will take over the property soon after January 1. It was announced today by John Miles Flynn, of the Biological Survey, who conducted the negotiations. The rental will be from \$4 to \$6 an acre a year and the lease will be signed for fifteen years.

"Some of the property is under water, some is marsh land and some is higher ground, with abundance of food and nesting room.

"Mr. Flynn pointed out that Long Island was a favorite spot for hunters and that many birds were destroyed there every year, so that when the Department of Agriculture acquired funds recently for ten new refuges in nine states, Long Island was one of the first sites considered.

"The new refuge probably will be populous with ducks, geese, woodcock, snipe and other game birds, Mr. Flynn said, adding that it would be better for future generations to see these birds alive than only in photographs or color plates. With the setting aside of this preserve much of Long Island will be closed to shooting."

FORD'S AID TO UNEMPLOYED

The New York *Times* of December 17 contains a description of Henry Ford's plan to aid the people of Inkster, a village of colored workers who had been employed in the Ford plants, but who have been out of work for six months or more. After a lengthy description of the village now, contrasted with its appearance during prosperous times, the *Times* investigator ascribed the poverty and suffering to lavish expenditures for luxuries at the solicitation of high pressure salesmen.

Hundreds of dollars of debts had been incurred by many of the men—even as high as \$3,800 in one case—and as fast as the men went back to work their pay was garnished, until not a sufficient amount was left to feed and clothe their families. The women and children suffered as much as ever. Also in some cases, the feeling that hard times were over expressed itself in folly.

"Investigators found a new washing machine in a home where there was no food. They learned that the housewife had purchased it on easy payments because the company selling it offered a turkey free with each machine."

The *Times* then described the remedies instituted by Mr. Ford.

"The men were taken out of the \$6 a day group and work was given to them at 12½ cents an hour, \$1 a day being about what was needed actually to feed these families.

"Meantime, the Ford Motor Company 'O. K.' d' all the outstanding accounts—electric, gas, installment payments and real estate contracts.

"It has also now established a temporary commissary where food may be purchased at practically wholesale prices. A hot vegetable kitchen has been opened where on Nov. 9 1,700 received supplies and 647 were cared for on Dec. 14.

"The wives of the men employed by the Ford Motor Company volunteer their services in the kitchen, a new crew being used every day so that they are actively contributing and are happy.

"A shoe cobbling department reconditions shoes for 65 cents a pair. Clothing has been furnished in amounts ranging from \$25 to \$40 a person.

"For these supplies the Ford Motor Company accepts 'I. O. U.'s' from such employees. Just how much each man actually earns depends upon

himself—his demonstration of willingness to work and sobriety of judgment.

"Nothing is being given to any one free, but the entire community is being guided out of inextricable difficulties to the status of contributing citizens.

"This is not competition with the regular merchants of Detroit, because these victims of the depression would have no individual purchasing power.

"Henry Ford believes in only three kinds of charity—for hopeless cripples, the aged, and chil-

dren. For the able-bodied he believes the greatest thing that can be offered is opportunity.

"So, instead of assuming as a charitable burden a rehabilitation of these people so long out of employment, a rehabilitation which, so easily acquired, would doubtless only be temporary, he is attempting to make them face soberly the question of their own reinstatement as earners and providers, to impress upon them the facts that the grasshopper is not a desirable economic model, and that high wages may be followed by unemployment for which they should provide."

EXPOSURE OF PAID TESTIMONIALS

The New York *Herald Tribune* of December 21 contains the following item on giving publicity of the pay received for testimonials:

"WASHINGTON, Dec. 20.—Following an investigation of the facts concerning testimonials obtained for advertising purposes from four women of international prominence, the Federal Trade Commission announced today that it has ordered no further use of such indorsements unless the advertisements disclose the payments made for them.

"The order is issued against a corporation of New York, manufacturers of toilet articles, which was found to have paid substantial sums for the testimonials in behalf of a manicuring preparation.

"This is the first step in a move by the commission to enforce full publicity for methods used in obtaining advertising testimonials from

prominent persons. That it will be combated was indicated by word from officials of the corporation involved, who plan an appeal to the United States Circuit Court of Appeals."

The newspaper prints the amount received by five prominent women for testimonials varying from \$1,000 to \$150, and continues:

"These advertisements were published at various times from 1928 to 1930. As an illustration of the procedure there is quoted a letter from an actress, promising to permit the use of her name and photograph with a statement to be submitted to her and approved.

"She authorized the use of a statement prepared to advertise the product in question, but also referring to herself as 'the best loved actress on the American stage.'

"'Everything must flatter us to our finger tips,' she allowed herself to be quoted as saying in indorsing the finger nail polish."

PHYSICAL DEFECTS OF CHILDREN

The New York *Herald Tribune* of December 9 has the following editorial on defects of children. After quoting statistics of the millions of children who are undernourished, and have damaged hearts and other defects, the writer continues his editorial:

"To list such blemishes is not, of course, the whole of the story. Were this age compared with almost any other in human history it is certain that the record would look less black. Perfect childhood has never been universal, nor is it likely that mankind does worse with its children today and in America than before or elsewhere, except perhaps in a few small and highly favored communities like Switzerland. This does not mean that nothing need be done about the defects which Dr. Averill arraigns, but what needs to be done, fearless consideration of biological facts suggests, is something much more drastic and much less easy than merely to relieve present misfortunes of

children who are underfed or deaf or mentally defective.

"The reason why so many children now suffer from personal defects is not that the human species is deteriorating, although that may be true. Nor is it that civilization is less careful or competent. It is merely that incompetents, infant or adult, now are more likely than formerly to be kept alive. It is useless to blink the fact that rigid elimination of the unfit, just or unjust, is Nature's method, with which man has interfered, and perhaps has interfered at serious peril—none of which need be taken to urge return to conditions of savagery in which all unfit persons are killed or allowed to die as Nature takes her ruthless course! The point is merely that solutions for these matters of inexorable biology are less simple than even Dr. Averill seems to believe, although arguments like this are useful to keep us from forgetting what some day we must solve or die."



BOOK REVIEWS



THE DOCTOR AND HIS INVESTMENTS Financial Policy and Technique for the Physician By MERRYLE STANLEY RUYSEYER, B Lit, M A 12mo of 330 pages Philadelphia, P Blakiston's Son & Co, Inc., 1931 Cloth, \$2.50

The writer is a financial editor and has had considerable experience. While he considers the Doctor's investment problems different from those of other individuals, his specialization in advising the buying of stocks and bonds is stressed a little too much but always with caution. His knowledge of the financial problems of a physician is very acute and his advice as to other investments is intelligent.

It is a book that every physician should read. Chapter 10 (Promises and Woes of Speculation), referring to buying stocks on margin, should be forever before the reader's eyes, in which the author says, "The Medical man with a Surgeon's knife in one hand and the Ticker Tape in the other is a sorry spectacle."

His attitude toward Life Insurance and Real Estate should be carefully read and we believe the sooner the young practitioner maps out his course for financial ease along the lines the author suggests and makes a detour through Wall Street and the stock question, the sooner an income will be assured him and the safer his dependents will become. M J DATTELBAUM

TREATMENT OF INJURY BY THE GENERAL PRACTITIONER By CLAY RAY MURRAY, M D, F A C S Two volumes 12mo of 412 pages, illustrated New York and London, Harper & Brothers, 1931 Cloth, \$5.00 (Harper's Medical Monographs)

These two volumes represent part of Harper's Medical Monographs, and just why this particular monograph should have been divided into two volumes is difficult to understand.

However, the contents represent a brief, practical and concise treatise on this subject. There are 404 pages with 196 drawings by the author. These black and white drawings are excellent illustrations of some of the methods of treatment and conditions encountered by the general practitioner.

Chapter one in volume one contains much "food for thought", particularly for those who have to deal with compensation cases. Patient psychology and surgical shock are discussed briefly, but in a very practical manner in this chapter.

The modern and accepted treatment for fractures is very clearly illustrated and described.

These two volumes would be an excellent asset to the library of the general practitioner.

HERBERT T WILKIF

RECLAIMING THE DRINKER. By CHARLES B TOWNS 12mo of 77 pages New York. Barnes & Company [c 1931] Cloth, \$1.00

Reclaiming the Drinker' is a frank discussion of alcohol and its effects. Mr. Towns' work with alcoholics and other drug habits over a period of more than 30 years has given him a clear understanding of these maladies and their control. He handles his subject in a satisfactory and authoritative manner. Simply written yet presenting a mass of information in an easily read and understood form the book is worthy of recommendation to the man who drinks as well as to the society of which he is a member. FREDRIC DAMRAU

SURGERY, ITS PRINCIPLES AND PRACTICE for Students and Practitioners By ASTLEY PASTON COOPER ASHURST, A B, M D Fourth edition Octavo of 1189 pages, illustrated Philadelphia, Lea & Febiger 1931 Cloth, \$10.00

This single volume of surgery, comprising 1189 pages and 1063 plates and illustrations appears as the fourth edition of the work. It is essentially a text book for students and is presented as a means of supplying a source of information to be used or to be supplemented by more complete works and by further practice as the requirements of the student or practitioner demand.

There are twenty nine chapters, the first nine deal with general surgery, the next seven chapters discuss systemic surgery, such as, surgery of the blood vessels, skin, burst, muscles, tendons, nerves, fractures, injuries of joints, diseases of bone and joints and orthopedic surgery. The remaining thirteen chapters deal with regional surgery, including that of the head, spine, nose, neck, chest, hernia, abdomen, the genito-urinary system of both male and female.

This book has been brought completely up to date. Many of the sections have been entirely rewritten and all of them have undergone extensive revision.

Among the new matter introduced might be mentioned giant cell tumors, rectal and spinal anesthesia, thrombo phlebitis obliterans. The injection treatment of varicose veins, the electro-surgical apparatus, hyperthyroidism, gastric ulcers, and tumors of the sympathetic nervous system are also introduced.

The specialties of the eye, the ear, the nose, and the throat are quite properly not included. The surgery of the genito-urinary tract and of gynecology and orthopedics are discussed only so far as they come within the province of the general surgeon.

The reviewer feels that because of the complete yet concise, method of presentation, and because of its easy reading, this book is to be highly recommended for medical students and as a text book for the general practitioner and surgeon.

MERRILL N FOOTE.

PATHOLOGY, BACTERIOLOGY AND APPLIED IMMUNOLOGY FOR NURSES By ROBERT A KILDUFFE A B A M Octavo of 324 pages, illustrated Milwaukee The Bruce Publishing Company, [c 1931] Cloth, \$2.50

This volume makes a difficult task simple. Those who teach nurses will best appreciate the advantage of treating the interlocking subjects of bacteriology, applied immunology and pathology in one course. Besides being of value as a text for lecturers this book can be recommended as a reference book for post graduate students of nursing.

SILK H POLAYES

BREAST FEEDING By MARGARET ENSLIF M B Ch B 12mo of 142 pages, illustrated New York and London Oxford University Press 1931 Cloth \$2.00 (Oxford Medical Publications)

A very commonsense little volume, which, in a not too comprehensive way, establishes in one's mind how breast feeding may be handled successfully. Chapter II especially deserves mention and physicians who do obstetrical work should study it. Various types of breasts and nipples are described and illustrated and ways and means of preparing each for successful nursing are given in ample thought. THIRMAN B GILMAN



OUR NEIGHBORS



HEALTH ADMINISTRATION IN MAINE

The appointment of a Special Health Commission by Governor Roosevelt of New York State on May first, 1930, was paralleled by the action of Governor William Tudor Gardiner of the State of Maine in appointing a Commission that should suggest changes in the form of administration in all branches of the State Government, including the Department of Health. A brief notice of a public referendum on a Code Bill suggested by the Commission was printed in this *Journal* of December 1, 1931, page 1493. The *Maine Medical Journal* of November states that the referendum was carried by a large majority, at the general election on November 9, and that the reorganization is now a fact. Dr. Philip W. Davis, Secretary of the Maine Medical Association, expressed his opinion regarding the new Code as follows:

"I feel that the passage of the Code Bill and its confirmation by the people of Maine November 9th was a real step forward. This bill created a Commissioner of Health and Welfare, a new office. He is to have general supervision of all Health and Welfare activities including State Institutions.

"The bill as passed does away with twenty-eight departments, bureaus and agencies and replaces them with four departments. Of course no system is 100% and much will depend upon the quality of the man appointed Commissioner of Health and Welfare. The Governor has not yet made this appointment but I have every reason to suppose that he will be a doctor who has had wide experience in institutional management."

Dr. Davis also sent some descriptive pamphlets regarding the new Code, from which the story of its adoption was obtained.

An impartial survey of the administration of the governmental organization of the State of Maine was made by a legislative committee, but when Governor Gardiner was inaugurated in 1929, he said: "All the State's activities should be under constant survey for any possible consolidation that might make for efficiency and economy," and he referred to the fact that the business of the State was administered by over forty governmental agencies. Later the Governor said:

"I had neither the time nor the technical ability to make a complete survey, but learned of the work of the National Institute of Public Administration which is qualified for such a task to a degree which is generally conceded to be un-

equalled. Their services cost money, the Legislature was not in session, and the sum seemed too large to draw from the contingent fund. I therefore solicited and received an unrestricted gift of \$20,000 from the Spelman Fund, the trustees of which are interested in the technical aspects of government. The staff of the Institute rendered a most comprehensive report on all the activities of the State, which was printed in a pamphlet of 214 pages and distributed as widely as possible."

When the report was received, it was referred by the Governor to a committee of seventeen persons whom he appointed to study the report and to suggest the proper action to be taken. The committee conducted public meetings in six sections of the State, and consulted the people on the reorganization to be suggested. On January 20, 1931, the Committee reported:

"At the first meeting of our committee we discussed the scope of legislation which might be introduced pursuant to the recommendations of the Survey. After reaching our own conclusions, we entrusted the task of drafting an administrative code along the lines agreed upon, to Mr. A. E. Buck of the Institute staff, whose qualifications and experience in this type of work are outstanding. Later, the committee, with Mr. Buck, went over the Code, discussing its terms section by section. The revised bill, entitled the 'State Administrative Reorganization Code' embodies all our suggestions.

"We have recommended a thorough-going financial reorganization which we believe will merit the approval of public finance experts. Through the Department of Finance, if established substantially as recommended, we believe real economies can be effected. Another important change which we propose in departmental organization is the association of health work, social welfare work, and institutional administration in three coordinated bureaus in a Department of Health and Welfare. This presents an opportunity not only for preventing further increase in our expenditures for those purposes, but also for going to the very root of the purpose behind all those activities, which is the conservation of our human resources through reduction in human misery, poverty, and disease."

The bill suggested by the Committee was introduced in the Legislature on January 21, 1931, and was passed on April 2; but a petition was filed that it be submitted to a referendum vote

(Continued on page 42—Adv. xviii)

"If one wishes to fortify cod liver oil, it is far more reasonable and efficacious to increase its potency by adding a small amount of viosterol, which is a specific in the prevention and cure of rickets, as it brings about calcification not only of the bone but of the proliferating cartilage as well." (Hess, Alfred F., Am. J. Dis. Child. 41:1081; May, 1931.)

MEAD'S 10 D Cod Liver Oil with Viosterol is the choice of many discriminating physicians because it represents the long pioneer experience of Mead Johnson & Company in the fields of *both* cod liver oil *and* viosterol.

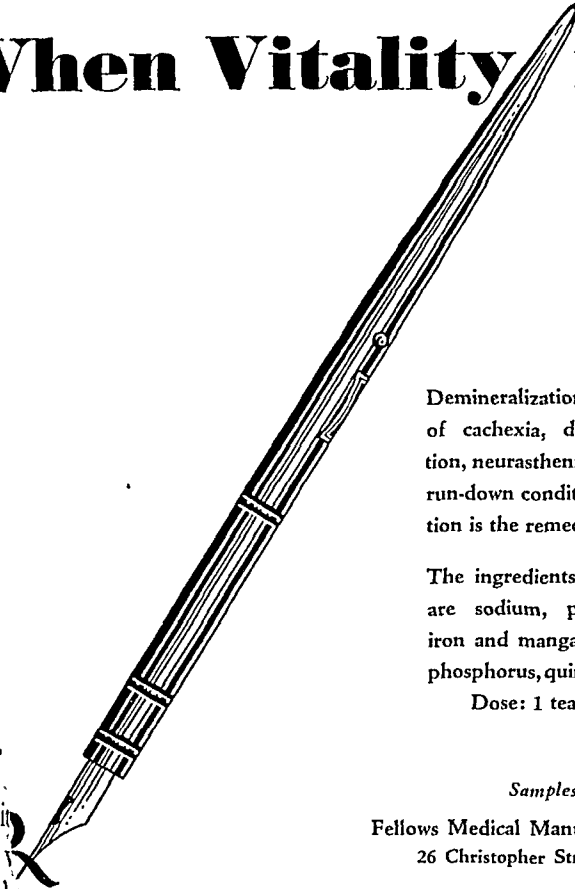
Mead's 10 D Cod Liver Oil is the only brand that combines *all* of the following features:

1. Council-accepted.
2. Made of Newfoundland oil (reported by Profs. Drummond and Hilditch to be higher in vitamins A and D than Norwegian, Scottish and Icelandic oils).
3. Supplied in brown bottles and light-proof cartons (these authorities have also demonstrated that vitamin A deteriorates rapidly when stored in white bottles).

In addition, Mead's 10 D Cod Liver Oil is ethically marketed without public advertising or dosage directions or clinical information. With Mead's,—*you* control the progress of the case.

Mead's 10 D Cod Liver Oil is therefore worthy of your personal and unfailing specification. This product is supplied in 3-oz. and 16-oz. brown bottles and light-proof cartons. The patient appreciates the economy of the large size.

When Vitality is Low



Demineralization causes many cases of cachexia, debility, undernutrition, neurasthenia, anemia and other run-down conditions. Remineralization is the remedy.

The ingredients of Fellows' Syrup are sodium, potassium, calcium, iron and manganese, together with phosphorus, quinine and strychnine.

Dose: 1 teaspoonful t. i. d.

Samples on Request

Fellows Medical Manufacturing Company, Inc.
26 Christopher Street, New York, N. Y.

Fellows' Syrup
applies the needed Minerals

Mead Johnson & Co.

(Continued from page 42—Adv. xviii)

The bill also creates an advisory council of six members, whose duties are defined as follows:

"1. To make such investigation of the social problems of the State, with the aid of the departmental staff, as the commissioner of health and welfare may request;

"2. To advise the commissioner of health and welfare with reference to the policy of the department of health and welfare and other matters falling within the jurisdiction of said department.

"3. To recommend to the commissioner of health and welfare the enactment of such laws as may be deemed necessary relative to the activities of the department of health and welfare.

"4. To make such rules and regulations as may be deemed necessary to carry out the intent of the public health and welfare laws of the State."

The sections on the Departments of Fisheries and of Education are extremely brief and do not change the present system to any great extent.

Article six creates a fifth Department,—that of Audit.

The law closes with a list of twenty-eight agencies which are abolished.

The editor of the *Journal* believes that the new law will help to make Maine a good place in which to live and practice for he says editorially:

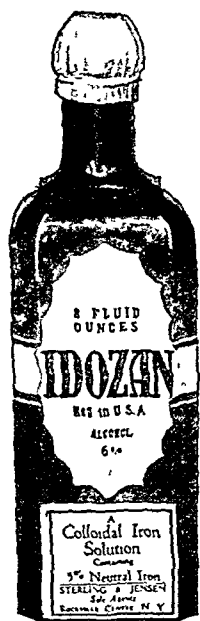
"Young medical men locating in Maine in the next decade should prosper. More than one-fourth of her present practitioners have passed the 60-year milestone. Maine should continue to afford a profitable field for the practice of medicine. An awakened profession cooperating with a sympathetic government and intelligent public seem to be securing results in establishing a dignified control of medical affairs. The provisions of the Code should now make it possible for the profession to exercise with authority in a recognized advisory capacity a stronger influence for good in matters of health and welfare. Our continued interest and insistence will maintain medical men of character as well as brains in positions of trust. Such men will now serve, assured of our support."

HOUSE OF DELEGATES OF KENTUCKY

The December number of the *Kentucky Medical Journal* contains the minutes of the annual meeting of the Kentucky State Medical Association held September 7-10, 1931, at the University of Kentucky, Lexington. An editorial states that the *Journal* contains a verbatim report of all that was spoken or read in the House of Dele-

(Continued on page 46—Adv. xvii)

Colloidal IRON in ANEMIAS



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8 oz. bottles



Dose,
dr. i. t.i.d. p.c.

IDOZAN is a stable colloidal iron solution, NEUTRAL, and contains 5% of iron.

Colloidal iron therapy represents a significant advance over the old iron preparations.

IDOZAN is an active iron preparation which will produce a definite rise in the hemoglobin in cases of simple anemia, chlorosis, secondary anemia and post partum hemorrhage.

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ASSURANCE OF RELIABILITY...

THE FOUNDATION UPON WHICH THEY
ARE BUILT
AT THE LABORATORIES OF
DAVIES, ROSE & CO., LTD.
BOSTON, MASS.

(Continued from page 44—Adv. xx)

gates, and the statement is probably true, for the minutes fill forty-eight pages.

Twenty-six reference committees were appointed, as follows:

Credentials	Heart
Scientific Work	Cancer
Medico-Legal	Health Problems
Crippled Children	County Hospitals
Journal	Ethics
Legislation	Auditing
Miscellaneous	Resolutions
Publicity	Students' Loans
Exhibits	Graduate Courses
Medical Education	Woman's Auxiliary
Health Examinations	Council
Hospitals	Veterans
Workmen's Compensation	Goiter

There is scarcely a mention of any action taken by a reference committee.

Division of Fees: The Secretary's report mentioned the division of fees as the most serious evil threatening the medical profession. He calls attention to the following provision of Chapter One of the By-Laws of the State Association:

"No physician may become a member of any county society unless he signs and keeps inviolate the following pledge:

"I hereby promise upon my honor as a gentleman that I will not as long as I am a member of the Kentucky State Medical Association practice division of fees in any form, neither by collecting fees from others referring patients to me nor by permitting them to collect any fees for me; nor will I make joint fees with physicians or surgeons referring patients to me for operation or consultation; neither will I in any way, directly or indirectly, compensate anyone referring patients to me, nor will I utilize any man as an assistant as a subterfuge for this purpose."



Division of Fees: The Secretary also calls attention to a State law of 1916 on the division of fees, as follows:


"Be it enacted by the General Assembly of the Commonwealth of Kentucky:


"I. That hereafter any physician, surgeon or any other person, who carries, sends, or is in any manner instrumental or aids and abets in causing a patient to go to another physician or surgeon for surgical operation or advice as to or the treatment of any physical or mental disease, injury or ailment, and receives therefor from such other physician or surgeon any money, gift, or other thing of value for having furnished such patient or who has any agreement or understanding with such physician or surgeon to receive therefor any money, gift, or other thing of value whatsoever from such physician or surgeon, without the knowledge and consent of the patient pre-

(Continued on page 48—Adv. xxiv)


WHETHER THE PATIENT IS

aged  and feeble  or so young

 that his digestive system works less

energetically than his limbs  or is an

adult business man  healthy but

deskbound  — prescribe AGAROL

with confidence for the relief of constipation

and to aid in restoring regular bowel function.

AGAROL is the original mineral oil and agar-agar emulsion with phenolphthalein. It softens the intestinal contents and gently stimulates peristalsis.

Gentle enough for little patients;
active enough for the chronic
state of the adult and aged patient.

A supply gladly sent for trial.

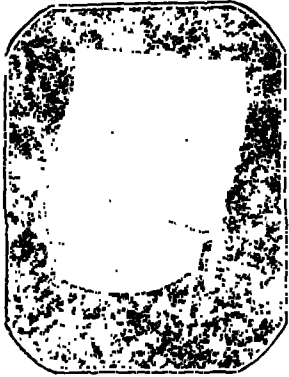
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2% Solution

It stains, it penetrates, and it furnishes a deposit of the germicidal agent in the desired field.

It does not burn, irritate or injure tissue in any way.

Hynson, Westcott & Dunning

Baltimore, Maryland

(Continued from page 46—Adv. xxii)

viously obtained, shall be guilty of selling the patient within the meaning of this Act."

The entire law fills a column and a half, and provides for a fine of \$100 for each offense for both the buyer and the seller of patients.

The reports of the councilors of the eleven districts fill over three pages; and the reports of delegates from twenty-one county societies fill six pages. They make interesting reading. The delegate from Gerrard County, for example, reported:

"We have six physicians in Gerrard County, all of whom are members of our society. We haven't had a meeting for so long that I really don't know when we did have one."

The Bourbon County delegate said:

"We have twenty-five doctors in the county: twenty-one are regular practitioners; two homeopaths, two cultists. We have nineteen members paid out of the twenty-one. The other two are rather hard to get, some way or other. We are going to slide under them and drag them in sometime."

Crippled Children: The Committee on Crippled Children reported on the work of the Kentucky Crippled Children Commission for the year ending September 1, 1931, stating that sixteen free diagnostic clinics had been held, and that the conditions treated and number of cases were as follows:

"Infantile paralysis	357
"Spastic paralysis	100
"Other paralysis	65
"Congenital deformities	213
"Bone tuberculosis	58
"Injuries	80
"Osteomyelitis	56
"Scoliosis	19
"Arthritis	35
"Rickets	34
"Non-orthopedic and mental	97
"Miscellaneous	85

"Total 1,199"

"I do not believe there has been a finer piece of medical or medico-sociological work done anywhere than has been done by the Kentucky Crippled Children's Commission. It has been done largely under the guidance of this Association and particularly of those of its members who limit their practice to orthopedic surgery. It is being done without an adverse criticism by anybody."

The chairman asked the question:

"What other form of organization can we make that would enable us to take care of those

(Continued on page 49—Adv. xxv)

(Continued from page 48—*Idt. rrr*)

very much larger groups, because the crippled children's group consists of some 6,000 to 12,000 in Kentucky? How far do we propose to go in the development of other commissions for the treatment and alleviation of the conditions in the larger groups that compose the disabled, that are remediable to a considerable degree?"

One doctor commented

"If this thing is carried to its logical conclusion, it seems to me we are right at State medicine. If we are going to have commissions that are going to scour the State with enthusiasm which a well organized commission exhibits and with the efficiency that is developed in these organizations, we are going to have organizations which will gather not only all those who are totally unable to pay, but those for whom it is considerable sacrifice to pay, and treat them gratuitously."

Answer was made.

"As we use the term 'crippled children,' it is for the orthopedic surgeon. I think there we are justified in allowing a commission of this kind to exist, and I do not think that the average physician throughout our State is qualified or prepared to treat the case when it is sent back. I have

seen some very bad failures following the turning over of those patients to physicians. They do not have the qualifications or the equipment necessary to handle those orthopedic cases."

A resolution was passed to sponsor a legislative bill to raise the limit of medical fees in a compensation from the present \$200 to \$700. Medical ethics collection agencies, and undergraduate education were discussed at length.

Law Enforcement. The report of the Council has the following reference to law enforcement.

"For the past seven years the Association has cooperated with the State Board of Health in the enforcement of medical practice and other health laws. The House last year authorized an expenditure not to exceed \$1,200 for this purpose. Fortunately we were called on to expend only \$300 of this amount. The Council recommends the appropriation of not to exceed \$1,200 for the same purpose for the next year."

"It will be impossible to improve conditions in these sections until public opinion has been educated as to the importance of the selection of competent officials. This year, again, our attorneys have assisted in the preparation of more than 143 cases and they have been effectively

(Continued on page 50—*Adv. rrr*)

LIQUID PEPTONOIDS WITH CREOSOTE

COMBINES the active and known therapeutic qualities of creosote and guaiacol with the nutritive properties of Liquid Peptonoids and is accordingly a thoroughly dependable product of definite quantities and recognized qualities as shown by the formula:

Each tablespoonful represents

ALCOHOL (By Volume)	12%
PURE BEECHWOOD CREOSOTE	2 min
GUAIACOL	1 min
PROTEINS (Peptones and Propeptones)	5.25%
LACTOSE AND DEXTROSE	11.3%
CANE SUGAR	2.5%
MINERAL CONSTITUENTS (Ash)	0.95%

It acts as a bronchial sedative and expectorant, exhibiting a peculiar ability to relieve Bronchitis—acute or chronic. It checks as well a persistent winter cough and without harsh or untoward effect. It is agreeable to the palate and acceptable to the stomach—with merit as an intestinal antiseptic. Supplied in 12 oz. bottles.

Samples on request

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RECLAIMING the DRINKER

By

CHARLES B. TOWNS

*Pioneer in Development of
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Treatment for Addictions*

The Alcoholic, being essentially a medical problem physicians will find valuable help in this book which records the observations of Mr. Towns in dealing with alcoholics for over thirty years. RECLAIMING THE DRINKER, includes quotations from noted physiologists, hygienists and laboratory investigators. It discusses various aspects of alcoholic insanity. It reflects a sympathetic and intelligent understanding of the physiological, the psychological and the human problems involved in the rehabilitation of the alcoholic.

CONTENTS

Why Men Drink. When is a Man Drunk?
The Mental Effects of Alcohol
Alcohol As a Deteriorator
What Animal Experimentation Proves
Is Alcohol a Food?
The Truth About Beer
Prevention of Alcoholic Insanity
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*To any physician especially interested
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ments*

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(Continued from page 49—Adv. xxv)

aided by the commonwealth and county attorneys in many sections of the State.

"The careful management of the Medico-Legal Committee has kept the cost of attorney's fees at practically the same figure as the preceding year, \$1.125 for 1931 as against \$1.025 for the preceding year. Court costs and expenses of this committee were \$190.25 as against \$154.85 for the preceding year.

"We regret to report that there is no decrease in the number of such unjust blackmail suits against reputable members of the profession."

The House of Delegates voted to recommend the establishment of State institute for the study of all phases of the problem of the detection of criminals, and for making fingerprints, chemical analysis, the examination of bullets, and all other modern investigations for the detection of crime and criminals.

The greater part of the minutes of the House of Delegates consist of reports of the committee... and of theoretical discussions of the reports.

DUES IN PENNSYLVANIA

The November number of the *Pennsylvania Medical Journal* contains the minutes of the annual meeting of the House of Delegates held October 5, 1931, in Scranton. The subject of reducing the annual dues was brought up by representatives of the Philadelphia County Society in the following resolution:—

"Whereas, This Country is experiencing the greatest financial stress of its history, and

"Whereas, This national condition is reflected on all medical organizations, especially the county medical societies of this State, and

"Whereas, We in Philadelphia are being particularly stressed as our County Society has formulated certain schedules in the way of scientific education for both physicians and laymen, publicity, welfare, etc., which naturally has put a constant drain on our exchequer, and

"Whereas, These premises through laborious work and expenditure of much money have developed into an almost well-founded reality, and, it would be nigh onto a tragedy if these activities were inhibited at this time, and

"Whereas, Other conditions are arising in the social and economic side of medicine, insurance companies, compensation boards, panel systems, health insurance, foundations established to analyze the high cost of medicine, and too numerous allied societies cooperating to dictate the welfare and existence of the physician, and

"Whereas, So it seems to this Committee that

(Continued on page 52—Adv. xxviii)

X-Ray Proves the Superiority of this Colloidal Bismuth Solution

Bi-Na-Gluconate
Completely Absorbed
48 Hours After
Injection and slowly
eliminated in Syphilis

THE therapeutic value of bismuth in the treatment of syphilis is dependent upon the absorability of the solution and its slow elimination, rather than on the amount injected. Maximum benefits are obtained only when the absorption is rapid and complete, coupled with the proper storage of the bismuth.

Some of the points of superiority of **Bi-Na-Gluconate**:

a. **Bi-Na-Gluconate** being both water and tissue soluble and in *True Colloidal State*, is quickly absorbed and assimilated and slowly eliminated. Thus its full therapeutic availability is assured.

b. **Bi-Na-Gluconate** injections are painless when given $1\frac{1}{2}$ to 2 inches deep intragluteally.

c. **Bi-Na-Gluconate** solution is perfectly stable, not affected by heat or light.

d. A smaller dose of **Bi-Na-Gluconate**, which is a true colloidal solution of bismuth, is more effective than a larger dose of a non-colloidal or a protective colloidal solution of bismuth, because of its more rapid absorability and complete utilization.

e. **Bi-Na-Gluconate** under the ultramicroscope is more energetic with a finer colloidal dispersion than other aqueous bismuth solutions similarly examined.

f. The toxic dose of **Bi-Na-Gluconate** is 125 to 150 times the therapeutic dose. No local induration or systemic reactions are produced.

Bi-Na-Gluconate is supplied in *Hyposols* (ampuls)—12, 25 and 100 in a package.



Immediately after injections.

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48 hours after injections.

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Bi-Na-Gluconate

(Bismuth—Sodium—Gluconate—Colloidal)

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(Continued from page 50—Adv. xxvii)

this is not the time to put away great reserves, but to spend what monies we have to combat the influx of these various elements, and

"Whereas, The State Medical Society is now the proud possessor of a reserve fund of some \$263,000.00, which I take has been accumulated for a rainy day; therefore, be it

"Resolved, That this Committee feels that the rainy day is here and we therefore resolve that the State Medical Society reduce for one year the per capita tax payable to the State Society from \$7.50 to \$5.00."

Dr. G. C. Yeager gave the following arguments in favor of a resolution to reduce the annual state dues from \$7.50 as at present to \$5.00:—

"We know that many of our members are not here because of their present financial condition. The State Society, we feel, can get along very well on \$5.00 this next year, and \$2.50 will look as large as this room to the Philadelphia County Society. We try to lead you all in scientific training and in education. We conduct many clinics, and seminars, do broadcasting and all this runs into big money. We have an executive secretary and two stenographers who are busy all day with that kind of work. We have a terrific

handicap because we are the largest society in the State. We want to lead in education and in publicity, which costs us a great deal, and we feel that if we are to take care of these malpractice suits as the first line of defense we will need a little fund to meet it. If these people find out that these suits are never won, that they are always defeated, they will stop. We want to keep on with our publicity. We feel that with the splendid reserve fund in the State Society, with the handsome home in Harrisburg, which I understand is all paid for, we feel that it would be good policy to adopt this plan for the coming year."

Dr. S. A. Brumm spoke as follows:—

"Our members are dropping away from us because of their financial condition. At present we have twenty members whom we are carrying to keep them in good standing in the State Society. We have twenty more who have begged us not to take them off the roll because they are unable at present to meet their obligations, but who hope to be able later to pay their dues."

Arguments against the reduction of dues were given as follows:

"No other society in the State, so far as I know, has asked for a reduction. Every article of our expense is increasing. I spoke of the

(Continued on page 53—Adv. xxix)

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Provides a definite elimination treatment which obliterates craving for alcohol and drugs, including the various groups of hypnotics and sedatives.

Physicians are invited to be in attendance on their patients. Complete bedside histories are kept.

Department of physical therapy and well equipped gymnasium. Located directly across from Central Park in one of New York's best residential sections.

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(Continued from page 52—*Idt. v. v. v.*)

great increase in the Medical Defense cases. We are establishing a bad precedent if we approve this reduction now. In 1928 when we asked for an increase from \$5.00 to \$7.50, we had a per-capita expense of \$5.34. At the present time it is \$6.54. Our defense case fees are increasing, along with everything else. It is your money, you are as much interested as the Board of Trustees. I am sure I express the sentiments of the Board of Trustees and I am positive of the president and retiring president in saying that this reduction should not be made.

Our medical defense cases have increased three hundred per cent in number over the average in the last six years. These demands have to be met and approved applicants defended. Lawyers' fees have gone up in comparison, as has already been said. Of the medical defense cases which we have had recently, two thirds have come from Philadelphia County alone.

The motion was lost with a vote of 40 for reducing the dues, and 41 against the reduction.

It would seem that the Pennsylvania society acted wisely in not reducing its annual dues for a society cannot work without money.

IOWA UNIVERSITY HEALTH SERVICE

The responsibility of college authorities for the health of their students is being recognized to an increasing degree. (For a survey of health service in New York Colleges see this Journal, November 1, 1930 page 1283.) The University of Iowa organized a service in 1930 and the results of its first year of operation are set forth in the Journal of the Iowa State Medical Society for November, 1931, page 636 as follows:

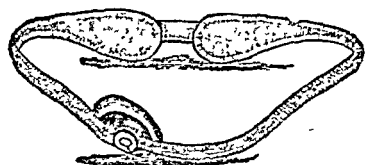
Nearly ten thousand young men and women from all parts of Iowa are enrolled each year in the State University. It is of statewide importance that strict supervision be kept over the health conditions under which these students live.

"The University has organized a Department of Health, conducted by Dr. Milford F. Barnes, head of the Department of Hygiene and Preventive Medicine, and Dr. A. V. Hardy, Associate Professor in the same department.

"It operates through five divisions. The Divisions of Communicable Disease, Life Extension, Student Outpatient, Inspection and Records. A chief heads each division and is aided by a staff of assistants drawn from various faculties.

(Continued on Jan. 54—*Idt. v. v. v.*)

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Springfield

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Wilkes-Barre

(Continued from page 53—Adv. xxix)

"All cases of diphtheria, tuberculosis and communicable maladies that come to the University hospitals are carefully investigated, both as to the source of the illness and to the possible exposure of other people.

"In September of 1930, 432 students were given complete physical examinations by the Life Extension Division of the University health department. In October, 626 students were examined, and through the rest of the year up to May more than 500 additional examinations were made.

"If maladies are found, the person examined is advised, but not obliged, to take remedial measures. Students are privileged to seek medical service of private physicians or at the University Hospital. If it is necessary to go to the University Hospital, minimum rates are charged.

"Freshmen are all required to take the physical examinations and any upper classman may avail himself of this opportunity. It is interesting to observe that each year a larger number of them are realizing the advantages of such an offer.

"The Life Extension Division requires every food handler in the dining rooms of the University, as well as the fraternity and sorority dining rooms, to have physical examinations. In addition, this requirement is extended to include nurses and all employees of the University Hospitals. To be on the positive side, all of the workers who are carriers of typhoid, diphtheria, venereal diseases, or tuberculosis are barred from service in the hospitals or dining rooms. Moreover, all employees must agree to notify the Life Extension Division if they come in contact with or are affected by any communicable disease. Under these conditions a permit to work is granted which is revocable if the employee does not live up to his agreement.

"The Student Outpatient Division, a unique feature of the University Department of Health, employs three full-time physicians and a nurse and is housed in ten complete outfitted rooms. It can readily be seen that the best possible care can be given to any students who are ill and desire medical attention of any sort. Nominal charges are made for office and room calls. Over 6,500 patients were treated by the division during the last school year.

"The benefits of remedial and preventive work of this nature cannot be stated definitely. However, it is interesting to note that the number of services rendered by the Department of Health for the different divisions, from September 1, 1930, to May 31, 1931, ranged as follows: Communicable Diseases, 60 (cases investigated); Life Extension, 8,533; Student Outpatient, 6,871; Inspection, 3,103. These statistics furnish some insight as to the service rendered.

(Continued on page 55—Adv. xxxi)

(Continued from page 54—Adv. cont.)

"The fact that there is a department of this kind functioning in a highly efficient manner should be reassuring to physicians and citizens of all parts of the state that the State University is not only a safe place for students, but also that students returning from the University will not disseminate contagious diseases in their respective communities."

STATE JOURNAL OF ALABAMA

The Journal of the Medical Association of the State of Alabama was started in July, 1931, as the organ of both the State Association and the State Board of Health. The public health department occupies the latter part of the Journal and is conducted by officials connected with the State Board of Health. That department in the November number contains articles contributed by the heads of the Bureau of administration, laboratories, vital statistics, preventable diseases, inspection, child hygiene and public health nursing, engineering.

The articles are practical and of informative value to general practitioners of medicine.

Referring to aid from the U. S. Government and other outside agencies, the Journal said:

"It was during this growing, formative stage that the Rockefeller Foundation and the United States Public Health Service, appreciating the soundness and strength of our public health organization, donated so liberally, both in money and in personnel, to the rapid building up of what they then considered and what the world now concedes, is one of the finest pieces of health machinery in existence. So liberal were these agencies to Alabama that her health department was frequently referred to as 'The Branch Office of the United States Public Health Service and the Rockefeller Foundation'.

"This fact, however, must be borne in mind. These aids were but temporary and those activities into which these extraneous monies were poured if continued, had to be paid for at the State's expense. To illustrate beginning in 1922, through the Sheppard Lowner Act, Alabama received annually from federal sources \$25,836 to be expended for rural health nursing. This activity proved of such great worth and so necessary that upon the discontinuance of this federal subsidy in 1929 this financial burden became the responsibility of this department. In the eyes of these various agencies, whose efforts are aimed primarily at setting health departments on their own feet, Alabama is viewed as, long since having passed the crawling stage in public health work.

(Continued on page 56—Adv. cont.)

PREVENTS RICKETS AND SPASMOPHILIA



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MAY WE SEND YOU SAMPLES?



S. M. A. was developed at the Babes and Children Hospital at Cleveland and is produced by its parent on an exclusively by



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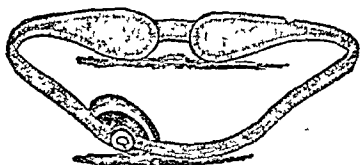
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(Continued from page 53—Adv. xxix)

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(Continued on page 55—Adv. xxvi)

(Continued from page 56—Adv. xxvii)

securing speakers. Dr. Flippin will doubtless be glad to assist you in selecting a subject and will also help you in securing clinicians or speakers.

"The Department of Clinical Education will hold the regular meeting in Richmond in December, and at that time it will probably be decided whether the committee on Postnatal and Prenatal clinics will undertake to begin their work during the current year. This is a sub-committee of the Department of Clinical Education. It is composed of two members from each of the State Medical Schools, two from the Society at large and two, added at the request of a special committee meeting in Roanoke, who are country doctors. The whole purpose of these clinics will be to benefit and educate the physicians through post-graduate training.

"It is contemplated that an able whole-time clinician in obstetrics and gynecology shall conduct clinics in designated centers for groups of physicians, and at times to meet physicians in their offices to assist them, but only at their request. The details of the plan will be published later. It is our sincere desire in attempting to introduce this plan of education to place our profession in the forefront of preventive medicine. We hope to lower the mortality rate of mothers and the newborn to such an extent, and to so impress the public with the efficiency and skill of our physicians, both town and country, that no woman will be satisfied to pass through the ordeal of childbirth without the supervision and care of a competent physician."

COUNTY HEALTH OFFICERS IN WYOMING

The Wyoming section of the November issue of *Colorado Medicine* discusses the public health administration of the State and describes some conditions which are not evident in those States which, like New York, have an effective civil service system. Two features of the Wyoming administration are noteworthy:

1. The violation of the principle of house rule in the appointment of county health officers by the State Board of Health.
2. The assumption of the power of appointing the county health officers by the governor.

A hopeful symptom is the awakening of the physicians to the necessity of taking an active part in both making and administering the public health laws. The article says:

"Some constructive plan should be developed in Wyoming to unite more closely the State Board of Health and all the physicians of the state. At present the State Board of

(Continued on page 58—Adv. xxviii)

★ ★ ★ HERE is one of the advertisements of The Sugar Institute

THE advertisement reproduced here is one of the series appearing in publications throughout the country. In order to keep the statements in accord with modern medical practice, they have been submitted to and approved by some of the leading authorities in the field of human nutrition in the United States. The Sugar Institute, 129 Front Street, New York.

SCHOOL CHILDREN'S

appetites ARE
fickle



...OFTEN DUE, HOWEVER,
TO TASTELESS OR
UNINVITING DIET

Those in charge of school lunches are often confronted with the problem of getting children to eat what is good for them.

The lack of taste-appeal in the food served is often the reason that food is rejected or "picked at." Cooked tomatoes may be too tart, the stewed fruit insipid, the spinach and the carrots bland.

By flavoring or seasoning these essential foods with sugar they will be much improved in flavor. A dash of sugar to a pinch of salt is a good rule to follow in seasoning string beans, carrots, peas, tomatoes, soups and meat and vegetable stews. Fresh and cooked fruits should be sweetened to taste.

Doctors and diet authorities approve this use of sugar because it makes those foods which are carriers of vitamins, minerals and roughage, more enjoyable to the child. Flavor and season with sugar. The Sugar Institute, 129 Front Street, New York City.

★ "Flavor and season with Sugar" ★

(Continued from page 57—Adv. xxxiii)

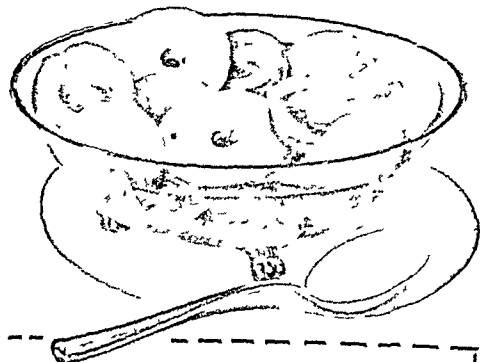
Health consists of a Secretary, who is a physician who gives all of his time to the work of the Board, with a small office force of clerks and stenographers. The Board is made up of the Secretary and three regular physicians and one osteopath. The professional standing of the Secretary and the rest of the Board is a fair average of a cross section of the physicians of the state—no better and no worse than the rest of us.

"The governor makes the appointments of this Board and we have no quarrel with him for his designations. The law does, however, vest with the Board the appointment of the county health officers. This right was taken away by the late Governor Emerson who selected the present county health officers and at his wish the list thus prepared was acted upon by the Board, and by rubber stamp methods appointed. That such county health officers thus become political appointments is self-evident.

"Three questions naturally arise. First: Is this the way to secure the best men to fill the office of County Health Officer? Second: Does such a system develop to the fullest extent the State Board of Health? Third: Can it be improved upon?

"At present there seems to be lacking a close contact between the board, the County Health Officer, and the Medical Profession. Something is wrong when such a condition exists. Some of it is the fault of the State Medical Society. Some of it is the fault of the State Board of Health, and some of it rests with all the doctors of the state of Wyoming.

"We feel the Board should present to the State Society at the next annual meeting in Rock Springs some definite plan for the future and at that meeting have a free discussion by the State Society of any plans for closer union and co-operation. The officers of the State Society, therefore, invite the Board of Health to present such plans at our next meeting and assure them time for such discussion."

**"INTERPINES"****GOSHEN, N. Y.****PHONE 117****ETHICAL—RELIABLE—SCIENTIFIC***Disorders of the Nervous System***BEAUTIFUL—QUIET—HOMELIKE—WRITE FOR BOOKLET****FREDERICK W. SEWARD, M.D., Dir.****FREDERICK T. SEWARD, M.D., Res. Phy.****CLARENCE A. POTTER, M.D., Res. Phy.****CELLU CANNED FRUITS****PACKED WITHOUT SUGAR***Are an important addition
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N.Y.M.J.—1-32

ANNUAL REGISTRATION IN TEXAS

The annual registration law, which takes effect on January 1, 1932, is discussed editorially in the December number of the *Texas State Journal of Medicine*, as follows:

"The dues of the State Medical Association have been reduced in the amount of the fee, namely, \$2.00. Members of the State Medical Association do not lose anything in the transaction. On the contrary, they are due to gain a good deal. Heretofore the State Medical Association has been contributing, from time to time, and as required, considerable sums of money to the State Board of Medical Examiners, to enable that body to administer and enforce the Medical Practice Act. The outsider, enjoying the same privileges and presumably burdened with the same responsibilities to insure to the public an adequate medical profession, has been paying nothing. These will now pay their share. In addition, and what is more to the point, it will now be possible, any day of the year, to determine just who is practicing medicine in this state, according to law, and where. That has never heretofore been the case. It will enable the law enforcement authorities to separate the sheep from the goats without any difficulty.

"There are many practitioners of medicine in this state who have never qualified for practice under the law. These will now be made to qualify or desist. That is to say, they are due to be made to do so. With the money accruing to the Board from the registration fee, the task should not be an impossible one. Indeed, it is believed by those who have studied the situation, that the task will be much easier than many of us think for."

Another editorial, a page or two further on, comments on the reduction of state dues as follows:

"It will be remembered that dues for 1932 are \$8.00 instead of \$10.00, plus, of course, the charge to cover county and district expenses. That represents a twenty

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per cent reduction in the cost of membership for quite a large proportion of our members, and a twenty per cent reduction of income from that source for the Association. The trustees are finding it rather difficult to carry on the work of the Association without curtailment, on the reduced income, which is another good reason for asking early and prompt payment of Dues, Do It Now."

GRADUATE EDUCATION IN GEORGIA

Graduate education in Georgia is described editorially in the *Journal of the Medical Association of Georgia* as follows:

"The extension course for the physicians of Georgia, put on by the University of Georgia and Emory, was held in six sections of the State. The number of attendants at each course was as follows: Athens, 76; Waycross, 37; Swainsboro, 45; Albany, 60; Macon, 31, and Rome, 66, making a total of 315 physicians attending.

"The alumni and venereal disease clinic week was attended by 199 physicians. This gave us a total of 514.

"Through the cooperation of Emory University and the Julius Rosenwald Fund a five-day course of instruction was put on for the negro physicians. The enrollment was fifty-three, fifty being in attendance for each of the five days.

"This makes a grand total of 567 physicians who have attended classes by the professors of the University of Georgia and Emory.

"In all of these courses the State Board of Health had charge of the detail and publicity work.

"Prof. J. R. McCord, of Emory University, did a great deal to make the courses a success, giving much time to the details of the program. The same is true of the service rendered by J. C. Wardlaw, of the University of Georgia.

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A distinguished granite facade 2-story brick building in the West Bronx is now fully completed, ready for inspection and immediate occupancy. Each story has 6 rooms, extra lavatory and basin, also open sun porch to the rear. Large foyers suitable for waiting rooms. Drop living rooms with indirect lighting. Walnut and maple floors, textured walls and beamed ceiling, lower floor and vaulted ceiling upper floor, ornamental wrought iron gates connecting with dining rooms, Spanish arched doorways, wainscoting effect in dining rooms; tiled kitchen and bathroom, colored fixtures in bathrooms; shower stalls with glass doors. Basement has finished reception room, laundry, and oil furnace for heating hot water and incineration. Builder will make alterations to suit buyer's requirements. Satisfactory terms may be arranged. Write Sabyrde, Realty, Inc., 2310 Third Ave., New York, or telephone HARlem 7-0102.

MEAD'S 10 D COD LIVER OIL IS MADE FROM NEWFOUND- LAND OIL

Professors Drummond and Hilditch have recently confirmed that for high vitamins A and D potency, Newfoundland cod liver oil is markedly superior to Norwegian, Scottish and Icelandic Oils.

They have also shown that vitamin A suffers considerable deterioration when stored in white glass bottles.

For years, Mead's Cod Liver Oil has been made from Newfoundland oil. For years, it has been stored in brown bottles and lightproof cartons.

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RESEARCHES IN CHEMISTRY

It can be said quite conservatively that chemistry affects every phase of our existence. Out of it have come wonders that stagger the imagination. The relationship between medicine and chemistry is a close one. The bacteriologist, the pharmacologist, the physician, and the pharmacist make daily use of their knowledge of chemistry. Without it, the work of Chen and Schmidt on the alkaloids of MaHuang could never have been accomplished.

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It would be difficult indeed to find a reputable work on medical treatment which does not contain favorable references to the application of moist heat in inflammatory and congestive conditions. Indeed, its use forms an important phase in the modern treatment of diseases and of injuries.

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Members of the medical profession are invited to write to The Denver Chemical Mfg. Co., 163 Varick Street, New York, for sample and literature. See page ii.—*Adv.*

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A BRIEF REVIEW OF THE PHYSIOLOGY OF THE GALL BLADDER*

By LESTER LEVYN, M.D., F.A.C.P., BUFFALO, N. Y.

THE functions of the gall bladder have been investigated from the seventeenth century to the present, but the very fact that there still remain so many puzzling uncertain factors is evidence of the complexity of that viscus.

Knowledge of the physiology of the gall bladder has made great strides during recent years, but even today there is much about this apparently simple organ that is baffling. It is known that the gall bladder stores and concentrates bile during the intervals of digestion and expels it into the intestines as required. Ordinarily, during fasting the gall bladder is distended with concentrated bile which tends to become inspissated if the vesicle fails to empty. During this process varying amounts of mucus are secreted. This mucus supposedly prevents excessive inspissation or acts as a lubricant to facilitate the expulsion of the concentrated bile during digestion.

In 1905 Hammarsten stated that the gall bladder concentrated the bile and he noted a marked difference between the weight of the dried residue of hepatic and gall bladder bile.

Rous and McMaster utilized an anatomical peculiarity of the hepatic ducts in the dog whereby a ligature placed at a certain point on the common bile duct allows bile secreted by one part of the liver to enter the gall bladder and from the remainder of the liver to be collected in a rubber bag. Using the concentration of pigment as an index they showed that bile which remains in the gall bladder for a number of hours is concentrated as much as ten times and that the mere passage of bile through the gall bladder may double or even quadruple the concentration.

Mann summarized the different views concerning other functions of the gall bladder as follows:

1. *The Reservoir Hypothesis*

It is evident that this view is tenable only in a restricted sense, but inasmuch as the great concentrating power of the organ is now generally known and accepted, it seems certain that the gall bladder does act in the role of a collector of bile.

2. *The Absorption Hypothesis*

There is definite proof of the absorption of water in concentrating the bile, but proof of absorption of cholesterol or other important biliary constituents is as yet inconclusive.

3. *The Secretory Hypothesis*

The epithelium of the gall bladder is not of the usual secretory type and, therefore, it is unreasonable to assume that the wall of the gall bladder secretes important substances into the bile, under normal conditions.

4. *The Bile-Flow Regulation Hypothesis*

This view by itself is inadequate except when included in that next to be described, viz:

5. *The Pressure Regulation Hypothesis*

This theory is reasonable to accept considering our knowledge of the concentrating power of the gall bladder and especially if we believe that the gall bladder acts as a reservoir to regulate the flow of a fluid constantly secreted by the liver, but only intermittently discharged into the duodenum. It is also reasonable to suppose that the gall bladder by slight contractions or relaxation may act as a buffer or pressure regulator of the biliary tract in respect of respiratory movements or changes in intra-abdominal pressure generally.

When the proper stimulus arises, usually as a result of the ingestion of food, the gall bladder contents are expelled in varying amounts over variable periods of time. Bile may be evacuated from the gall bladder almost as quickly as food begins to leave the stomach or it may be retarded for an hour or even longer after feeding.

Since it is known that emptying of the gall bladder is as a rule associated with feeding it is of interest to note which foods are most effective in stimulating evacuation of bile.

In 1923 Boyden in experimenting on cats discovered that feeding a mixture of egg-yolk and cream would induce the gall bladder to empty. This was verified by necropsy. Lean meat had less effect and rice scarcely any. In 1925 a group of men working in the surgical clinic of the Peter Bent Brigham Hospital discovered by means of the Graham-Cole method of cholecystography that

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 2, 1931.

a meal rich in fat would cause a marked reduction in size of the gall bladder shadow in man. Continuing their experiments they found that pure fat was most effective, protein considerably less so, and that carbohydrates were apparently ineffective to this end.

There has been much controversy over the question as to whether the passage of bile from the gall bladder is an active function of the musculature of the vesicle itself or whether it results from extrinsic factors. At present the weight of experimental evidence definitely indicates that the contents of the gall bladder are expelled mainly by the contraction of its own musculature. The wall of the gall bladder contains a large proportion of smooth muscle the function of which regardless of its distribution is contraction. Contraction in the gall bladder has been demonstrated frequently. That muscular contraction is capable of expelling the contents of the gall bladder has been demonstrated as follows:

A. The administration of smooth muscle stimulants such as barium chloride has produced expulsion of iodized oil.

B. Contraction rings in the vesicle have been demonstrated during evacuation of its contents.

C. Spasm has been noted during the process of emptying.

D. Elongation of the gall bladder occurs during emptying and relaxation during rest.

E. Actual measurements have shown a marked increase in pressure in the gall bladder after feeding.

F. Contraction after feeding with alteration in shape and reduction in size has been observed in the exposed viscus.

G. Peristalsis has been observed in the gall bladders of certain animals.

One good reason for doubting a passive mechanism for emptying the gall bladder is that an effective active mechanism has been demonstrated and another is that if the gall bladder emptied passively it would be the only hollow viscus in the body containing smooth muscle to function in this manner.

Extrinsic factors as effective expulsive agents can be ruled out for the following reasons:

a. Changes in intra-abdominal pressure such as might be due to respiration, have no effect.

b. Elimination of the sphincter of the common bile duct by cutting or an inlying tube or cannula produces no emptying of the gall bladder by elastic recoil or in any other manner.

c. Intestinal peristalsis has little effect because certain foods may pass through the alimentary tract without effect on the gall bladder. Drugs that stimulate peristalsis do not alter cholecystograms.

d. Administration of bile salts to induce increased flow of bile from the liver does not cause the cholecystogram to disappear.

e. The gall bladder shadow becomes denser as the vesicle becomes smaller in size after feeding.

f. The gall bladder empties normally after feeding fats even with the hepatic ducts tied off to prevent any washing-out effect of bile from the liver.

It has long been believed that the stimulus responsible for gall bladder evacuation is reflex, due to the presence of food or acid chyme in the duodenum and traveling over nerves to the gall bladder. While this theory has not been disproved the evidence available is largely against it. Denervation of the gall bladder does not inhibit normal emptying after feeding.

It has also been thought that there exists a reciprocal nervous mechanism whereby the gall bladder is made to contract when the sphincter of the common bile duct is opened.

This is contradicted because:

1. Duodenal peristalsis in itself which supposedly opens the sphincter does not induce the gall bladder to contract.

2. Opening of the sphincter by the administration of bile salts does not cause the gall bladder to contract.

3. The sphincter may be destroyed and yet the gall bladder contracts normally during digestion.

Is the motor stimulus to the gall bladder furnished by a hormone? It is difficult to conceive how it could be stimulated in any other manner, with the gall bladder denervated. Fats empty the gall bladder readily whereas proteins have but slight action and carbohydrates practically none. It has been shown experimentally in animals that one intravenous injection of only a few c.c. of highly emulsified olive oil or of egg-yolk induces as marked a response as the ingestion of a much larger amount of the same substance. In spite of this it does not appear that fat in the circulation is the real gall bladder stimulus as the gall bladder may empty without any increase of fat in the blood.

The presence in the circulation of a secretion like product developed by food or hydrochloric acid in the duodenum has been thought of as stimulating the musculature of the gall bladder. Emptying of the gall bladder has been induced by the intravenous injection of a purified fat-free extract of duodenal mucosa and by applying hydrochloric acid to the duodenal mucosa.

It has been shown that crossing the circulation in dogs by allowing the blood of one dog to flow into the vessels of another and applying decinormal hydrochloric acid to the duodenal mucosa of the one dog that the gall bladder of the other was found to contract. It would therefore seem that gall bladder contraction is brought about by the presence of some substance in the circulation, which theory is fortified by the knowledge that

the gall bladder will empty after feeding though denervated

However, the question still remains as to whether a specific hormone is produced by the action of hydrochloric acid in the duodenum or in some other manner

The intravenous injection of highly emulsified fat and extract of duodenal mucosa are equally efficient in emptying the gall bladder

Spontaneous emptying of the gall bladder has occurred even after days or weeks of fasting. The gall bladder has emptied even when the gastric contents have been strongly alkalinized

It seems reasonable to theorize that if gall bladder contraction is stimulated by a hormone developed by hydrochloric acid in the duodenum the stomach would play an important role, but certain workers have demonstrated that removing the stomach and anastomosing the esophagus and duodenum have not prevented gall bladder contraction after fats have been fed the animals

From the above it is apparent that the normal stimulus responsible for gall bladder contraction has not as yet been conclusively demonstrated

One of the most important functions of the gall bladder is that of concentration. Water is readily absorbed. The concentrating function enhances the function of the viscus as a storage reservoir but if normal emptying does not occur over concentration and precipitation may result

Another important function is that of the secretion of mucus. The gall bladders of normal experimental animals are found to contain mucus in large or small amounts. In some instances the vesicle has been filled with almost pure mucus containing only a small quantity of bile

The three significant functions of the gall bladder therefore are

1 The evacuation of its contents brought about by contraction of its musculature

2 Concentration of its contents through the absorption of water

3 The secretion of mucus

Some workers have shown that dyes placed in the lumen of the gall bladder find their way into the lymphatics and that there is a probability that cholesterol is also absorbed from the bile. It is

uncertain, however, if this is a normal function or if this phenomenon indicates very early gall bladder disease

The earliest pathologic changes in the gall bladder undoubtedly are directly related to disturbance of function and cholecystography is of inestimable value as a functional test

Boyd advanced the theory that cholesterol is absorbed from bile by the mucosa until pedunculated masses are developed in the rugae which eventually break off and form the nucleus of cholesterol gallstones. He also contends that the formation of stones is due to the deposit of cholesterol in the mucosa from an overloaded bile, the function of the mucosa being altered by inflammatory changes

If stasis of the bile occurs with no undue increase of cholesterol active concentration may induce precipitation of other constituents of the bile with the formation of other types of stones

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ACUTE POLIOMYELITIS NAMES AND SYNONYMS—INFANTILE PARALYSIS: HEINE-MEDIN DISEASE

By IRVING PARDEE, M D, NEW YORK, N Y

ACUTE poliomyelitis is an acute generalized infectious disease which occurs both sporadically and in epidemics affecting largely children and adolescents. A characteristic paralysis ensues in the majority of instances, due to the selective pathological localization in the cells of the anterior grey column

The first accurate description of this disease

was made by Von Heine¹ in 1840, though paralyzes, indefinite in type, were described in the 17th and 18th centuries. The focal lesions in the anterior horn were noted by Prevost and Vulpian and later Strumpell² in 1884 described the infectious nature of the disease. The name poliomyelitis (polios grey) was suggested by Kussmaul who was impressed by the lesions in the grey

matter. Very little further progress in the understanding of the disease was made until Medin³ in 1890 studied current epidemics and gave the first good clinical description of its course. Because of the undoubted contributions of these writers the disease has become known as Heine-Medin disease, especially in Europe, although the designation of Acute Poliomyelitis is urged by the United States Census Bureau. Large epidemics occurred in Norway and Sweden and we are indebted to Wickman⁴ for so complete a report of the disease after these epidemics that little advance has been made since.

In this country there were sporadic small groups of cases occurring for twenty years before the larger epidemic of 1907. Since that time the disease has been endemic so that every year or so there occur outbreaks in different states, the largest occurring in the summer of 1916. There was a total of 27,000 cases reported with 6,000 deaths,—half of these were in New York City alone.

ETIOLOGY

Susceptibility to the disease is noteworthy between the ages of one to five years, during which period 75 per cent of the cases occur, while 95 per cent have occurred under sixteen years of age in certain epidemics. Contact infection is considered to be very rare, though the report of the New York Committee⁵ which studied the large 1916 epidemic extensively, is of interest in this regard. Children's institutions and separate communities such as the military post on Governor's Island were isolated during the epidemic with the result that no cases occurred. However, there are numerous reports of two, three, and even five cases in one family. The seasonal occurrence of poliomyelitis is of note, July, August, September and October being the months when the disease is at its height.

An extensive literature has developed on the subject of the mode of transmission of the disease, but we are yet far from a final conclusion. Milk-borne epidemics are reported here and in England. The common fly is also accused of being the carrier of this disease, but only further studies will serve to elucidate this important factor.

The virus of the disease is present in the nasopharynx of humans, and remains so for months or years following the infection. The upper respiratory tract is considered the site of entrance of the virus and the infundibulum is the pathway for cerebral involvement, according to Marinесco⁶.

Experimental transmission of the virus of the disease was first successfully performed intraperitoneally by Landsteiner and Popper⁷, while Flexner and Lewis⁸ injected suspension of central nervous tissue into the brain of monkeys. Thus it was found possible to establish a strain of the

virus which was passed through several hundred animals who presented a picture of the disease. By means of this it seems conclusively proven that it was a living virus and not a toxin of the disease. No stainable organism has been found, but it has been proven by experiments that it is filter-passing and ultra-microscopic. Flexner, Noguchi and Amoss⁹ found uniformly what they termed globoid bodies which produced experimental poliomyelitis in monkeys. However, it has been impossible to establish their relationship to the virus, or as the causative agent in human poliomyelitis.

A polymorphic streptococcus-like organism has been isolated and described by Rosenow, Nuzum and Mathers¹⁰, but other research studies have failed to confirm their work, so doubt may be cast upon the specificity of this organism in poliomyelitis.

Until further research reveals the real facts as to the organism and its mode of transmission, we remain still pathetically in the dark as regards a solution of the problem of this disease.

PATHOLOGY

The gross appearance of the brain and spinal cord at autopsy is notable only for edema, congestion of the capillaries, and scattered petechial hemorrhages. The meninges may likewise show congestion. On cross-section of the spinal cord the greatest involvement is seen in the lumbar and cervical grey enlargements, no doubt due to their greater blood supply. Here an occasional capillary hemorrhage is seen with all degrees of destruction up to a hemorrhagic myelitis.

Microscopically, the outstanding lesion is a round cell infiltration, especially around the pial vessels. In the posterior root ganglia there is nerve cell destruction and lymphocytic infiltration. Of note is the interesting observation by Amoss¹¹ that this is the first nervous tissue attacked and also the first to recover, which allows one readily to understand the distressing hyperesthesia present early in this disease.

The white matter in the cord shows perivascular infiltration, while the grey matter is most strikingly involved in both posterior and anterior horns. There are observed focalized and diffuse infiltrations of round cells, while the nerve cells first show edema, granulation of the cell protoplasm, neuronophagia, with final scar tissue replacement of the neurone. The early edema of the cell is considered to be the cause of the initial paralysis while the rapid recovery of the muscle is explained on the subsidence of its swelling.

The distribution of the lesion especially in the lumbar and cervical cord enlargements has already been noted, but also there are frequent changes in the medulla in fatal cases. Likewise lesions are seen in the subcortical region in certain cases.

In recent years considerable interest has been aroused over the visceral lesions observed in this disease. A hyperplasia of all the lymphatic structures of the body is generally noted, the histological picture resembling typhoid fever. Occasional necroses are found in the liver and lymphatic nodules. Observations on the total pathology of poliomyelitis would indicate that there is a generalized disease affecting the parenchymatous organs and lymphatic tissues with a special preference for the central nervous system.

SYMPTOMATOLOGY

The incubation period of poliomyelitis is short, averaging about two weeks, but three to ten days is more usual. Rare cases have developed within twenty-four hours after exposure.

The onset is usually sudden with symptoms of a generalized infection. The child feels out of sorts, has no appetite, and wants to do nothing. Fever develops almost immediately, though it is 101 to 103 degrees, it may be very transitory over night, or it may last until the fourth or fifth day with return to normal temperature. The pulse is rapid, more so than the fever would warrant. With the onset and in the first few days, there may be a convulsion, though it is rare, but nausea, vomiting, constipation or diarrhoea are commonly observed symptoms. This initial period may pass rapidly and should no paralysis occur it might have been unrecognized.

Meningeal irritative signs are frequently seen at an early stage with the occurrence of stiffness of the neck.—Kernig and Brudzinski's sign. Headache is often very troublesome, and of note is the distressing pain at the back of the neck and between the shoulders. This often gives the impression of rigidity, but is really not a true sign, only another evidence of the pain and hyperesthesia. Pain is a troublesome symptom for it not only occurs spontaneously and on movement, but deep pressure reveals an acute sensitiveness. Sedatives frequently must be given for this. Hyperesthesia of the skin is exceedingly uncomfortable and may last five to ten days. Profuse sweating or flushing of the skin may occur. Paralysis of the bladder is rare. The tendon reflexes are often exaggerated early but later on as the paralyses occur, inequality or a complete loss may be present in the paralyzed group of muscles.

Paralysis, the outstanding symptom of the disease, has its onset in seventy per cent of the cases before the fourth day. It is not essential for the diagnosis of the disease, as it is only a symptom in the course of an infectious process and many abortive forms will be recognized by early spinal fluid studies. The paralyses are often preceded by twitching of the muscle groups which later show paralysis. The most frequently involved groups of muscles are in order,—those about the hips, the legs (both about equally), and the arms, (more often one). Often it is difficult

to determine which muscles are paralyzed because portions of several muscle groups are involved rather than any single muscle. An anatomical explanation for this clinical finding is the knowledge that the cells in the cord are arranged vertically through several segments while the vessels around which the infection centers are arranged horizontally. It is frequently necessary to stimulate the limbs of young children with a pin to make them move, in order to determine the amount of paralysis. The back muscles are very often paralyzed and when recovery takes place, it may do so unilaterally, resulting in a scoliosis.

Cranial nerve paralyses are not infrequent. Radovici¹² having reported fifteen cases of isolated facial nerve paralysis.

We have seen in the foregoing description that the disease may be differentiated into three stages, one of general infection, one of invasion of the subarachnoid space, and lastly invasion of the neuraxis itself. Its progress may become arrested at any stage and only in the latter will paralysis occur.

There is much discussion in the literature on the subject of separating poliomyelitis into several types, but it seems quite futile, for it only confuses the clinical approach. If we consider that the picture presented by the patient depends upon the location of the involvement of the nervous system, it brings to the mind a clearer concept of its anatomical pathology. Those cases in which meningeal signs predominate have been noted, while the bulbar type is one of extreme gravity. In this the medulla is chiefly involved, with rapid heart, difficulty in swallowing and respiratory paralysis often resulting in fatality. A so called encephalitic form is seen in which there is a clouded sensorium, delirium, or stupor, and often a paralysis of a spastic type (upper motor neurone pyramidal lesion). This form usually has a favorable outcome.

The well known syndrome of Landry's ascending paralysis has become of late more and more referred to as a form of poliomyelitis. In this condition there is a successive involvement of the legs, trunk, arms and lastly the bulb with fatal termination. More rarely a descending type is seen, which bears a good prognosis. A careful differentiation must be made from similar clinical types of epidemic encephalitis, toxic myelitis, or polyneuritis.

Abortive forms of this disease are seen in large numbers in epidemics, more probably because they are better recognized than these may or may not show meningeal signs and do not develop paralysis. Potts described a peculiar form of intrauterine poliomyelitis.

Diagnosis. Examination of the patient is of great value in coming to a diagnostic conclusion. Close observation must be made for respiratory

paralysis, e.g., of diaphragm and intercostals, and for abdominal wall weakness, etc. The back, as before noted, is very painful, and being supported stiffly on movement gives the impression of cervical rigidity, which is not a true sign. Careful neurological examination is essential to determine the quantity and location of parenchymatous involvement of the spinal cord and brain. Thus only can the progress of the disease be determined.

Spinal puncture is one of the most important diagnostic aids in poliomyelitis and should be performed early and repeated frequently. The pressure is uniformly increased. The color of the fluid is clear, opalescent, or rarely yellow and a fibrin web may form on standing. Albumin and globulin are increased and Fehling's is reduced well. The number of cells is apt to be high in the early stages, from 100 to 1000, and there is a preponderance of lymphocytes, 75 to 90 per cent, according to various estimations. Menninger¹² says that within the first twelve to twenty-four hours the polymorphonuclear leucocytes predominate. Large mononuclear and endothelial cells are frequently found. After the first week the cell count returns to normal. The colloidal gold curve is usually of the luetic type, and the blood picture of this disease is one upon which observers are evenly divided, e.g., as to whether there is a leucocytosis or a leukeopenia. A relative lymphocytosis is also noted. The urine shows no variation.

Differential Diagnosis

(A). Epidemic meningitis. True rigidity of the neck combined with marked Kernig's sign in a patient usually very much more acutely ill is found. The spinal fluid shows a higher cell count with considerable polynuclear increase and a marked decrease in globulin.

(B). Tuberculous Meningitis. A history of a slow onset with headache, continuing fever and obvious meningeal signs. The early spinal fluid examinations are the same, but later the globulin is much increased, and sugar reduction is diminished.

(C). Epidemic encephalitis is characterized by a diffuse lesion with an associated stupor and lethargy; the encephalitic form of poliomyelitis is only seen in the presence of an epidemic. The cell count in the spinal fluid is low, 0 to 150, and is normal in 50 per cent of the cases.

TREATMENT

The treatment of poliomyelitis falls naturally into three stages: (a) acute stage; (b) convalescent stage; (c) chronic stage.

In the acute stage the therapy is general and specific. The former is directed to a symptomatic approach, the most important factors being absolute rest and quiet. Hyperesthesia, which is so distressing a symptom, must be re-

lieved by protecting the sensitive skin with cotton, while the pain is best combated by codeine or morphine. When the respirations are embarrassed morphine will often give much needed rest. Muscular rest for the weak or paralyzed muscle so as to relieve strain is essential, while support for the back and neck, which are exceedingly sensitive, is productive of much comfort.

Warm salt baths should be given as soon as the pain and tenderness have disappeared, combined with slight under-water movement. Medical therapy has proven of no avail, though hexamethylamine has been tried internally and adrenalin hypodermically and intraspinaly.

Spinal puncture as a diagnostic procedure is of great value, but the author, Menninger¹⁴, Dively¹⁵ and Crothers¹⁶ strongly believe also in its efficiency as a therapeutic agent, combined with spinal drainage.

The paralyzes must be treated with rest. Support of the tension on the muscles and the limbs is of great importance and no massage should be given until after three or four weeks. Lovett¹⁷, whose wide experience in these cases has resulted in making many advances, has noted "muscles are more often weakened than totally paralyzed." Therefore the muscle must not be fatigued or strained.

Serum Therapy. (a) Prophylactic. Convalescent serum has been largely used in animal experimentation where it has proved somewhat effective. In human poliomyelitis, however, it has proved impracticable. The most effective method of prevention is to avoid contact with body secretions, especially nasal secretions. Good respiratory manners must be cultivated, especially around children, who should be avoided. Nasal douches have been recommended. Isolation in the presence of epidemics is the most effective method to avoid infection. Three to six weeks' quarantine for recovering cases, while contacts should be quarantined for two weeks.

(b). Serum treatment of acute cases. In animal research it was found that monkeys who had recovered from the disease could not be reinfected. Netter¹⁸ was the first to supply serum therapy to human cases. Convalescent blood serum has been quite largely employed and it should preferably be obtained from recently recovered cases. If possible, several sources may be successively used in one case with advantage. Flexner and Amoss¹⁹ showed that poliomyelitis antibodies in the blood would pass into the spinal fluid if the meninges were inflamed, and it is generally recommended that both intraspinal and intravenous injection be made. If necessary, the injections may be made every twelve hours—the intraspinal injection to be 15 to 30 c.c., and the intravenous 50 to 100 c.c. in order to obtain the maximum benefit. Much emphasis is made upon the early administration of the serum, as cases

treated within forty-eight hours of the onset would seem to have the best chance of improvement.

The horse serum prepared from Rosenow's streptococcus has been extensively used, but there is still a strong skepticism concerning it.

The entire question of serum therapy will be subject to further review at a far later date as it is still in the experimental stage, and whether it has a specific effect or is due to a non-specific protein influence is yet to be proven. However, in so serious a disease, where at best the approach is inadequate, anything which holds out hope is worth a thorough trial.

A recent suggestion in treatment by Bordier²⁰ is radiotherapy applied according to his special technique to the spinal cord level involved. Diathermy to the affected muscles combined with low voltage current of desired frequency and wave form continued over a long period has been suggested. Numerous other contributors have reported success with radiotherapy given early.

Treatment during the convalescent stage is carried out as follows: Rest must be continued until tenderness is gone. Muscles weak or paralyzed must not be allowed to be stretched nor must fatigue occur. Walking must be encouraged as soon as possible, and no deformity must be allowed in any position, either lying in bed, sitting, or walking. Lovett¹⁷ and Wright²¹ have stressed in their writings that muscle training is the most important factor in recovery and deformities must be prevented. Massage is of inestimable value after the first month, and should be regularly employed to improve the circulation and support the muscle tone. Heat locally applied is also of benefit and faradism to cause complete muscle contraction may be helpful, but must not be given too strong.

Spontaneous improvement will continue for several years and operations should be put off till the maximum recovery has taken place and the condition is permanent. Treatment in the chronic stages is a problem of correction of deformities by operation and the proper application of braces. Only a well trained orthopedic surgeon with a thorough knowledge of the mechanics is capable of properly carrying this out.

PROGNOSIS

The mortality in this disease varies greatly, depending upon whether or not an epidemic is in progress. In the New York epidemic of 1916⁶ the rate was as high as seventy-seven per cent, while the average could not be more than ten to twelve per cent. It is highest in adults and in the bulbar forms of the disease.

The expectancy of paralysis is a much mooted question, the statistics varying from sixteen per cent to forty-four per cent which will recover completely without residual paralysis. Again the

figures of the New York epidemic show that in 1223 reported cases, sixty-seven per cent had residual paralysis. Recovery from the paralysis depends largely upon the type of care which the patient receives. The chances of functional recovery are six to one in cases with proper muscle training, under guidance of an expert; otherwise it is three to one. These figures of Lovett and Martin are very important and striking.

In conclusion, the best prognosis is obtained by proper treatment, and avoidance of infection, during an epidemic, by isolation.

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PROVISION FOR THE TREATMENT OF THE SYPHILITIC AND GONORRHEIC

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STATE DEPARTMENT OF HEALTH, ALBANY, N. Y.

PHYSICIANS frequently write the Division of Social Hygiene asking how they are to receive payment for the treatment of the indigent syphilitic and gonorrheic. Section 343-p of the Public Health Law as amended April 13, 1931, is as follows:

"Any person who is suffering from a venereal disease who is unable to pay for treatment may make application for care and treatment to the board of health or health officer of the health district in which such person resides, and such board or health officer shall promptly institute treatment. It shall be the duty of each county and city board of health to provide facilities adequate for the diagnosis, care and treatment of persons suffering from venereal disease, who are unable to pay for treatment by a private physician, which facilities shall meet such standards as may be prescribed by the state commissioner of health."

This section places the responsibility upon local health departments of providing treatment for any case of gonorrhea or syphilis unable to pay irrespective of whether the case is infectious or otherwise. Provision in the law has therefore been made to take care of the paretics, tabetics, the congenital and cardiovascular cases.

It will be noted that the word "indigent" has been changed in the amended law to "who is unable to pay" and this term is interpreted as applying to patients who cannot pay customary fees for the continued treatment which is usually necessary. The Department is much concerned with the inadequate treatment of not only the indigent but of patients able to pay but a dollar or two for their treatments which for the best interests of themselves and the community should extend for a year or more.

Our studies show that the vast majority of patients with syphilis are not diagnosed until comparatively late in the disease. In the interest of the patient, the objective is mainly to prevent degenerative changes and possible premature cardiac death, but from the point of view of the tax payer, whom the state represents, the objective is the prevention of tabes, paresis and blindness requiring institutional care, a big factor in our cost of government.

Many health officers have arranged with their boards of health to pay practicing physicians a nominal sum ranging from \$1.50 to \$5.00 per treatment. Physicians having patients unable to pay regular fees for extended treatment must receive authorization from their local health officer and have a fee arranged before a claim can be made. Having all of these patients come at a definite time every week is usually most convenient and effective, and when the number of cases warrant it, the establishment of a treatment center or clinic is indicated as an economical measure. It is often noted in places where the health officer selects a practicing physician to see indigent cases and a treatment center is established, that a physician will raise objections to so-called clinics, but nothing is said regarding the previous neglect in diagnosing and adequately treating these cases, the result often being that they become derelicts and charges on the community.

The State Health Department supplies to up-State physicians for the treatment of these cases, bismuth in both the soluble potassium sodium tartrate form and the insoluble salicylate, arsphenamine, sulpharsphenamine and to a limited degree tryparsamide.

LEPROSY IN A CHILD

By I. NEWTON KUGELMASS, M.D., NEW YORK, N. Y.

(From the Department of Pediatrics, The Fifth Avenue Hospital, New York.)

TROPICAL diseases should always be considered in the analysis of atypical manifestations in recent arrivals from foreign lands. Since the influx of children from southern countries there has been a great stimulus in the study of diseases occurring amongst them in their native habitat because of the problems their clinical conditions have presented on admission to the hospital. Our eyes have thus been opened to striking deficiency diseases, strange infectious diseases and severe alimentary disturbances. The present case is illustrative of what might have been considered luetic in the light of the clinical

manifestations only to be confirmed by a positive Wassermann which not infrequently occurs in leprosy.

Edith S., a ten-year-old girl, was admitted to the hospital August 6th, two weeks after her arrival from Porto Rico. She had been ill for three months with a patchy, erythematous rash over the trunk, buttocks and extremities and a thickening of the fingers which interfered with their usefulness. As far as it was possible to ascertain from her parents she had had no fever, alimentary upsets, pains, respiratory or infectious disturbances. The parents were more concerned about the unaesthetic

appearance of the child's body rather than about any severity of the child's illness. There was no history of contact with anyone of equivalent symptomatology.

The girl was fairly nourished, alert, responsive. The reflexes were normal. The pharynx

were yellowish in the center and bright red at the border, distinctly dry, smooth and shiny. Some of the macules appeared pale in the center tending to clear up but most of them were distinctly anesthetic to the prick of a pin.



FIGURE 1
Patchy Pigmented Erythema

was ingested and there was some cervical lymphadenitis. The heart was normal; the lungs were clear; the abdomen was soft; the spleen was palpable and the liver was not enlarged. She showed a generalized maculopapular eruption especially profuse over the buttocks and lower extremities. The macules



FIGURE 3
Contractures and Thickening of Fingers

Over the lower extremities were several round nodules varying in size from a small shot to a filbert. They were raised above the level of the skin, elastic to the touch but anesthetic to the prick of a pin. The face was free from lesions and the eyelashes, eyebrows, conjunctiva and mucous membranes were unaffected.

Roentgenograms of both hands showed no bone or periosteal changes. There was a swelling of the soft parts particularly over the middle portion of both little fingers, more marked on the right than on the left side. The film of the chest showed a marked thickening about both roots; the peribronchial markings were accentuated particularly on the left side. The appearance was that of an acute infectious process. The Wassermann and Kahn reactions were negative. The blood showed a hemoglobin of 86 per cent; red cells 4,400,000; white cells 8,000; polys 37 per cent; lymphocytes 51 per cent and eosinophiles 12 per cent. The urine was normal in every respect. Biopsy of one of the nodules failed to show the acid-fast lepra bacilli, but the inflammatory process was characteristic. Attempts at isolating the organism from the nasal discharge were also without avail.

We are indebted to Dr. W. E. Woodbury and to Dr. F. E. Bartlett for their clinical contributions; to Dr. Howard Fox for the dermatologic consultation and to Dr. D. J. D. Jessup for the pathological examination.

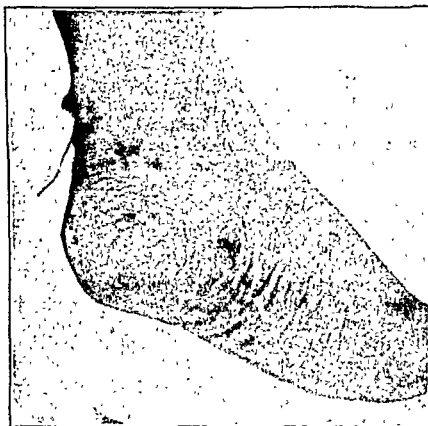


FIGURE 2
Tubercular Nodules of Leprosy

RESULTS OF A RECENT HYGIENE EXAMINATION

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A STUDY of papers in hygiene submitted by 155 candidates in the last State medical licensing examination raises some interesting questions as to what recent medical graduates do, and should, know about hygiene and public health. The public is accustomed to look to practicing physicians for advice and guidance in this field, and practically all medical schools in the State have undergraduate courses covering it.

The examination questions, summarized, were as follows:

- (1) Difference between active and passive immunity, with examples.
- (2) Four physical defects commonly found among children entering school and likely to impede progress.
- (3) Which one of the several vitamins present in milk is destroyed by pasteurization and how may it be replaced in the diet of the infant?
- (4) Three diseases in which sore throat is an early and prominent symptom.
- (5) What is meant by "Preventive medicine"?
- (6) What is the state sanitary code? By what official body is it enacted?
- (7) Purpose of Schick, Dick and tuberculin tests.
- (8) Two important features in construction of a sanitary privy.
- (9) Would you advise an apparently healthy adult to have periodic physical examinations? Explain answer.
- (10) Ages of greatest susceptibility to diphtheria and means of providing protection.
- (11) Mention two possible explanations of a failure to secure a "take" in vaccinating a person who has never had smallpox.
- (12) Three diseases apparently incited by the hemolytic streptococcus.

The candidates had a choice of ten questions.

That the examination was relatively easy was indicated by the fact that only 15 out of 155 failed to attain a pass-mark of 75. Two rated 100%, a mark attained by none of the more than 400 candidates in the June examination; 38 received marks of 90% or over; 24 received marks of 75%.

The most striking observation was that 132 of the 155 candidates "passed up" question number 6. Of the 23 who attempted to answer it, not one answered it correctly and only one or two approximately correctly. Yet the sanitary code im-

poses important duties on physicians practicing everywhere in New York State, excepting in New York City. Inability to answer this simple question might be explained on the assumption that most of the candidates lived in New York City, where the State code is not effective; still, if they had had any knowledge of the nature and origin of the New York City sanitary code they could have made a better guess as to the answer than most of them did.

Fifty passed over question number 12,—three diseases apparently incited by the hemolytic streptococcus; and 31 answered it incorrectly. Even without courses in public health it would seem that the average medical student, somewhere in his course, would have stumbled upon the relationship between the hemolytic streptococcus and scarlet fever, septic sore throat, and erysipelas.

The question avoided by the next largest number, 37, was number 3: the one vitamin in milk destroyed by pasteurization. It was answered correctly by 42 and fifty percent correctly by 18 others. The answers of 37 were wholly wrong. This result is interesting because physicians are frequently called upon for advice as to the relative virtues of raw and pasteurized milk and it is not unusual to find one advocating raw milk because "all the vitamins are intact."

Perhaps of greater practical significance was the fact that 33 passed over the question on vaccination, and only 86 answered it either correctly or approximately correctly. This certainly is a matter upon which every physician hoping to practice medicine should be thoroughly informed.

Fortunately there is "another side to the picture." Nearly all candidates selected question number 1 and answered it correctly. I question whether, five years ago, many would have been able to give a clear explanation of the difference between active and passive immunity. A large majority selected and answered approximately correctly the questions on physical defects in school children, preventive medicine, diphtheria in children and purposes of Schick, Dick and tuberculin tests.

Another interesting point was that nearly all answered the question regarding periodic physical examinations and without exception stated that they would advise such examinations, giving valid reasons for this position. I feel certain that if this question had been presented a few years ago many would have answered in the negative.

THE MICROSCOPIC SLIDE PRECIPITATION TEST FOR SYPHILIS WITH SPINAL FLUID

A Comparative Study with 500 Spinal Fluids

By JOSEPH JORDAN ELLER, M.D., AND CHARLES ROBERT REIN, M.D., NEW YORK, N. Y.

From the Department of Dermatology and Syphilology, New York Post-Graduate Medical School of Columbia University. Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 2nd, 1931.

THE microscopic slide precipitation test for syphilis with spinal fluids has been found by us to be more sensitive than the Wassermann reaction, Kahn test, albumin-globulin ratio and colloidal gold reaction. The purpose of this paper is to present a comparative study of this test with the accepted complement fixation and precipitation tests with special emphasis on the agreement of the tests with clinical findings.

This precipitation test recently described by one of us¹ is simple in detail, requiring no titrated hemolytic system of cells, amboceptor or complement. Furthermore, it requires no concentration of the globulins of the spinal fluids, it is performed with antigen emulsions that are satisfactory for use for twenty-four hours, and the results of the reaction magnified about 120 times by the microscope are read accurately with ease."

The spinal fluids were obtained from hospital and private practice and also from Dr. Leo Spiegel. The majority of the fluids were derived from cistern punctures which yielded sufficient material for the various tests employed in this series.

The patients were divided into a neurosyphilitic and non-neurosyphilitic group. The latter was comprised of patients with systemic syphilis but no evidence of central nervous system involvement and patients who presented themselves for syphilitic investigation who proved to be negative both clinically and serologically.

The microscopic slide precipitation test for syphilis with spinal fluids was performed according to the technic described¹ with the Kline antigen,² as follows:

"PRELIMINARY PROCEDURES WITH SPINAL FLUIDS

"Spinal fluids turbid with blood, exudate or bacteria, or containing injected substances including horse serum are unsatisfactory for testing. Spinal fluids with slight turbidity of few particles are centrifuged at high speed for ten minutes and the clear fluid withdrawn or decanted. All clear and cleared spinal fluids are tested as follows:

"Place the required number of test tubes 6 x 5/8 inch each containing 5 c.c. of Benedict's solution (1926) in a beaker (Pyrex). Add water halfway to the top. Heat. Keep the tubes in vigorously boiling water five minutes.

"Place the tubes in a rack. After making certain no copper reduction has occurred in any of

the tubes, add to each tube properly numbered 0.5 c.c. of spinal fluid. Shake the tubes individually vigorously for ten seconds.

"Replace the tubes in the beaker. Add water halfway to the top. Heat. Keep the tubes in vigorously boiling water five minutes.

"Replace the tubes in the rack, inspecting each immediately upon removal from the beaker for precipitate indicating presence of sugar.

"Spinal fluids giving a negative reaction for sugar in the above test are unsatisfactory for testing for syphilis. These are fluids that have been acted upon by bacteria either inside or outside of the body. In the former case of the various bacterial meningitides in which organisms and ferments of the exudate have acted upon the sugar, the fluids may contain substances giving positive or unsatisfactory reactions in various tests for syphilis. In the latter case of bacterial contamination subsequent to withdrawal, spinal fluids from cases of syphilis show a steady loss both of sugar and of the specific reacting substance if the fluids are kept at room temperature.

"On the other hand spinal fluids containing sugar when withdrawn from the body kept at low temperature (8 degrees to 12 degrees C.) continue to give a positive reaction for sugar with the test described above for several weeks, and syphilitic spinal fluids under these conditions show no appreciable loss of specific reacting substance for at least a week.

"The clear and cleared spinal fluids which give a positive reaction in the sugar test described above are then tested as follows:

"MICROSCOPIC SLIDE PRECIPITATION TEST FOR SYPHILIS WITH SPINAL FLUID

"Into each of twelve chambers on six glass slides, deliver 0.05 c.c. of 1 per cent glacial acetic acid solution from a 0.2 c.c. pipette graduated in thousandths.

"Into each of the twelve chambers allow 0.25 c.c. of the spinal fluid to be tested to fall from a 1 c.c. pipette graduated in hundredths (six fluids in duplicate). Hold the pipette directly above the acid and lastly touch the tip of the pipette at some dry portion of the chamber.

"Rotate the slides in a holder on a flat surface with moderate vigor for one minute.

"One drop of the diagnostic test antigen emulsion (about 0.0075 c.c.) is allowed to fall from a Wright pipette into one half of the fluids. Into each of the other six duplicate fluids a similar

drop of the exclusion test antigen emulsion is allowed to fall.

"Rotate the slides in the holder on a flat surface with moderate vigor for one minute to distribute the antigen and then for four minutes move the holder gently, but rapidly (about three complex movements a second), back and forth a distance of one-fourth to one-half inch.

"The results are examined at once through the microscope at a magnification of about 120 times (eyepiece 12X, objective 16 mm.) with the light cut down as for the study of urinary sediments and recorded in terms of pluses according to the degree of clumping and the size of the clumps. For ease in reading the results, the slide is tilted on a piece of metal one-eighth inch thick, one inch wide and four inches long, placed on the stage."

The Wassermann tests were performed by Drs. Osamu Ishii and Eugenia Trouveller at the New York Post-Graduate Hospital Laboratories. Two antigens were used, one an alcoholic extract of beef heart and the other a similar antigen reinforced with 0.2 per cent cholesterol. The tests with both antigens were kept in the ice-box overnight for the period of fixation.

The Kahn tests were performed by Dr. Osamu Ishii³ according to the modified technic described by him.

The albumin-globulin ratios were performed by Dr. Leo Spiegel according to the technic described by Exton and Rose.⁴

The colloidal gold reactions were done according to the standard technic, with colloidal gold solution prepared by the method of Wuth and Faupel.⁵

RESULTS

Table I shows the very close agreement (94.80%) of the diagnostic microscopic slide precipitation test with the clinical findings of the patients. The one false positive (a two plus reaction) occurred in a case of tuberculosis meningitis.

One doubtful reaction (one plus) occurred in a patient with epileptiform attacks but with no evidence of syphilis. There were twenty-four negative reactions in cases which had been diagnosed as some type of neurosyphilis. Sixteen of these cases had received considerable treatment and were not only negative in the diagnostic slide precipitation test but were also negative in all the other spinal fluid procedures including the non-cholesterinized and cholesterolized Wassermann, colloidal gold reaction and total protein-globulin ratio.

Table II correlates the results of the exclusion microscopic slide precipitation test with clinical findings. In this series the total agreement (95.6) is slightly higher than with the diagnostic antigen. There were 16 fluids with negative reactions from patients who had been diagnosed as neurosyphilitics and were under treatment. Fourteen of these cases were negative by other spinal fluid findings including the cholesterolized and non-cholesterinized Wassermann reactions, colloidal gold reaction, albumin-globulin ratio, and cell count. The other two gave positive Wassermann reactions but were negative with the colloidal gold reaction. There were three false positives, one occurring in a case of tuberculosis meningitis and two in patients with epilepsy.

Table III summarizes the increase in sensitivity of the exclusion slide test over the diagnostic slide test. There was an increase of 6.4% in the strongly positive cases while there were ten more negatives with the diagnostic procedure than with the exclusion test.

Table IV shows the very close agreement (99.59%) of the diagnostic microscopic slide precipitation tests with the non-cholesterinized Wassermann reaction in patients with no evidence of neurosyphilis. There is a relatively lower agreement in the proven neurosyphilitics. There were 31 disagreements, twenty-eight of

TABLE I
CORRELATION OF DIAGNOSTIC MICROSCOPIC SLIDE PRECIPITATION TEST
WITH CLINICAL FINDINGS BASED ON 500 SPINAL FLUIDS

REACTION	AGREEMENT			DISAGREEMENT		
	Clinical Findings	Tests	Per CENT	Clinical Findings	Tests	Per CENT
Four Plus.....	Neurosyphilis.....	181	36.2	.....	..	...
Three Plus.....	Neurosyphilis.....	18	3.6	.....	..	...
Two Plus.....	Neurosyphilis.....	13	2.6	No Neurosyphilis.....	1	0.2
One Plus.....	Neurosyphilis.....	12	2.4	No Neurosyphilis.....	1	0.2
Plus Minus.....	Neurosyphilis.....	8	1.6	.....	..	...
Negative.....	No Neurosyphilis.....	242	48.4	Neurosyphilis.....	24	4.8
TOTAL AGREEMENT.....		474	94.8	TOTAL DISAGREEMENT.....		5.2

Four plus indicates strongly positive reaction.

Three plus and two plus indicate weakly positive reaction.

One plus and plus minus indicate doubtful reaction.

TABLE II
CORRELATION OF EXCLUSION MICROSCOPIC SLIDE PRECIPITATION TEST
WITH CLINICAL FINDINGS BASED ON 500 SPINAL FLUIDS

REACTION	AGREEMENT			DISAGREEMENT			
	Clinical Findings	Tests	Per Cent	Clinical Findings	Tests	Per Cent	
Four Plus.....	Neurosyphilis.....	212	42.4	No Neurosyphilis.....	1	0.2	
Three Plus.....	Neurosyphilis.....	8	1.6	No Neurosyphilis.....	2	0.4	
Two Plus.....	Neurosyphilis.....	13	2.6	No Neurosyphilis.....	2	0.4	
One Plus.....	Neurosyphilis.....	4	0.8	No Neurosyphilis.....	1	0.2	
Plus Minus.....	Neurosyphilis.....	1	0.2	Neurosyphilis.....	16	3.2	
Negative.....	No Neurosyphilis.....	240	48.0				
TOTAL AGREEMENT.....		478	95.6	TOTAL DISAGREEMENT.....		22	4.4

Four plus indicates strongly positive reaction.

Three plus and two plus indicate weakly positive reaction.

One plus and plus minus indicate doubtful reaction.

TABLE III
INCREASE IN SENSITIVENESS OF EXCLUSION SLIDE TEST
OVER DIAGNOSTIC SLIDE TEST WITH 500 SPINAL FLUIDS

REACTION	EXCLUSION TEST		DIAGNOSTIC TEST	
	Tests	Per Cent	Tests	Per Cent
Four Plus.....	213	42.6	181	36.2
Three Plus.....	10	2.0	18	3.6
Two Plus.....	15	3.0	14	2.8
One Plus.....	5	1.0	13	2.6
Plus Minus.....	1	0.2	8	1.6
Negative.....	256	51.2	266	53.2
TOTAL.....	500	100.0	500	100.0

Four plus indicates strongly positive reaction.

Three plus and two plus indicate weakly positive reaction.

One plus and plus minus indicate doubtful reaction.

which were positive with the diagnostic microscopic slide precipitation test and negative with the Wassermann. Thus, if the diagnostic slide test alone had been done, only three cases of neurosyphilis would have been missed, while if the Wassermann test alone had been done, twenty-eight cases of neurosyphilis would have been missed. This shows the increased sensitivity of the diagnostic slide test over the non-cholesterinized Wassermann test, and the importance of doing both a precipitation test and a complement fixation test on all fluids in order to report the most accurate results to the clinician. There was one false positive in the diagnostic slide precipitation test occurring in a case of tuberculosis meningitis.

Table V shows the very close agreement (98.77%) of the exclusion microscopic slide precipitation test with the cholesterinized Wassermann in the non-neurosyphilitic cases. There were thirty-four disagreements in the proven neurosyphilitics, 31 of which were positive in the

slide test and negative in the cholesterinized Wassermann. This table shows the increased sensitivity of the exclusion slide test over the Wassermann reaction and that the Wassermann reaction alone, even with a sensitized antigen, is not adequate and should be supplemented by the more sensitive slide precipitation test.

Table VI shows the very close agreement of the diagnostic microscopic slide precipitation test with the albumin-globulin ratio. In the neurosyphilitic group there were fourteen disagreements, thirteen of which were positive with the slide test and negative with the total protein-globulin ratio. Thus, if the latter test alone would have been used, thirteen cases of neurosyphilis would have been missed, while if the diagnostic slide test would have been used alone, only one case of neurosyphilis would have been missed.

Table VII shows a similar close agreement of the exclusion microscopic slide precipitation test with the albumin-globulin ratio. This more sen-

TABLE IV
COMPARISON OF 500 DIAGNOSTIC SLIDE TESTS AND
WASSERMANN TESTS (NON-CHOLESTERINIZED ANTIGEN)

	NEUROSPHYLITIC GROUP				NON-NEUROSPHYLITIC GROUP				COMBINED GROUPS					
	Absolute Agreement	Relative Agreement	DIS- AGREEMENT		Absolute Agreement	Relative Agreement	DIS- AGREEMENT		Absolute Agreement	Relative Agreement	Disagreement	Positive Slide Test Anticomplementary Wassermann	Negative Slide Test Anticomplementary Wassermann	Total Tests
			Positive Slide Test Negative Wassermann	Positive Wassermann Negative Slide Test			Positive Slide Test Negative Wassermann	Positive Wassermann Negative Slide Test						
Tests.....	187	34	28	3	242	2	1	0	429	36	32	3	0	500
Per Cent..	74.20	13.48	11.11	1.19	98.77	0.81	0.40	0	85.8	7.2	6.4	0.6	..	
Tests.....	221		31		244		1		465		32	3	0	500
Per Cent..	87.69		12.30		99.59		0.40		93.0		6.4	0.6	0	

EVALUATION ACCORDING TO THE METHODS OF KAHN OF THE RESULTS OF THE ABOVE TABLES

Positive Reaction four plus, three plus and two plus.

Doubtful Reaction one plus and plus minus.

Agreement = Positive or negative by both methods.

Relative Agreement = Positive or negative by one method and doubtful with the other.

Disagreement = Positive by one method and negative with the other.

TABLE V
COMPARISON OF 500 EXCLUSION SLIDE TESTS AND
WASSERMANN TESTS (CHOLESTERINIZED ANTIGEN 0.2%)

	NEUROSPHYLITIC GROUP				NON-NEUROSPHYLITIC GROUP				COMBINED GROUPS					
	Absolute Agreement	Relative Agreement	DIS- AGREEMENT		Absolute Agreement	Relative Agreement	DIS- AGREEMENT		Absolute Agreement	Relative Agreement	Disagreement	Positive Slide Test Anticomplementary Wassermann	Negative Slide Test Anticomplementary Wassermann	Total Tests
			Positive Slide Test Negative Wassermann	Positive Wassermann Negative Slide Test			Positive Slide Test Negative Wassermann	Positive Wassermann Negative Slide Test						
Tests.....	204	15	31	3	239	2	3	0	443	17	37	3	0	500
Per Cent..	80.63	5.92	12.25	1.18	97.95	0.81	1.22	....	88.6	3.4	7.4	.6	..	
Tests.....	219		34		241		3		460		37	3	0	500
Per Cent..	86.56		13.43		98.77		1.22		92.0		7.4	.6	..	

sitive slide test gave a larger number of positive reactions in the neurosyphilitic cases. There were four false positives with the albumin-globulin ratio, two of which occurred in spinal fluids

from a case of encephalitis lethargica, one in a bloody spinal fluid and one in a fluid with a high leucocyte count which was thought to be due to the presence of a cerebral gumma. Further

TABLE VI
COMPARISON OF 127 DIAGNOSTIC MICROSCOPIC SLIDE PRECIPITATION TESTS AND
ALBUMIN-GLOBULIN RATIO (EXTON-ROSE SPEIGEL)

NEUROSYPHILITIC GROUP					NON-NEUROSYPHILITIC GROUP				COMBINED GROUPS			
	Absolute Agreement	Relative Agreement	DISAGREEMENT				DISAGREEMENT					
			Positive Slide Test Negative Protein-Globulin	Negative Slide Test Positive Protein-Globulin			Positive Slide Test Negative Protein Globulin	Negative Slide Test Positive Protein Globulin				
Tests	52	17	13	1	40	0	0	4	92	17	18	127
Per Cent	62 65	20 46	15 66	1 20	90 90	0	0	9 09	72 44	13 38	14 17	
Tests	69		14		40		4		109		18	127
Per Cent	83 13		16 86		90 90		9 09		85 82		14 17	

TABLE VII
COMPARISON OF 127 EXCLUSION SLIDE TESTS AND
ALBUMIN-GLOBULIN RATIO (EXTON-ROSE SPEIGEL)

NEUROSYPHILITIC GROUP					NON-NEUROSYPHILITIC GROUP				COMBINED GROUPS			
	Absolute Agreement	Relative Agreement	DISAGREEMENT				DISAGREEMENT					
			Positive Slide Test Negative Protein-Globulin	Negative Slide Test Positive Protein Globulin			Positive Slide Test Negative Protein Globulin	Negative Slide Test Positive Protein-Globulin				
Tests	49	17	16	1	40	0	0	4	89	17	21	127
Per Cent	59 03	20 48	19 27	1 20	90 90	0	0	9 09	70 07	13 39		
Tests	66		17		40		4		106		21	127
Per Cent	79 51		20 48		90 90		9 09		83 46		16 53	

studies will have to be carried out in this last patient before a definite conclusion can be made.

Table VIII shows the increase in sensitiveness of the diagnostic microscopic slide precipitation test over the Ishii modification of the Kahn test. Of twenty-nine fluids which gave strongly positive reactions with diagnostic slide test, ten gave similar reactions, six gave weakly positive reactions and thirteen gave doubtful reactions with the Kahn test. Of 9 fluids which gave weakly positive reactions with the diagnostic slide test,

2 gave similar reactions, 4 gave doubtful reactions and 3 were negative with the Kahn test. Of 5 fluids that gave doubtful reactions with the diagnostic slide test, 1 gave a similar reaction and 4 were negative with the Kahn test. Of 103 fluids that were negative with the diagnostic slide test, five gave doubtful reactions and 98 were negative with the Kahn test. This table also shows that the slide test gave 19.86 per cent four plus reactions as compared with 6.84 per cent with the Kahn test, or an increase in 13.02 per

TABLE VIII
INCREASE IN SENSITIVENESS OF DIAGNOSTIC SLIDE TEST
OVER ISHII MODIFICATION OF KAHN TEST WITH 146
SPINAL FLUIDS

DIAGNOSTIC SLIDE TEST			KAHN TEST		
Reaction	Number	Per Cent	Reaction	Number	Per Cent
Four Plus.....	29	19.86	Four Plus.....	10	6.84
			Three Plus or Two Plus..	6	4.10
			One Plus or Plus Minus..	13	8.90
Three Plus or Two Plus ..	9	6.16	Three Plus or Two Plus..	2	1.36
			One Plus or Plus Minus..	4	2.73
			NEGATIVE.....	3	2.05
One Plus or Plus Minus ...	5	3.42	One Plus or Plus Minus..	1	0.68
			NEGATIVE.....	4	2.73
NEGATIVE.....	103	70.54	One Plus or Plus Minus..	5	3.42
			NEGATIVE.....	98	67.12
TOTAL.....	146	...	TOTAL.....	146	....

TOTAL REACTIONS COMPILED FROM ABOVE TABLE

	FOUR PLUS		THREE PLUS TWO PLUS		PLUS MINUS ONE PLUS		NEGATIVE	
	Tests	Per Cent	Tests	Per Cent	Tests	Per Cent	Tests	Per Cent
Slide Test.....	29	19.86	9	6.16	5	3.47	103	70.54
Kahn Test ...	10	6.84	8	5.47	23	15.75	105	71.91

cent. In the case of the weakly positive reactions the increase in sensitiveness was only 0.69 per cent.

Table IX. In order to facilitate the comparison of the colloidal gold and the diagnostic microscopic slide precipitation, the observations of the former were interpreted on a four plus basis. Thus, where one or more tubes showed complete precipitation the results were read as four plus (strongly positive), while when the precipitations were less complete, they were read as three plus and two plus (weakly positive), and one plus (doubtful). In this series there were 25 doubtful and 10 positive reactions in fluids from patients who were definitely non-neurosyphilitic. There were 55 doubtful reactions in spinal fluids of neurosyphilitic patients 44 of which gave doubtful or positive reactions with the microscopic slide precipitation tests. Of the 25 disagreements in the neurosyphilitic cases, 21 were positive with the slide test and negative with the colloidal gold. This shows that the diagnostic microscopic slide precipitation test is not only more sensitive, but also more specific than the colloidal gold reaction. The total agreement of the combined neurosyphilitic and non-neurosyphilitic groups was 92.61 per cent.

DISCUSSION

The various spinal fluid procedures are indispensable aids in diagnosis and are sometimes the sole means of detecting early asymptomatic neurosyphilis. In this series the microscopic slide precipitation test showed not only a high degree of sensitivity and specificity, but also gave immediate evidence as to the diagnosis and exclusion of neurosyphilis. In this comparative study, the slide test performed alone would have given more correct information than the combined Wassermann, Kahn and colloidal gold reactions.

The diagnostic test when definitely positive (two plus to four plus) may, with very rare exceptions, be relied upon as diagnostic of neurosyphilis. This test was considerably more sensitive and agreed more closely with the clinical findings of the patient than the Wassermann reaction with the non-cholesterinized antigen. The exclusion test was more sensitive than the diagnostic test and consequently there was a corresponding increase in sensitiveness of the former over the Wassermann reactions. Because of this increased sensitivity the exclusion test should play an important role in detecting the invasion of the central nervous system by the spirocheta pallida before the appearance of clinical symp-

TABLE IX
COMPARISON OF 497 DIAGNOSTIC MICROSCOPIC SLIDE PRECIPITATION TESTS
AND COLLOIDAL GOLD REACTIONS

NEUROSYPHILITIC GROUP					NON-NEUROSYPHILITIC GROUP				COMBINED GROUPS			
	Absolute Agreement	Relative Agreement	DISAGREEMENT		Absolute Agreement	Relative Agreement	DISAGREEMENT		Absolute Agreement	Relative Agreement	Disagreement	Total Tests
			Positive Slide Test Negative Colloidal Gold	Negative Slide Test Positive Colloidal Gold			Positive Slide Test Negative Colloidal Gold	Negative Slide Test Positive Colloidal Gold				
Tests	147	69	21	4	196	27	0	10	343	96	35	474
Per Cent	60 99	28 63	8 71	1 65	84 12	12 01	0	4 29	72 36	20 25	7 23	
Tests	216		25		223		10		439		35	474
Per Cent	89 62		10 37		95 70		4 29		92 61		7 38	

toms or before the disease has had the opportunity of progressing to such a degree when treatment would be inadequate.

The exclusion test gave positive reactions when the other spinal fluid procedures were negative in a reasonable number of cases of old tabes, syphilitic ocular palsies and asymptomatic neurosyphilis.

With the exclusion test an occasional doubtful and positive reaction was obtained in syphilitic cases free from any clinical evidence of neurosyphilis. Such reactions should not be used for the diagnosis of neurosyphilis, but rather when negative, as indicating the absence of neurosyphilis. A positive exclusion test might, however, prove to be an indicator of very early involvement of the central nervous system, but considerable more study will have to be made for an extended period of time along these lines before any significant deductions can be made.

In cases of neurosyphilis under treatment, especially in the meningo-vascular type the Wassermann reactions, Kahn tests, colloidal gold reactions and albumin globulin ratios became negative before the microscopic slide precipitation tests, and therefore, when the latter became negative they had a greater value as to diagnosis and prognosis. Further study will be required to determine the amount and time of treatment necessary in such patients after slide tests become negative, but the amount of treatment will undoubtedly be much shorter than was necessary, when less sensitive spinal fluid tests were used.

The diagnostic slide precipitation tests were negative in a number of nonsyphilitic spinal fluids which gave positive colloidal gold reactions such

as multiple sclerosis, tumors and encephalitis. Doubtful and even positive colloidal gold reactions in the absence of clinical or other serological corroborative evidence must be interpreted with a great deal of caution.

CONCLUSIONS

1 The microscopic slide precipitation test with spinal fluids has been found to be more sensitive than the Wassermann reaction, modified Kahn test, colloidal gold reaction and albumin-globulin ratios.

2 This test gave results which agreed more frequently with the clinical condition of the patients than those of the other spinal fluid tests used in this series.

3 The test is simple in detail and the results magnified by the microscope are read accurately with ease.

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CISTERNAL PUNCTURE*

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QUINSKE¹ in 1890 was the first to suggest the possibility of entering the cisterna magna to obtain cerebrospinal fluid. He considered the procedure too dangerous and abandoned it in favor of lumbar puncture which he originated and believed to be safe. Ayres² and Eskuchen³ however devised the present methods of performing cistern puncture. Westenhoeffer⁴ in 1905 cut a window in the atlanto-occipital membrane for drainage purposes while Obregia⁵ claims to have done a suboccipital rachicentesis in 1908. In 1913 Dixon and Halliburton⁶ demonstrated that cerebrospinal fluid could be successfully obtained from the cerebral reservoirs by direct puncture through the occipito-atlantoid ligament of a dog and this technic was extensively used by them and Weed⁷ in 1914. Chartier⁸ performed a spinal puncture at the level of the 8th dorsal interspace and obtained spinal fluid in two instances, while Revaut and Krolunitzky⁹ obtained fluid by puncture at the 7th interspace. Netter¹⁰ in 1916 successfully used both lumbar and suboccipital routes. Canzaman¹¹ in 1916 obtained cerebrospinal fluid via the sphenoidal route, as did Berriel¹² by inserting a needle from in front and below the eye. Purves-Stewart¹³ obtained cerebrospinal fluid by entering the cavum Meckelii through the foramen ovale in 1925. Herrick,¹³ Cushing and Sladen,¹⁴ Ambertin and Chabanier,¹⁵ Capitan,¹⁶ Franco,¹⁷ and Miller¹⁸ very early used cistern puncture alone or together with lumbar puncture in cerebrospinal infections.

Ayres performed numerous cistern punctures on the cat prior to 1919 with only 10 injuries to the medulla. He thought the method could be successfully used on the human which he described together with Essick and Wegforth in 1919. This method is frequently called the "Direct Method." The needle is inserted just above the spine of the axis in the median line in the back of the neck. The upper edge of the external auditory meatus and the glabella are valuable guides for directing the forward stroke of the cistern puncture needle, for a plane passed through them and the point of insertion on the back of the neck will pass through the occipito-atlantoid ligament. The depth of cisterns varies with the individual and on cadavers (2) the average was 4 c.m., rarely 5 c.m. or less than 3 c.m. from the skin surface. The stylette remains in the needle to the very end of the procedure and tactile impression alone or "give" is the only guide the operator has upon passing through the

ligament and dura. Ayres also remarks that the head could be moved in any direction without altering the position of the needle to the nerve structures; an important thing to know when puncturing unruly patients. Not more than 5 c.m. depth from the skin surface is advised. That the stylette remains in the needle to the end of the puncture and tactile sense alone is relied upon removes an important safety factor when the "give" is hard to note; besides some cisterns are more than 5 c.m. deep.

Eskuchen in 1923 published his description of a new technic for cistern puncture, known as the "Indirect Method." It is essentially accomplished in two stages. The point for the insertion of the needle is selected by passing the index finger of the left hand down the back of the head and neck, starting at the posterior occipital protuberance, until it enters the hollow just above the tip of the second cervical vertebra. With the index finger still in this position, the needle is inserted in the median line of the head to the occiput at an angle. The stylette is then withdrawn and by upward pressure on the shank of the needle and by pushing the needle forward very slowly, the cisterna magna is entered. Cerebrospinal fluid can be seen dropping from the free end of the needle at this stage. The object in the second stage is to follow the under surface of the occipital bone very closely. The exact angle at which the first stroke is made is not given clearly by Eskuchen but it is advised to reach the bone too soon rather than miss it altogether, for in the later event the cistern may be entered directly. It is essential in order to perform the Eskuchen method to reach the occiput. Sometimes puncture of the skin meets with difficulty and in such cases a quick stroke through it at a right angle is advisable. The needle with this technic should enter the cistern at the posterior rim of the foramen magnum and it is at this point that the occipito-atlantoid ligament and meninges are penetrated with at times the feeling of a "give." Too great pressure at this stage should be avoided in order not to "overpass." In the second stage the cistern may be reached in either a few m.m. to 1.5 c.m., more than this distance should be carried out very cautiously.

Roentgenographic studies of every step in the performance of cistern puncture clearly shows that the point of the needle enters the cranial cavity through the foramen magnum and that this point is more superficial than is generally believed. It is therefore a procedure where the greatest caution must be exercised in technic and asepsis. Of 679 cistern punctures performed

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nearly all were reached within 3.5 c.m. to 5 c.m. from the skin surface, only a few were 6 c.m. to 7 c.m. deep and one 7.5 c.m.

The space through which the cistern puncture is performed is triangular in shape. The apex is in the fossa subcerebellaris magna and the base on the skin of the neck. The upper boundary is made up of the posterior occipital protuberance and the crest on the under surface of the occipital bone. The inferior boundary is the upper surface of the spine of the axis and the posterior and upper part of the rudimentary spinous process of the posterior arch of the atlas. The lateral walls of this triangular space are made up of the trapezius, complexus and rectus capitus posticus minor muscles (19;20). The base is the skin on the back of the neck between the posterior occipital protuberance and the tip of the spine of the second cervical vertebra. The structures penetrated by the needle are skin, cervical fascia, ligamentum nucae, loose connective tissue, occipito-atlantoid ligament and meninges. Such important structures as the vertebral arteries, posterior occipital nerves and lower end of the medulla are in the vicinity of the end of the cistern puncture needle. The space between the meninges and the brain structures at this point is estimated as from 0.5 c.m. to 1.5 c.m. (12). The space through which the cistern puncture needle passes between the atlas and the posterior rim of the foramen magnum of the occipital bone as seen on a wet specimen of a sagittal section of the head and neck was 3 m.m. With flexion of the head on the living subject this may appear greater as shown on x-ray examination of a thin patient as being 7 m.m. on the film, which with the factors used in taking the film would give an actual distance in this patient of nearly 2 m.m.

A modification of the existing technics together with a general improvement in asepsis not only aids in the performance of cistern puncture but insures the patient against possible infection. The patient is placed on his right side and shoulder with his head on a block of wood in such a manner that the sagittal plane of the head, cervical vertebrae and dorsal vertebrae are on a horizontal plane and at right angles to a plane through the spines of the scapulae. The head is then flexed so that the chin rests on the chest. The point for cistern puncture is then palpated and a dime sized tuft of hair removed. The back of the head and neck is thoroughly washed with first alcohol, then iodine and again alcohol. A sterile cap, triangular in shape with a window the size of a silver dollar cut in the center of the long side, is adjusted to the head so that only the suboccipital depression is exposed. The shoulders and surrounding field are covered with sterile sheet and towels and the operator besides wearing a short operating room coat, wears sterile gloves. The cistern puncture needles are sterilized in glass

tubes and done up twelve to a package. With the gloved index finger of the left hand held firmly over the tip of the spine of the axis, the cistern puncture needle is inserted in the center of the hollow just above the second cervical vertebra and below the posterior occipital protuberance, for 2.5 c.m. in the median sagittal plane of the head, with the needle point directed one inch above the glabella. No attempt is made to reach the occiput. The stillette is then withdrawn and by slightly raising the handle of the needle so that the point is just below the glabella, very slow pressure is applied to the needle which enters the cisterna magna very readily. Cerebrospinal fluid immediately escapes from the free end of the needle at this stage and the procedure is completed. The index finger of the left hand can be removed after the stillette is removed. With the collection of the spinal fluid completed, the needle is quickly withdrawn, the puncture hole painted with collodion and a small piece of sterile gauze pressed firmly against it. The patient may then get up and leave.

One of the great assets of cistern puncture is the almost total absence of headache. Probably not more than once in one hundred cases does this happen. In one instance this persisted for two days but in the few other cases for only an hour or two. This headache when it occurs is prompt in its onset upon the sitting up of the patient after the cistern puncture and is referred to the frontal region. Drinking of water and lowering the head between the knees frequently relieves it. This of course is in marked contrast to lumbar puncture headache which is much more frequent and severe. The cerebrospinal fluid (19;20;21) obtained by cistern puncture from the fossa subcerebellaris magna is in direct communication above with the fourth ventricle through the foramen of Majendie and below with the central canal of the spinal cord. From the lateral ventricles the fluid enters the third ventricle through the foramen of Monro and thence the fourth ventricle through the aqueduct of Sylvius. By way of the lateral recesses and the foramen of Luschka, the cerebrospinal fluid enters the subarachnoid space. To a great measure the fluid is absorbed into the venous circulation through the Pacchionian bodies. Because of the intimate relationship of the fluid within the fossa subcerebellaris magna and the fourth ventricle through the large foramen of Majendie, changes in the amount of fluid as a result of cistern puncture are referred to the intraventricular system or reservoir. The subarachnoid space retains its spinal fluid cushion for the brain and headache is avoided.

Studies on the quantity of cerebrospinal fluid were made by Mestrezat and Frazier²² who estimated that the fluid renews itself six to seven times in 24 hours, the average amount of change

being 125 c.c. to 175 c.c. so that about 1000 c.c. were formed in 24 hours. The rate of flow from the Sylvian fissure of two dogs²³ was 0.231 c.c. to 0.192 c.c. Reese²⁴ demonstrated that in normal fluid the cell count, globulin and Wassermann reactions were the same whereas in pathological fluids, that obtained by lumbar puncture was more strongly positive in cells, globulin and Wassermann reaction. A later study on a greater series of cases²⁵ by Saunders showed that the colloidal gold and Wassermann reactions were the same in both specimens but that cells and globulin were found in greater amounts in the fluid obtained by lumbar puncture. Kubie²⁶ speaks of the rise in the protein content of the spinal fluid following glucose injections while following the intravenous injection of hypotonic saline solution, the flow of cerebrospinal fluid is renewed with a still greater percentage of lymphocytes, after it has almost ceased.

The amount of cerebrospinal fluid that can be withdrawn without any bad effects upon the patient varies. Ebaugh²⁷ removed 60 c.c. to 80 c.c. by cistern puncture followed immediately by intravenous hypertonic saline, without any bad effects on the patient. In one patient where 40 c.c. of fluid were removed, the patient had severe chills, headache, pallor and a weak and rapid pulse. After stimulants by mouth were given, the patient was able to leave but remained in bed for 24 hours. Parasthesia of the right hand, which persisted for several days was noted in an outside case. Pfister²⁸ had one case where artificial respiration had to be done for several hours, following cistern puncture. A case of death is reported due to an abnormal cerebellar artery²⁹. In a collection of 10000 cistern punctures³⁰ there were only 7 bad results reported. Of 679 cistern punctures performed at this clinic, no mishap occurred except for four headaches and weakness in the right leg of one patient which cleared up in an hour. Death occurred in one case of cranial hemorrhage and another of meningitis following cistern puncture at another hospital. In view of the many thousands of cistern punctures being performed, greater care must be urged upon those in this work especially the beginners.

Cistern puncture possesses certain advantages over lumbar puncture. These are the ease with which cerebrospinal fluid can be obtained for diagnosis, lack of headache and its therapeutic applications. So simple is it to obtain cerebrospinal fluid for diagnosis, after the technic is acquired, that the procedure becomes an office or out-patient clinic operation. For the syphilologist it is an easy means not only for diagnosing syphilitic involvement of the cerebrospinal axis, but it is also an easy method for obtaining fluid for serological tests as a guide in the treatment where syphilis involves the central nervous

system. Before discharging a treated syphilitic patient this route serves as an excellent means of obtaining cerebrospinal fluid.

The intracisternal treatment of optic atrophy due to syphilis has been described by Gifford,³¹ Viner and McMurtry,³² Gifford and Keegan,³³ Gifford³⁴ and Hume.³⁵ Marie and Leri³⁶ concluded that the first lesion in the nerve is an endovascularitis of tertiary syphilis causing secondary atrophy; a conclusion also reached by Staigart. Paton believes that the toxic theory should be abandoned, while Igersheimer found spirocheta near the optic nerve but not in it. Sucker replaced salvarsan by mercury. The procedure was to allow ten drops of a solution containing one-fiftieth of a grain of bichloride of mercury to gravitate into the fossa subcerebellaris magna by way of cistern puncture, after ten cubic centimeters of cerebrospinal fluid was removed. The conclusions reached by Gifford with the intracisternal injections of mercury bichloride in syphilitic optic atrophy were that these injections have given better results than any other method; that intracisternal injections are relatively simple to do; that improvement in vision is evidence of an active infiltrative lesion; that the best results are obtained in early cases with definite defects in part of the field of vision and relatively good vision in one eye and little evidence of other nervous involvement. The reactions following this treatment were at times severe.

The suboccipital route has been used extensively in the treatment of paresis, tabes dorsalis and cerebrospinal syphilis. Ebaugh²⁷ mentions Berriel as having injected arsphenamized serum by way of the sphenoidal route and also credits McKusker for having published the first case. The arsphenamized serum was prepared in the regular manner with the addition of 0.5 to 1.0 milligram of arsphenamine and diluted to 25 c.c. with saline. The same amount of arsphenamized serum was introduced as spinal fluid drained via the suboccipital route. Following this procedure, 50 c.c. of saline was injected intravenously, to encourage an increase in the flow of cerebrospinal fluid. Tryparsphenamized serum prepared in a similar manner was also used. Besides Ebaugh, Edge,³⁸ Stewart³⁹ and others have worked along this line and while theoretically a good method, yet their results were discouraging in the advanced paretics they treated. Drainage following the intravenous injection of salvarsan, silver salvarsan and tryarsamide has been more encouraging in neurosyphilis. In a general way the procedure was to do a suboccipital drainage in 20 to 30 minutes following the intravenous injection. The amount of cerebrospinal fluid removed varied from 15 c.c. to 35 c.c. From six to eight intravenous injections at weekly intervals was considered a course with a rest intervening of from three to four weeks.

Bleeding causing contaminated cerebrospinal fluid is more frequent with cistern puncture than with lumbar puncture in the hands of the same operator. From 2 to 3 percent of such cases is a fair estimate. It seems that the short bevel of the cistern puncture needle pushes the meninges ahead of it in these bleeding cases, causing a small lacuna of venous blood to form. Withdrawing the needle and performing another cistern puncture by a different method frequently results in clear fluid. No bad effects have been noted even in those cases where the cerebrospinal fluid was blood tinged.

CONCLUSIONS

1. Cisterna puncture is performed through a definite anatomical space.
2. The modified technic is simple to do and safe.
3. The almost total lack of headache is a great advantage in cistern puncture over lumbar puncture.
4. Cistern puncture has been a great aid in the diagnosis and treatment of intra-cranial infections.
5. Serious injuries following cistern puncture are rare.

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RECORDED AND RESIDENT DEATH RATES IN NEW YORK STATE

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NO. I—ALL CAUSES, 1926-1930

THE generally accepted measure of the risk of death in a given period of time and in a given place is the fraction obtained by dividing the number of deaths in that place during the stated time by the number of people residing there. Thus, if one states that the death rate in the State of New York in 1930 was 11.7 per 1,000 population, it means that the risk of the "average" person dying in the State in 1930 was as 11.7 is to 1,000 or about 1 in 85. If one were to define the "average" person within certain ages or limit him to one racial group or occupation, the risk of death would be expressed by relating the number of deaths occurring in the group to which the "average" person is now confined to the number of persons in that smaller population. In addition to the total death rates, based on mortality from all causes in the entire population, there are, therefore, specific death rates by sex, age, cause of death, occupation, etc.

The rate of mortality would be a precise measure of the risk of death provided the numbers upon which it is based were exact. It is, however, generally recognized that these numbers are, inevitably, open to a certain degree of error. The populations employed in the computation of annual rates are estimated as of July 1 of each year. The accuracy of these estimates depends directly upon the size of the population and the interval of time separating the period considered from the last census. Also, even with a perfectly functioning system of registration, the total number of deaths ascribed to a certain cause does not necessarily represent the true mortality from this cause. Accuracy of diagnosis is one factor of importance; another is the fact that a disease may be contracted in one place and the death occur in a different place. The Public Health Law of this State provides that a death must be recorded in the city, town, or village in which it occurs. The official death rate, based on the number of deaths occurring in each administrative unit, therefore, frequently underestimates or overestimates the actual volume of mortality among the population. In 1926 the Division of Vital Statistics of the State Department of Health commenced to allocate deaths according to the residence of the decedent or the place in which the disease leading to death was known to be contracted or the fatal injury sustained.

The present article deals with recorded and corrected death rates from all causes. It will be followed by a similar presentation of the death

rates from tuberculosis and cancer and of infant mortality and maternal mortality. The table below shows the death rates from all causes per 1,000 population, recorded and corrected for residence, in New York City and in the urban and rural up-State territories in 1926-1930:

Year	New York City Re- corded	New York City Resi- dent	Rest of State Re- corded	Rest of State Resi- dent	Urban Re- corded	Urban Resi- dent	Rural Re- corded	Rural Resi- dent
1926	11.8	12.0	14.0	13.8	13.8	13.5	13.0	14.4
1927	10.7	10.9	13.0	12.7	12.6	12.3	12.3	13.7
1928	11.6	11.9	13.3	13.0	13.2	12.7	12.3	13.9
1929	11.3	11.6	13.7	13.4	13.4	12.9	12.8	14.6
1930	10.8	11.0	12.8	12.5	12.5	11.9	12.1	13.8

Main Divisions of the State: In 1930 the resident death rate of New York City was higher than the recorded rate by 0.2 while up-State the resident rate was lower than the recorded figure by 0.3. The rate of the urban up-State territory is reduced from 12.5 to 11.9; the rate of rural New York is increased from 12.1 to 13.8. Thus, while the *recorded* death rate of urban up-State was 3 per cent higher than the rural rate, the *resident* urban rate is 14 per cent lower than the resident rural rate.

Cities: The resident death rates of most of the cities were less than the recorded rates. Below are listed cities over 25,000 population whose resident rates in 1930 were less than the recorded figures by 10 per cent or more:

	Recorded	Resident
Albany	14.8	13.1
Amsterdam	12.2	10.4
Auburn	14.6	12.5
Elmira	16.8	14.4
Jamestown	12.0	9.8
Kingston	21.5	16.1
Newburgh	16.7	14.3
Rome	16.6	13.3
Watertown	17.2	13.4

Rural Area of Counties: The resident death rates of the rural areas of counties were higher than the recorded rates with the following exceptions:

	Recorded	Resident
Dutchess	16.9	14.7
Franklin	16.0	14.2
Seneca	12.2	11.1
Westchester	12.2	9.4

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For list of officers of County Medical Societies, see this issue, advertising page xxx.

Annual meeting, Hotel Statler, Buffalo, N. Y., May 23-25, 1932

THE OUTLOOK

The year 1932 opens auspiciously for the Medical Society of the State of New York and its constituent County Societies. The most encouraging omen of the new year is the number of objectives which the members are seeking to reach. Physicians always respond when there is something to be done, or a needed policy is to be popularized. The older activities in public health and graduate education will be continued more vigorously than ever; while the public relations of practicing

physicians will be extended as a result of the studies of the Governor's Health Commission. The Medical Societies are also entering the new field of medical publicity, and are seeking practical ways of informing the people how they may secure the benefits of scientific medicine. There is every indication that the medical societies will assert a controlling influence in the development of the policies of the civil authorities in their administration of health matters.

A MEDICAL MUSEUM

The vision of a central medical museum under the auspices of the New York Academy of Medicine was suggested by Dr. Linsly R. Williams at the annual meeting of the Academy on January seventh. That the idea is both practical and popular is shown by the amount of space given to it on the following day by the New York newspapers.

New York is a great center of everything that is progressive and modern. It has more centers than one realizes, unless he stops to enumerate them. Its reputation as the center of the world's business and finance is so great that it is often said that money submerges all other features of the city. But where great wealth is centered, there the humanities also flourish under the patronage of those having the financial means to indulge their avocations. Men who build great business enterprises are successful to the degree that they supply widespread needs of mankind. When a man has accumulated wealth far beyond his own needs, he naturally makes provision that the public may share in the culture in which he finds gratification. If he is musical, he endows a music center; if he delights in art, he gives his collections as the nucleus of an art gallery; or if science appeals to him, he establishes a museum of natural history or endows a university foundation for teaching and research. It is but natural that New York, the financial center of the world, should support the American Museum of Natural History, the Metropolitan Museum of Art, the Botanical Garden, and great universities, all established for the benefit of mankind generally.

New York also has its medical centers. The Rockefeller Institute for Medical Research seeks to develop newer and more exact means of diagnosis and treatment which the family physician can apply in his practice. Columbia University has developed its College of Physicians and Surgeons into a medical center in which undergraduate teaching, hospital service, and scientific research are combined in one group of buildings; and other universities are developing similar plans.

The New York Academy of Medicine is another great medical center; and its membership is composed of leading practitioners in all branches of medicine. Its meetings have been forums for the discussion of medical problems of a civic nature as well as those applying to sick individuals. The Academy is a powerful force in influencing the action of civic bodies in adopting measures relating to health.

One of the greatest activities of the Academy has been the development of a Medical Library, which ranks second only to the Library of the Surgeon General in Washington. The Library

of the Academy contains the germs of a great medical museum whose influence shall appeal to the people generally as well as physicians. Already the Library is open to the public at certain hours and is used by research workers, especially those interested in the broader phases of medical history.

An essential element in the development of the Library into a public museum will be the preparation of indexes and bibliographies so complete that untrained readers may readily find the reference to any medical subject that they may wish to investigate.

There will also be needed a staff of trained librarians who will be familiar with the literature of medicine, and will be ready to assist readers to find information on all subjects.

The popular conception of a museum is that it is a collection of specimens of a spectacular nature. A medical museum will never appeal to the sightseeing visitor; but yet it will contain models and charts which will explain the living action of the body according to the laws of chemistry and physics. There will be models of the heart pump, and of the chemical factory of a gland, and the propagation and transmission of nerve impulses. To dispel the mystery of living action within the body is the first step in combating the influence of the quack and the cultist.

The medical museum will also enter the great field of sanitation and its relation to health. The successive steps of the development of sanitation of New York City are still being repeated over and over everywhere as new towns develop. The camper and the lone farmer practice the sanitation of the New York City of one hundred years ago. The country village that installs a water system follows the example of New York when it introduced croton water in 1842; and the householder who builds a cesspool is somewhat in advance of the New York City of today which has not yet provided the up-to-date sewage disposal system for its people. The medical museum will visualize unsanitary conditions and the measures for improving them.

There is no museum anywhere that is to medicine what the American Museum of Natural History is to biology and its subdivisions such as zoology, ornithology, paleontology, and anthropology—and there never will be until other physicians join Doctor Williams in presenting the vision of a medical center to which the people may turn for information and inspiration, just as they now look to the American Museum of Natural History and the Metropolitan Museum of Art. When physicians include a medical museum among their major plans for the future, the business men of New York City will provide the funds for its establishment.

MEDICAL LEGISLATION

Since the Legislature of the State of New York is in session, the usual run of medical bills may be expected. On the one hand are bills sanctioned by governmental officials and lay health organizations dealing with administrative machinery by which the community may do its duty to people who are sick or are threatened with illness. This class of bills includes those sanctioned by Governor Roosevelt's Health Commission. The Medical profession approves the principles of these bills, although some change of details may be proposed as a result of the deliberations of the House of Delegates.

In contrast to the medical bills introduced by experienced administrators are those proposed by cultists and quacks asking for special privileges for ignorant healers. The arguments for these bills consist of testimonials from the minority of persons who say they feel better after having taken the treatments. Modern advertising is based on testimonies. If the wife of a man prominent in business or the government advertises her confidence in a preparation used on the skin or in the kitchen, other women buy that article even though half a dozen rival articles are advertised in a similar way in the same magazine.

A person goes to a cultist or a quack because some friend or neighbor says that he was helped by the healer. A legislator supports cult bills because he hears the testimony of his neighbors that they have received benefit from the cultists after the doctors had given them up. Such testimony is hard to refute for what a person sees or experiences is accepted in a

law court as of greater weight than the opinions of doctors who have not seen the case.

Cultists seek to give the impression that they are successful with the great majority of cases which they treat. A legislator gets this impression when he receives testimonial letters from a dozen patrons of a cultist in his district. If a doctor were to combat this evidence in a law court, he would have to produce over one hundred witnesses to testify that they had not received benefit and so to prove that improvement follows the alleged treatment in only a small proportion of the cases. The cultist evidently has the best of an argument based on the witness of ordinary citizens.

The influence of personal contacts is greater than that of reason. The legislator is naturally biased in favor of the doctor, and he values the evidence of the patients of the physician far higher than that of the patrons of the cultist. Who can estimate the value of a number of letters from prominent citizens asking a legislator to oppose the granting of special privileges to cultists? The present medical practice act was passed because doctors influenced their prominent patients to write to their legislators and ask them to support the bill.

The doctor will be successful in legislation when he heeds the example of the cultist and induces his patients to state their wishes to their legislators. Effective machinery for doing this is provided by the Tuberculosis and Public Health Associations of the counties.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

First Year of Amalgamated State Society The year 1907 was the second year of the amalgamation of the former State Society with its rival, the State Association. What the amalgamation did for New York County in the first year is told in an article in this Journal for January, 1907. The President, Dr. Floyd M. Crandall, summarized the results as follows:

"To summarize the inquiry regarding the effect of amalgamation upon the Medical Society of the County of New York we find 1 That the receipts from membership dues the first fiscal year after amalgamation were \$2,189 greater than the average receipts for the five years preceding it, and \$1,803 greater than for the year immediately preceding it.

"2 That 68 per cent of the membership was in

arrears of dues on December 31, 1906, as compared with 21 per cent in arrears at the end of the year preceding amalgamation.

"3 That 2,178 members paid dues for the first year after amalgamation as compared with 1,476 for the year immediately preceding it, that is 702 more members paid dues in 1906 than in 1905.

"4 That this increase of 702 was but partially due to the members received from the Association of whom 387 paid their dues.

"5 That prior to 1906, the total paid membership never reached 1,500.

"In New York County, therefore, union and the new system of organization have brought a larger membership and greater income than ever before, and the percentage of members who have paid their dues has been unprecedented."



MEDICAL PROGRESS



The Three Phases of Hypertensive Disease.

—Chronic progressive hypertension should be considered, says A. Dumas, not so much a symptom as a veritable disease. While its original cause is still little known, it appears to consist in humoral troubles which place it in the class of diatheses. Thus understood, hypertensive disease passes through three successive phases, which may be termed (1) solitary or functional, (2) organic, with visceral lesions, and (3) involutive or declining hypertension. Each of these has its own characteristic symptoms and lesions, and its own special complications, each requiring its own treatment. Owing to the long time covered by the evolution of the disease, each of these phases has been mistaken for a different affection. Thus we have seen described the hypertension of chronic nephritis, or hypertensive nephritis, which proves to be only the second phase of the general hypertensive disease, the organic or cardiorenal phase. More recently a solitary hypertension has been recognized which is in reality only the initial phase of all hypertension, while the third stage has long been described under the name of arteriosclerosis. The hypertensive disease is essentially hereditary, the antecedents of the subject having been diabetic, gouty, or arthritic individuals, suffering with an unbalanced humoral condition which all shared alike, whatever the particular manifestation. The nature of these humoral imbalances is not yet well understood. Treatment produces its best results in the first phase, provided the presence of hypertension has been recognized, which is not always the case, since the beginnings are insidious and objective symptoms few. It should consist of appropriate regimens, such as iodated medication, insulin, angioxyl, oxycyanide of mercury, together with a rest-cure, thermal baths, and the like. This phase may begin around the age of 40, and pass insensibly into the second stage, perhaps after a number of years. The second phase is better known, and here treatment is most frequently ineffective. Its complications are cerebral hemorrhage, pulmonary edema due to insufficiency of the left ventricle, heart block, or acute asystole, by reason of which many subjects do not reach the third or involutive stage, in which hypertension may give place to hypotension, with arterial cachexia and a state of progressive depression no longer calling for hypertensive remedies.—*Journal de médecine de Lyon*, September 20, 1931.

The Action of Iodine in Experimental Arteriosclerosis.—With a view to determine the

value of iodine in arteriosclerosis, Hans Liebig produced arteriosclerotic lesions in rabbits by administering a mixture of cholesterol and linseed oil. To some of them he administered contemporaneously a preparation consisting of iodine and a fatty acid, which appeared particularly well adapted for the purpose, because it circulates a long time in the blood and thus has opportunity to exert a particular influence upon the vessels. Lesions developed in 100 per cent of the control animals, chiefly in the aorta but also in arteries of medium caliber. The first doses of the iodine preparation were too weak to have any effect, and no difference was observed between the experimental animals and the controls. In later series of animals strong doses amounting to 50-100 mg. iodine per day per kilo body weight could be reached without ill effect, although these would have been lethal but for the special form of the preparation. In 75 per cent of the 28 animals used for the experiment, no lesions were produced in the aorta, or only lesions of little importance, notwithstanding the rabbits had been fed with cholesterol 1 gm. daily for 6 or 7 months and in some cases 11 months. Complete success may be expected only when the iodine treatment is begun very early and followed up without interruption. Care must also be taken that the amount of iodine reaches a certain high level. It is still impossible to say to what extent the experimental results can be applied to human beings. Nor can a definite interpretation be made of the mode in which the iodine acts upon the arteriosclerosis. Two possibilities present themselves to the mind: that of a direct action upon the vessel wall, and that of a general favorable effect upon the metabolism. It is probable that smaller doses of iodine than those administered would have been sufficient, such as could be prescribed for an arteriosclerotic without fear of injury.—*Riforma medica*, September 14, 1931.

The Physiology of Painful Sensation.—In discussing the nature and distribution of the pains that may result from injuries to the nerve-fibers of the sensory pathway, C. P. Symonds selects examples from different levels. In causalgia which may follow injury to one of the peripheral nerves there are three phenomena—spontaneous pain referred diffusely to the whole distribution of the nerve instead of to the spot stimulated, a raised threshold for all forms of cutaneous sensibility, and painful over-reaction to such stimuli as are able to cross the threshold. Analogous phenomena are observed in tabes in which the lesion is of the posterior roots, prob-

ably at their point of entry into the spinal cord, and also in lesions of the spinal cord and brain stem. As we get near the optic thalamus this syndrome is found most constantly and in the most marked degree. Clinical observation indicates that the essential condition for the production of this syndrome, at whatever level, is a certain degree of incompleteness of the lesion. The necessary degree of incompleteness may develop ab initio, or it may be attained only at a certain stage of recovery. In the case of a progressive lesion, the syndrome may appear and later disappear as the lesion becomes more severe, for example, in advancing degeneration of the posterior root-fibers in tabes. Occasionally the lesion may become stable at the essential degree of incompleteness and the syndrome persist indefinitely. These clinical observations are consistent with the hypothesis, originally suggested by Trotter and Davies, that the phenomena of raised threshold and over-reaction observed in the skin supplied by a regenerating nerve are due to a certain pathological state in the nerve-fibers themselves. Further support for this hypothesis is afforded by the finding of Adrian and his collaborators that the action of electric currents in afferent nerves behaves on the whole in very much the same way as in the efferent fibers. He found that the main feature of the stimulus which causes pain in the intact animal must be of relatively long duration, that is, it must possess a certain massiveness. Adrian also found that freeing the nerve from surrounding tissues, cutting, etc., caused spinal reflex movements in the animal and would be likely to cause pain in man. These findings suggest that the pain and painful over-reaction resulting from a partial lesion of the sensory fibers may be due to loss of insulation and consequent contact of naked axis cylinders with surrounding connective tissue.—*The Lancet*, October 3, 1931, ccxi, 5640

The Surgical Treatment of Angina Pectoris

—In view of the uncertainty as to the pathogenesis of angina pectoris, it seems rational, says Gino Pieri, to consider the problem of its treatment as one of the aspects of the surgery of pain in other words, to treat the symptom of pain by interrupting the afferent sensory tracts of the cardio aortic plexus. In carrying out this method, it seemed wise to avoid, so far as possible, the destruction of the sympathetic ganglia of the ltero vertebral chain, since their function, probably a trophic one, is not definitely known, and to sacrifice them, especially the stellate ganglion, might do incalculable injury. In a case described in which he adopted this conservative principle, he sectioned (1) all the rami communicantes that are directed outward from the stellate ganglion and from the ganglion intermediale above it, (2) the cord of the sympathetic near the lower pole of the ganglion superius, (3) a bun-

dle of nerve fibers directed medially and downward from the lower part of the ganglion superius, (4) a nerve filament coming from the vagus at the level of the hyoid bone and descending into the thorax. The rami from the lateral margin of the stellate and intermediary ganglia contain the sensitive cardio-aortic fibers which pass through these into the roots of the brachial and cervical plexuses, and from these to the spinal centers (fibers whose stimulation during an attack also produces the pain radiating into the left upper extremity). The second of the sections mentioned above seeks to interrupt those afferent fibers which, joined to the stellate ganglion, are directed upward toward the upper part of the neck and head. The third section, cutting the nerve bundle which probably represents the group of superior cardiac nerves, interrupts the afferent fibers which by way of the ganglion may reach alike the neck and head (along the cervical plexus and the carotid nerve). This section may cut a few of the less important vasomotor and cardio-accelerator nerves. The fourth section suppresses centripetal parasympathetic tracts related to the bulbar centers, which probably have also a vector function for cardio aortic sensibility. All these procedures were designed to intercept the sensory fibers which conduct the violent sensations of pain from the cardio aortic system to the centers of consciousness. It is possible that a certain number of fibers eluded section under this technique, but the great majority of these must have been cut, as the patient's satisfactory condition shows, 14 months after operation during which time there has been no attack.—*Riforma medica*, September 7, 1931

Studies in Sinus Infection—In a study of 101 cases of sinus disease, and 135 cultures taken therefrom, J Wynne Pugh sought to correlate the bacteria recovered with the reaction of the diseased sinus. Of the cultures 37 were pure and 98 mixed. From the tabulated figures he deduces the conclusion that the range of hydrogen ion concentration compatible with a full, happy, and useful life for all the bacteria recovered is identical with that of human cell life, and that no bacteria thrive especially, or are unusually discouraged, in any one pH. In correlating the type of sinus content and its reaction it was found that almost always the foul broken down, cloudy return from an acute or recrudescing sinusitis has an acid reaction relative to the normal healthy average pH of 7.5, the pH varying from 6.9 to 7.4. On the other hand, the healing sinus, which tends to have a firm clot of mucus, has a pH varying from 7.5 to 8.1, so that the use of the alkaline lotion in the irrigation of infected sinuses may have biochemical as well as mechanical reasons for its employment. Another and more startling discovery was that the bacterial flora of a diseased sinus changes continually. Several of

the cases investigated had cultures and pH estimations at intervals of one to two weeks, and it was decidedly the exception to find the same bacteria present at different examinations. The importance of this finding is seen when one considers the preparation of autogenous vaccines. It suggests that in the preparation of autogenous vaccines repeated cultures be taken first, and then only those vaccines be used which prove their specificity by the degree of reaction they cause on injection in trial doses. In seeking for the predisposing cause of sinus disease, Pugh observes that they have very much less sinus trouble in England than we do here. He is inclined to think that central heating is the cause of a good deal of sinusitis, though so far there is no proof. It might be possible to humidify some public schools and to use non-humidified pupils as controls, and rabbits might be subjected to similar investigations.—*The Laryngoscope*, October, 1931, xli, 10.

The Beginning of Chronic Renal Disease.—All renal disease, acute or chronic, is preceded by a disturbance in the regulatory apparatus of the vascular system, says R. Siebeck, in the *Deutsche medizinische Wochenschrift* of October 16, 1931. This vascular disturbance is wholly independent of the kidney condition, and furnishes a constitutional foundation for functional derangements and organic disease. The morbid picture which develops under these conditions frequently resembles that of so-called essential hypertonia, with general palpitation, loss of strength, tendency to air hunger, vertigo, and headache. In acute nephritis many of the symptoms arise not from the kidney disease but from this independent disturbance in the vessels. The heart, burdened by the increased blood pressure, may be reduced to a condition of permanent weakness, the more so if the resistance of the myocardium has been lowered by the attack of renal infection; the changes in the retina can be attributed likewise to vascular disturbances; the edema is apparently due to alterations in the metabolic exchanges between blood and tissues, not dependent on the kidneys but related to disturbances of the function of the endothelium. If the symptoms in severe acute nephritis are thus due in large part to the state of the vascular system, this system must play a decisive role in the development of chronic nephritis. Although the causes of chronic nephritis are not perfectly understood, Siebeck takes his stand with Volhard in regarding the vessels and the blood circulation of the tubules as of primary importance. It is reasonable to assume that the persistent abnormal engorgement of the vessels has brought about organic changes in them and in the tissues,—changes that are irreversible and which further induce a greater tendency to disturbances of circulation, thus creating a vicious circle. Frequently the acute stage of nephritis passes unrecognized, and the physician is not

called in until chronic changes have resulted from the insidious course of the disease. For a long time these cases must be judged chiefly on the basis of the blood pressure as the most important consideration. The hope of improvement in all these cases lies in reaching a diagnosis early enough to make it possible to institute a sparing treatment, calculated to save the kidneys and heart from overexertion. In any case, the leading symptom to be attacked in chronic kidney cases is nearly always the increased blood pressure.

Premature Contractions of the Heart in Children.—F. Antell reports three cases of premature systole of the heart in children. He states that the condition is relatively infrequent in children. In a series of 400 consecutive cases studied in the out-patient pediatric services of Beth Israel and Gouverneur hospitals no case of extrasystole was discovered. The largest number of cases are encountered during or shortly after acute infectious diseases. In the absence of other cardiac signs, the condition is usually benign and of little significance. Occasionally, however, premature contractions may be precursors of definite myocardial disease, as in one of the cases here described. This child developed a state of decompensation, a dilated heart and most irregular rhythm, resembling auricular fibrillation. What causes these premature contractions in apparently healthy hearts is still unknown. In recent years considerable evidence has been brought forward to prove that they may be explained on the basis of local circulatory deficiency resulting in increased irritability. Antell believes that hereditary influences play a part in idiopathic cases. In his first case there was a questionable family history of similar trouble in an uncle of the patient. In appraising the clinical and pathological significance of these premature contractions, there is an array of conflicting opinion. Antell is of the opinion that cases of idiopathic origin are of no importance clinically, require no treatment, should get no restriction of exercise, and can be practically disregarded. Cases of toxic or nervous origin call for treatment of the causative agent. Cases that follow in the wake of infectious disease require caution. In these the position of the cardiac borders should be the guide. A slight enlargement spells definitely caution for several weeks.—*Archives of Pediatrics*, October, 1931, xlviii, 10.

A New Treatment of Carbon Monoxide Poisoning.—Pometta, writing in the *Schweizerische medizinische Wochenschrift* of October 24, 1931, calls attention to the excellent results obtained by Artault de Vevey and others with the use of sodium hyposulphite in cases of acute carbon monoxide intoxication. According to the severity of the symptoms a solution of 8 to 20 gm. of the hyposulphite in a liter of water is

administered in the course of 24 hours. Thus each individual dose is 100 c.c., amounting to $\frac{1}{3}$ to 2 gm. of the substance, administered at intervals until the symptoms disappear, which in milder cases will be in 6 to 10 hours, and at most within 24 hours. To patients in a state of coma the remedy can be administered by means of a stomach tube or by enema, or if necessary it can be injected intravenously, giving 20 c.c. of a 10 per cent solution at each injection. The results are truly astonishing, the consciousness returning promptly. In some cases a state of depression and of muscular weakness remains for 2 or 3 days, but the headache disappears absolutely. Other untoward sequelae disappear little by little upon administration of coffee and the like. For a week the patient should still continue to take the sodium hyposulphite in dosage of 2 or 3 gm. per day. The intravenous use of this substance is useful also in other types of cases in which the tissues suffer from lack of oxygen which is at the bottom of carbon monoxide poisoning. It appears however, that the action of sodium hyposulphite is not of a chemical nature, as was formerly believed but that it has the effect rather of overcoming the state of shock of the organisms. Its action would thus be biologic rather than chemical. This method of treating carbon monoxide poisoning has quickly become widespread, and favorable results are reported from many directions.

Infarcts of the Myocardium—Attention is called by L. Gallavardin and Roger Fromont to cases of myocardial infarct of which the essential if not the only sign is paroxysmal ventricular tachycardia. It appears that no author has yet pointed out the absolute difference between such tachycardia in cases of grave heart disease and what may be called autonomous ventricular tachycardia. There is a close relation between coronary trouble (infarct of the myocardium) and ventricular tachycardia occurring in non asystolic subjects, who are in a state of general good health. By outlining 6 typical cases the authors show that these ventricular paroxysms have all the characteristics of paroxysms of Bouveret's disease, the sudden appearance in a patient who is in sinus rhythm and who presents no sign of cardiac insufficiency, the long duration of the attack, the monomorphism of the electric ventricular complex, which in fact betrays the existence of a center of abnormal excitation. Cases of this kind quite frequently follow crises of frank or concealed angina, but may also appear as isolated phenomena, in the latter case we are dealing certainly with myocardial infarct causing this form of paroxysmal ventricular tachycardia. In the absence of an earlier history of an attack of complete arrhythmia, the only certain sign by which the nature of the condition can be recognized is the dissociation which exists during the attack between the count of the heart beats at the heart

itself and that at the jugular notch, if the jugular beats (representing the auricles) are less in number, or about half, those of the ventricles, we can affirm that the patient has an attack of ventricular paroxysmal tachycardia. Apart from this finding, the diagnosis can be made only by the electrocardiograph, whose tracing will show independent auricular waves with a rhythmic value less than that of the ventricular waves. In more rare cases, these ventricular tachycardias symptomatic of infarct may appear in patients who are already asystolic, or they may give place to extrasystoles and to brief attacks simultaneously with attacks of long duration. Such facts establish the close relation that exists between infarctoid tachycardia and extrasystolic explosions of the common grave cardiopathies. In the present state of our knowledge, quinidine seems to be the only remedy capable of arresting one of these ventricular paroxysms of long duration—*Archives des maladies du coeur, des vaisseaux et du sang*, October, 1931.

Copper Treatment of Anemia in Infants Prematurely Born—E. Schiff and N. Joffe state that their own experiments have fully confirmed the good results recently reported by Lewis in America in the treatment of young children between the ages of 6 months and 7 years suffering from anemia. Although Smith administered both copper and iron, these authors found no advantage in this combination over the use of copper alone. The observation that small amounts of copper are effective in the prophylaxis and treatment of milk anemia argues that the development of this disease is not due to a lack of building materials which are necessary for the formation of hemoglobin (which in human beings contains no copper), but that the favorable effect of small amounts of copper is due to a catalytic action of this substance, which may be supposed to have an influence upon hemoglobin synthesis. So striking was the good effect of copper that the authors were induced to try its effect upon anemia in infants prematurely born, which has hitherto proved refractory to treatment. The mode of development of this type of anemia has never been explained, and the various hypotheses that have been presented have been for the most part untenable. The authors accordingly administered 10-20 drops of a 1 per cent copper solution once or twice a week to 12 prematurely born children, over a period of several months. The protocols of 3 of the cases in children 3, 3½, and 4 weeks old are given. In no case was any salutary effect observed with reference either to prophylaxis or to cure of the anemia. Hence it may be assumed that unlike alimentary anemia which is influenced favorably by administration of copper, the anemia of prematurely born infants remains wholly unaffected by such a treatment—*Klinische Wochenschrift*, October 17, 1931.



LEGAL



INSANITY — LIABILITY OF PHYSICIANS MAKING EXAMINATION

By LORENZ J. BROSNAN, ESQ.

Counsel, Medical Society of the State of New York

Physicians who make mental examinations for the purpose of determining sanity or insanity of an individual are sometimes thereafter confronted with a claim based upon alleged negligence in the making of such examination. That there is nothing new about claims of this character is clearly illustrated by a case that came before one of our Appellate Courts over twenty years ago.

In the case in question the husband of a woman came to a physician and said that he feared he would have to send his wife to a sanitarium; that for three or four years she had been acting strangely and for two or three years they had had a great deal of trouble. He further said there was nothing he could do to please her, that she had attacked him, had threatened him, and also threatened to injure herself. He told the physician that city life not agreeing with his wife, he purchased a home for her in the country. Instead of improving her health, this move proved detrimental to his wife's condition, for she insisted upon operating a wheelbarrow filled with heavy stones and that his advice that she desist in this was entirely disregarded. He further told the physician that for some years his wife refused to speak to him, but that she left notes in the house in the form of agreements which, although utterly ridiculous, he signed in order to keep peace in the family. The further history obtained by the physician disclosed that the man's wife had been a constant source of trouble and annoyance to the neighbors since on many occasions she screamed and screamed although there was no reason for her to do so. Substantially the same story the husband repeated to another physician. Neither physician was acquainted with either the husband or the wife. A short time thereafter, the husband requested the two physicians in question to make an examination of his wife to the end that if they found that she was insane and a proper subject for custody and treatment in some institution for the insane that she might be committed, after compliance with the legal requirements pertinent to the situation. The two physicians, pursuant to the husband's request made a joint examination of the wife, and after such examination certified that she

was insane and a proper subject for custodial care in an institution for the insane. Upon the husband's petition and the physicians' certificate the woman was committed to an institution.

Some time thereafter she brought an action against the two physicians in which she charged that the defendants made a false, pretended and grossly negligent examination of her as to her mental condition; that she was not insane at the time of the examination, or at any time, and that the defendants wilfully failed and neglected to use or exercise reasonable and ordinary care to ascertain her true mental condition. She further charged that the defendants failed to make a prudent and careful inquiry and to obtain proof as to whether she was sane or insane, and failed to exercise their best judgment as to her sanity, and further that with gross and culpable negligence they based their opinions upon false and interested statements made to them by the plaintiff's husband. The action came to trial and the jury awarded the plaintiff a verdict in the sum of \$25,000.

From the judgment entered upon this verdict, the defendants appealed to the Appellate Division. On the trial the plaintiff, after testifying that the defendants were introduced to her as nerve specialists, gave her version of the examination conducted by the physicians substantially as follows:

She said that the examination took less than fifteen minutes. That one of the doctors did not ask her any questions and the other physician asked her only a few. She further testified that the physicians took no notes and that she was asked by one of them on two or three occasions whether she ever thought of ending her life. She also testified that she was asked a few questions with respect to her experiences with her husband.

The defendants testified with respect to their joint examination substantially as follows:

The plaintiff was lying on a sort of lounge chair or steamer chair, covered with blankets. She seemed anxious. She was very pale in appearance when they went in, and then her face flushed, her whole manner changed and she showed intense anger and excitement. After the husband left the room the defendants

gave their names and said that her husband had asked them to make an examination, which they would be glad to do if she were willing, but that they did not wish to distress her, whereupon she said it was one of her husband's schemes to annoy her and he would ultimately drive her insane. When asked about her health, she said it was not very good, that there was sufficient cause—her husband—who forced her to work out of doors, and that she had to haul stones. She then rose and showed the path she had made outside. She said her husband had deliberately walked across the lawn to annoy her. Dr X asked her again about injuring herself, and she said she would not, that she would not bring disgrace on her family. The husband returned and she acted very angry towards him. She said she had to move her bed because of a leak in the roof. She became very much excited at four separate times during the examination. She would pale and flush and her pupils would dilate and her muscles would contract and she would sit up. In regard to her physical condition, she looked fairly well excepting that she was pale and very anxious, and she looked to be all right excepting during the period of excitement, when she would become excited and speak in a very loud voice. She became excited to the extent that she spoke and shouted in a very loud voice, and she showed great excitement during this time, and then again she would become more composed. As regards her physical condition, it was very fair. They did not make a record of her pulse, but Dr X took her pulse and it was somewhat accelerated. She appeared anæmic when Dr X looked at her first, but in looking at her again he found her color was very good, that her pupillary reflexes were all right, and the various reflexes were all right. Dr Y testified that after he and Dr X came to the plaintiff her husband said "I have brought these two physicians to examine you, because I thought you were sick, they will talk with you and will see if anything can be done for your good." Mrs A seemed out of patience. She appeared angry and made a remark to Mr A but made no other objection to their remaining there. Mr A stepped downstairs and left them alone with his wife. Dr Y permitted Dr X to do most of the questioning, nevertheless following what was said very closely. Mrs A was asked how she felt ill, and was asked to discuss the matter in general. She said that she had been feeling bad, had been nervous for some time, that she had a great many troubles at home, and that she was very much worried, that Mr A had been making trouble for her for a number of years, and that he was gradually getting worse, that, in her opinion, he was

anxious to obtain control of her property and was taking steps to drive her to commit some act which would permit of his obtaining the property, that it was part of the scheme for him to control her property, that these troubles had come on her within the past few years, that he had been annoying her in all sorts of ways, for instance, that on one occasion he entered her room, after having been working out of doors, removed a shirt in which he had been working and threw it on a chair on which one of her dresses was placed, she thought he did this with some malign intention to exasperate her, this had occurred a year or two before if the witness remembered rightly, and yet she brought that up as one of his supreme insults, as she called them.

The plaintiff, on the trial, called a number of lay witnesses, most of them her acquaintances and friends, who testified that in their opinion, specific words and acts of the plaintiff before and about the time of the examination were rational. The plaintiff did not offer any proof in support of the allegation in the complaint that the statements made by the husband to the physicians were false and pretended. Neither did she offer any proof that the defendants lacked the learning and skill ordinarily possessed by the average examiners in lunacy. The plaintiff did not offer any scientific or expert evidence showing or tending to show that the defendants had failed to follow proper practice in the making of their examination. In commenting upon this point, the court said:

"A striking feature in the plaintiff's case is the omission of any scientific or expert evidence as to the course pursued by the defendants in the examination, as to what was done that the average examiner in lunacy would not have done, or as to what was not done which such an examiner would have done under the circumstances of the case. We know insanity is a mysterious disease, that it may exist without physical indications, is often cunningly concealed so as almost or altogether to baffle detection even by a specialist, or may be so occult as to cause most eminent alienists to clash as to its existence in an instance. The diagnosis of it is recognized as a difficult task (Balfour Browne, *Medical Jurisprudence of Insanity*, 320, Mann's *Medical Jurisprudence*, 113) Wharton & Stille on *Medical Jurisprudence* (Vol 1, Sec 1240) write 'In brief, the task of a physician when he examines a patient for certification is to make a diagnosis. If, for any reason, he is not able to make a diagnosis, he should not sign the certificate. The whole art of diagnosis may be involved in the case, and there is no rule for it except to have a reliable knowledge of insanity.' It seems to

me that the very nature of the subject—the question of negligence in a diagnosis—would almost preclude a jury from passing upon it by their common knowledge unaided by any scientific or expert information whatever, or by the testimony of any witnesses of special knowledge and skill. Yet there is not in evidence any standard for comparison of the conduct of the defendants with that which was required of them.”

The court concluding that the plaintiff had failed to prove any negligence in the making of the examination on the part of the defen-

dants or either of them, reversed the judgment and ordered a new trial.

It is of the utmost importance for the protection of the examiners that they should make a very careful examination of the patient so that if any claim thereafter arises they will be in a position to fortify and sustain their findings.

An examiner in lunacy who is not given an opportunity to make the thorough examination which he deems necessary should refuse to sign a certificate in connection with such examination.

BURN FROM DIATHERMY TREATMENT

In this case a physician, specializing in x-ray work and diathermy, was consulted by a woman about forty years of age who complained of a pain in the back and right arm. The doctor examined her and found that she was suffering from distortion of the joints of both hands and clubbing of her fingers. He diagnosed her condition as arthritis and recommended diathermy treatment. He administered to her a treatment with his machine, which was a standard make, attaching one plate from the machine to her arm and the other to her hand, using sheets of tinfoil on heavy zinc which was wet and soaped, bandaging the plates to her arm and hand. He then applied the current and gave her a 500 m.a. dosage of about twenty minutes duration. The patient made no complaint of the heat and appeared to suffer no ill effects from the treatment, the doctor watching her meanwhile. She left the doctor's office without any complaints, but about two hours later she returned, exhibiting to him a few small blisters on her wrist close to the spot where the zinc plate had been bound to her hand. The doctor dressed the blisters which seemed to be trivial in extent and sent her home.

Apparently the burn occurred by reason of the woman moving her hand during the treatment, causing the electrode to become dislodged and permitting a spark to jump through to the wrist.

Subsequent investigation of the matter disclosed that the patient had been suffering from syringomyelia, a rare disease of the nervous system, which had de-sensitized the skin that had been burned so that she was unable to tell during the application of the treatment whether the heat was excessive.

The patient subsequently consulted a surgeon with respect to said burn. Upon examination of her wrist he found considerable swelling and ulceration, with a condition of septic arthritis. At his advice the patient submitted to an operation to remove so much of the burn from her wrist as had become necrotic. Under a general anæsthesia he opened up the affected area and found a bad condition of necrosis and removed a large amount of bone from her wrist and sawed off the end of the radius. The condition thereafter improved normally, but the end result was that the patient lost all motion in her wrist. She was able to move her fingers but unable to grip anything with her hand. Likewise, the motion of her elbow had become somewhat restricted.

A law suit was instituted against the doctor who had administered the diathermy treatment, claiming that through his negligence she had sustained a serious burn on her arm due to which she had completely lost the usefulness of the said arm. Damages were demanded in the total amount of \$60,000.

The case came on for trial before a judge and jury and the plaintiff proved the administration of the treatment by the defendant and her injuries, but introduced no proof showing that the doctor was in any way negligent. At the end of all the testimony the court directed judgment for the defendant.

An appeal was taken to the Appellate Division on behalf of the plaintiff, but was never actually brought on for argument. After a year had elapsed a motion was made to dismiss the appeal for want of prosecution which was granted, finally terminating the matter in favor of the doctor.



NEWS NOTES



TEACHING THE PUBLIC THE NEED FOR PROPER MATERNITY CARE

In 1918 the Maternity Center Association was organized through the effort of a group of obstetricians who, after making a study of conditions in New York, interested some public-spirited citizens in a plan for improved maternity care among certain groups of people to whom such facilities were lacking.

In 1919 the Association became incorporated and for five years conducted demonstration prenatal work, endeavoring to reach prospective mothers early in pregnancy and then get them under medical supervision.

In 1922 emphasis on prenatal care alone was discontinued. The Association concentrated on a program of complete maternity care in one small district and expanded the scope of its educational work.

A study of the records of 4,726 pregnant women cared for by the Association was made by Dr. Louis I. Dublin and published in the *American Journal of Obstetrics and Gynecology* (December, 1930). This report showed a maternal mortality rate of 24 for mothers cared for by the Association as compared with a rate of 62 for the mothers in the same district not under its care. The obvious difference in the care received by the two groups was that the Maternity Center Association group had early and constant medical supervision.

In 1930 the Maternity Center Association launched a year's campaign, which culminated on Mother's Day in 1931, during which efforts were made to reach as many persons in this country as possible through publicity methods which stressed the facts that the puerperal death rate in the United States was unnecessarily high, that it could be reduced greatly by adequate and skilled obstetric care, and finally to educate the public in the essentials of such care. Daily and weekly newspapers, magazines and trade journals all over the country carried the material which the Maternity Center Association sent out. The Metropolitan Life Insurance Company, the Borden Company, and Parke Davis and Company devoted newspaper and magazine display advertising to the importance of adequate maternity care. Governors and mayors issued proclamations and health commissioners wrote articles and broadcast over the radio, ministers preached sermons, news reels in every theatre in the United States showed Mrs. Theodore Roosevelt, Sr., speaking at the Association's luncheon in New York on May 19 of last

year in behalf of the work of the organization.

In its campaign for the current year the Maternity Center Association asks the support of the members of the Medical Society of the State of New York. It will endeavor to enlist the interest and help of every practising physician in the State by circulating among them in reprint form, for distribution among his or her patients, the statement which follows. It is hoped by this means to develop a better knowledge of the need for adequate maternity care which will result in a situation mutually helpful to patients and their physicians. During the month of January, press releases all over the State will call attention to this campaign and to the participation of the State Medical Society in this movement.

The medical activities of the Association are under the immediate and close supervision of a Medical Board, made up of the following members: Dr. George W. Kosmak, chairman, Drs. S. Josephine Baker, George L. Brodhead, Haven Emerson, Caroline S. Finley, James A. Harrar, Leon S. Loizeaux, Philip Van Ingen, George Gray Ward, Wilbur Ward, Benjamin P. Watson, Herbert Wilcox, and Hervey C. Williamson.

Dr. Kosmak submitted a draft of the proposed circular statement to the Committee on Public Health and Medical Education of the Medical Society of the State of New York on October 8, 1931. The Committee approved and authorized its distribution to the practicing physicians in New York State, to be given by them to their pregnant patients. Later in the day the action of the committee was approved by the Executive Committee of the Council.

The following is the text of the circular, copies of which may be obtained from the administration headquarters of the Maternity Center Association at 1 East 57th Street, New York, telephone, PLaza 3 2066.

A MESSAGE TO EXPECTANT MOTHERS AND FATHERS FROM THE NEW YORK STATE MEDICAL SOCIETY

Motherhood is natural and should be normal. If you do as your doctor advises, you should have no reason to worry about having your baby.

Every Pregnant Mother Needs a Doctor—the best one available—to care for her from

the time she believes she is pregnant until he says she is able to resume her regular activities and responsibilities and to care for her baby. Her doctor will make a complete examination. He will take her blood pressure and examine her urine, measure her in order to determine whether the passages are large enough for the baby to be born without difficulty. He will make an internal examination, too. He will want to see her every three or four weeks or oftener throughout pregnancy to examine her urine and take her blood pressure, so he may know all about her condition as the baby is developing and be able to give her the best of care when the baby is being born. He will help her to decide whether to go to a hospital or to stay at home for the baby's birth. He will want to see her and the baby several times after the labor. He will examine her two and three months later to make sure everything is all right before she undertakes the full care of her home and baby.

Prospective mothers should observe the following directions in addition to what the doctor may order: Eat simple balanced meals—meat once a day, two green vegetables, canned or cooked fruit and one quart of milk. Sleep eight hours every night with windows open. Rest one-half hour morning and afternoon. If you are not tired, take a daily walk. Bathe daily, preferably a shower. Do your work with the windows open. Wear clothes that are light and loose and hang from the shoulders.

Labor begins with a pain in the back, with or without discharge. As soon as labor begins, send for your doctor. Take things easy until he gets there.

Ask him *NOW* for his card or telephone number so you will be able to call him immediately.

ATTACH HIS PHONE NUMBER TO THIS CIRCULAR AND PLACE IT IN A PROMINENT PLACE.

BABY'S SUPPLIES

The following list of baby clothes and toilet necessities may be modified as to material, quantity and quality to suit the individual taste and pocket-book:

- 48 Diapers, 20 inches by 20 inches
- 3 Slips
- 3 Bands 6 by 7 inches
- 3 Shirts size 2, cotton and wool, or silk and wool
- 3 Night dresses
- 3 Dresses
- 3 Squares, 36 by 36 inches
- 6 Quilted Pads 11 by 16 inches
- 2 Rubber Pads, 11 by 16 inches
- 1 Hair pillow or felt pad, or folded blanket, for mattress.
- 1 Basket or box for bed 15 by 30 inches
- 1 Oilcloth or rubber pillow case for mattress.
- 2 Muslin pillow cases for mattress.
- 2 Crib blankets, small size
- 2 Towels, soft
- 2 Wash cloths, old pieces of linen or underwear
- 1 piece pure white soap
- 1 package absorbent cotton
- 1 package of toothpicks
- ½ pint albolene
- 1 Covered pail for soiled diapers
- 1 box of 20 Mule Team Borax
- Toilet Tray to be fitted with:
 - Jar of boiled water
 - Jar for large cotton swabs
 - Jar for small cotton swabs
 - Jar for cotton
 - Soap for pincushion
 - Bottle for boiled water
 - Jar for nipples
 - Flat dish for soap
 - Flat dish for oil
 - Safety pins
 - Nursing bottle
 - Paper cornucopia
 - Anticolic nipples
 - Bottle caps



MEDICAL ECONOMICS

TWO QUOTATIONS AND SOME COMMENTS

"There is a perfectly appalling ignorance in every quarter about economics, about the ways in which men work and live together

"Indeed, if there is one stark fact that stands out in the world's experience of the past two years, it is that the number of people on the planet who understand clearly *what* has been happening and *why* must be a pitiable handful—and that among them are probably not to be included most of our *soidisant* 'experts'. In other words, we now see that this great world-machine, human society—a machine that nobody made, that made itself—has been lumbering forward through time, creaking, groaning, emitting fearsome explosions every now and then, and suddenly it has become clear to most of us, apprehensive passengers, that there is not even a driver's seat on the immense contraption, that there is not a soul at the helm of it who understands competently how it works, that its distracted tenders (whom we have heretofore blindly trusted) know no more than we do, and often less, about its complex mechanism, but are simply running about, worried and quarrelling, fastening a bolt here or loosening a screw there—one not knowing nor caring what another does. In certain departments of knowledge, obviously, it is not of any immediate importance if the great body of living human beings happen to be in abysmal ignorance. It may be a sad fact, for instance, that only a dozen people in the world can understand Mr. Einstein's theories, but at least there is no very pressing reason (so far as we can see) why more should, at this time. This is true of many things. It is not true of economics. Here a general ignorance matters, matters vitally, affecting so intimately, as it does, the present and future of every single one of us

—Harry Sherman

"Since the Great War, the economic stresses of the world have become more and more painful and distressing. By comparison, preceding ages are beginning to assume an air of the most idyllic tranquility. Now we all begin to realize we are living in the breakup of whatever system existed before our time, and that in great disorder a new system may be coming into being. All sorts of forces are at work disorganizing us now, but with a tantalizing air of producing some larger strange organization to which we must adapt our lives. We work, and the things we make are taken away and we see no more of them. Our streets are full of strangers who pass and give way to other strangers. Great factories arise in our familiar landscape, and we do not under-

stand why they have arisen or what they produce. We buy and consume exotic foods. We are employed, we are thrown out of employment, things become dear, or cheap, or inaccessible and we cannot trace the causes of these fluctuations.

"It seems all beyond our control. We can not find out who controls it. Is anyone controlling it? The newspapers tell us this or that about it. They are disturbing and alarming. Vast multitudes, we learn, millions are being thrust out of employment. There is plenty, locked up. There are dire want and misery. Then we find ourselves called upon to decide between politicians who demand that this shall be done and politicians who demand that that shall be done. It appears that we in our muddled multitudinousness are being called upon to make decisions. This immense tangled affair, we gather, is our affair. In various rather obscure ways we have been made responsible for it. We have to vote.

"But how can we vote when we do not get the hang of it? Has anyone got the hang of it? Are there any people anywhere in our world today who have a really comprehensive vision of the economic world process as one whole? Apparently not. And yet we ordinary people have it thrust upon us, that whatever control can be exercised over this immense complex tumult of world change, must be exercised through our voting and our assent."

—H. G. Wells

With some such appreciation of the magnitude and chaos of the problem, the State Society Committee on Medical Economics has undertaken its job.

No magic solution of the ills of society nor even of the lesser field of medical economics has been contemplated. Our most ambitious hope is that we may lay a foundation, a plan, upon which we and our successors may build. At every turn of our thoughts we are confronted with the need of facts from which to analyze or upon which to predicate conclusions.

In the present organization of society many vexations and injustices fall to the lot of the doctor. We may seek relief from some of these by recommendation of change in the statute law. In others our only recourse will be found in a clear statement of principle, with the hope that as the organization of humanity progresses it may shape that growth. In every instance there is the outstanding need of compiled facts or data upon which to establish our point of view.

The late President Wilson gave high recognition to the principle of policy of "collective

bargaining." Thoughtful observers of current events have noted the baneful sequences of fanaticism fostered by a small but well-financed and well-organized minority. What a different thing we can make of a group consciousness, of a united and expressed will of a highly educated and broadly experienced class of men and women? A collective judgment balance by living contact with every level of human life, with every industry and human effort, with every vocation and avocation known to the mind of man.

We, a part of this great living mass, must now sense our group-being, our group-privileges, and our group-responsibilities. An in-

telligent class of citizenry, too long we have been only professionally minded. We must surely assume our more complete life-experience. We must open our minds and apply our influence to the affairs of the community and of the world.

Medical economics cannot be a mere quasi-philosophy of ways and means to greater profit from sick-care. No! It must be the establishment of principles and laws to relate medicine to the growth and maintenance of family and community life, wherein there is a fair and proper balance between work and awards, with justice to all—FREDERICK E. ELLIOTT,

For the Committee on Medical Economics.

COMMITTEE ON LEGISLATION

Dr. Harry Aranow, Chairman of the Committee on Legislation, has sent the following letter to the secretaries of the County Medical Societies:

Condition of Medical Practice: The Committee on Legislation has been entrusted with the task of ascertaining how the medical practice act is operating in the state. We think of no better way than to inquire of the secretaries of the County Societies.

Will you please let us know what the conditions in this regard are in your county? If the law is not being properly enforced or administered, let us have the particulars, using the enclosed envelope for your reply.

While we are writing you, we wish to suggest that there is great need for each County Society to develop some concrete plan for taking care of the sick unemployed this winter. By so doing we can anticipate the flood of relief bills we expect will be presented to the legislature. If a considerable number of County Societies adopt a relief program and inform us of their action, we shall be in a better position to prevent the enactment of a general uplift program in which the physician traditionally receives little consideration.

Will you please bring these matters to the attention of your County Society at its next meeting and inform us of the action taken?

Dr. Aranow has also sent the following letter to the Chairman of the Legislative Committees of the County Medical Societies:

Chiropractic: Let us remind you of the urgent necessity of immediately calling upon your Assemblymen and Senator with well prepared argumentative proof that chiropractic is a fraud and has no scientific basis whatever.

D. D. Palmer, its originator and promoter, claimed to be able to heal by laying on of hands, from which probably comes the name "Chiroprac-

tic." In developing his philosophy he helped himself liberally from osteopathy. His son, "B. J.," took over the school while his father was in prison and sold widely a correspondence course in chiropractic. The school at Davenport—and there is no other that was ever nearly so large—has gone into decline in the last few years.

Chiropractors do not believe in germs as the cause of disease, but do teach that the spinal vertebrae become displaced as to press on the spinal nerves and all disease is the direct result of such pressure. Anatomists contend that displacement that would cause such pressure is impossible, except as a result of trauma, and that the ligaments bind the vertebrae together so tightly that no man can move one upon another even a fraction of an inch. Chiropractic is pure quackery and humbuggery.

Impress upon your legislators, also, the great injustice that would be done to the public by permitting osteopaths, who have never learned to use the knife or believe there can be any virtue in drugs, to practice Surgery and prescribe drugs. Osteopaths, you know, take the same examinations under the Medical Examining Board as physicians, and because of this they claim they should not be denied any privileges accorded us, but they neglect to state that they are required to present fewer qualifications for entering the examinations; namely, no knowledge of operative surgery nor the two years of pharmacy and materia medica required of us.

The legislators will appreciate the danger of granting anybody a license to prescribe drugs who knows no more than the legislator himself.

Do not delay in securing the cooperation of the legislators' family physicians, and impress upon them that they must do more than simply tell the legislator to vote against such bills. He, too, must give reasons for his opposition.

THE NEW YORK ACADEMY OF MEDICINE

The annual meeting of the New York Academy of Medicine was held on the evening of Thursday, January 7, in its building at 2 East 103rd Street, New York City. The formal meeting was preceded by a testimonial dinner given to the Director of the Academy, Dr. Linsly R. Williams, which was served in the exhibition hall, and was attended by over two hundred Fellows.

The business before the annual meeting was the reception of the reports of the officers and committees. Since these dealt with a multitude of details of the broad field of the activities of the Academy, they were presented by

title only, but will be published later. The exception was the remarks of the Director who paraphrased his formal report by giving an informal review of the work of the Academy during the eight years of his directorship. He also gave a picture of the plans for the future including the ultimate development of the Academy into a Medical Museum with the scope of the Metropolitan Museum of Art, and the American Museum of Natural History, after plans which have been urged by Dr. D. Bryson Delevan (See page 84).

The reports will be published in an early issue of the Bulletin of the Academy.

OTSEGO COUNTY

The annual meeting of the Otsego County Medical Society was held at the Fox Memorial Hospital on Tuesday, December 8th. The following officers were elected for 1932:

President—Dr. Harrie V. Frink of Richfield Springs

Vice-President—Dr. James Greenough of Coopers town

Secretary-Treasurer—Dr. F. E. Bolt of Worcester

Censor—Dr. E. C. Winsor of Schenectady

Delegate to the State Convention—Dr. A. F. Carson of Oneonta

Alternate—Dr. L. C. Warren of Franklin

Dr. J. H. Powers and Dr. Charles A. McCoy of Coopers town were elected to membership.

At the scientific session Dr. Arthur W. Elting gave a clinical lecture of dressing and treatment of wounds resulting from automobile and gun shot accidents. The talk was most interesting and instructive. Dr. Elting brought out many new ideas of modern surgery that have been adopted since the war.

A very satisfactory duck dinner was served in the dining room at the hospital to the thirty-two members present.

This meeting had the largest number of members present in several years.

A. H. BROWNELL, *Secretary*

RENSSELAER COUNTY

The annual meeting of the Medical Society of the County of Rensselaer was held in the Troy Health Center at 8:40 p.m., December 8, 1931.

The officers of the society as presented by the nominating committee at the last meeting were regularly elected to their respective positions. They are as follows:

President—Dr. J. B. Burke

Vice-President—Dr. W. W. St. John

Secretary—Dr. C. J. Handron

Treasurer—Dr. O. F. Kinloch

Censors—Dr. J. H. Bissell and Dr. C. W. Hamm

Delegates to the House of Delegates—Dr. A. J.

Hambrook and Dr. J. H. Reid

Alternates—Dr. J. J. Quinlan and Dr. F. W. F. Caird

President-elect, Dr. J. B. Burke, gave a two-minute speech asking for the cooperation of the membership, and for suggestions relative to monthly programs during the coming year.

The censors reported favorably on Dr. Charles R. Lewis, Dr. Wm. B. McDonald, and Dr. Frank Davenport, and they were elected to the regular membership. Dr. F. J. Scott was elected to the Associate membership.

Dr. W. W. St. John, representing the Economics Committee, gave a detailed report on "The Relation Between the Physician and Insurance Carrier."

The meeting then adjourned to reconvene in the ballroom of the Hendrick Hudson Hotel at 7:00 p.m., December 9, 1931, at which event nearly the entire membership attended. At the close of a turkey dinner, Dr. John B. Harvie of Troy, N. Y., gave a very interesting talk entitled "After Fifty Years."

Dr. Gabriel Tucker of Philadelphia, Pa., gave an excellent address on "Bronchoscopy," with a lantern slide demonstration.

WM. B. D. VAN AUKEN, *Reporter*

DUTCHESS-PUTNAM COUNTIES

A regular meeting of the Dutchess-Putnam Medical Society was held Wednesday evening, December 9, 1931, at St. Francis Hospital, Poughkeepsie, N. Y., and was called to order by the Vice-President, Dr. W. A. Krieger, at 9:00 p.m.

The minutes of the previous meeting were read and approved.

The following was a report of the nominating committee:

President—Dr. William A. Krieger

Vice-President—Dr. Samuel E. Appel

Secretary-Treasurer—Dr. Howard P. Carpenter

Associate Secretary—Dr. E. Gordon MacKenzie

Delegate (1932-33-34)—Dr. William A. Krieger

Alternate Delegate (1932-33-34)—Dr. J. N. Boyce

Censors—Drs. A. L. Peckham, A. W. Thomson, Scott Lord Smith

Councilor—Judge G. V. L. Spratt

Dr. Charles Lerner, Instructor in Dermatology, N. Y. Post-Graduate Medical School of Columbia University, gave a paper on "The Etiology and Treatment of Nevi," illustrated with lantern slides.

The meeting adjourned at 11:00 p.m. for refreshments.

Present: Drs. Toomey, Rosenthal, J. N. Boyce, Maloney, Boyce, R. Deyo, J. H. Dingman, Card, Sadlier, Roberts, Brown, Stoller, Appel, Voorhees, Borst, MacKenzie, Krieger, Simon, Davison, Thomson, Sobel, Cavanaugh, C. E. Lane, H. P. Carpenter, Lerner, Poucher, Stibbs, Gosse, Leonidoff, Harrington, Benson, Smith, Harold Crispell, G. E. Lane. 33.

H. P. CARPENTER, M.D., *Secretary*.

TIOGA COUNTY

The Annual Meeting of the Medical Society of the County of Tioga was held at the Green Lantern Inn with a dinner at seven-thirty P. M., Tuesday, December 1, 1931. Thirty members and guests were present making the largest attendance on record for the Society.

The following officers were elected for the year 1932:

President—Dr. W. A. Moulton, Candor, N. Y.

Vice President—Dr. F. C. Carpenter, Waverly, N. Y.

Secretary-Treasurer—Dr. I. N. Peterson, Owego, N. Y.

Censors—Drs. A. C. Hartnagle, Berkshire, N. Y.; E. E. Bauer, Owego, N. Y., and E. S. Beck, Owego, N. Y.

Delegate to State Society—Dr. G. S. Carpenter, Waverly, N. Y.

The President Elect appointed the following committees:

Public Health—Drs. A. C. Hartnagle, Berkshire, N. Y.; H. L. Knapp, Sr., Newark Valley, N. Y.; E. E. Bauer, Owego, N. Y.

Public Relations—Drs. G. S. Carpenter, Waverly, N. Y.; A. M. Fisher, Spencer, N. Y.; C. J. V. Redding, Owego, N. Y.

Legislative—Drs. G. M. Cady, F. A. Carpenter and F. H. Spencer.

Medical Economics—Drs. L. S. Betowski, Waverly, N. Y.; H. L. Knapp, Jr., Newark Valley, N. Y., and W. D. Brown, Nichols, N. Y.

Program—Drs. L. D. Hyde, Owego, N. Y., and E. S. Beck, Owego, for March meeting; Drs. W. L. Seil, Waverly, N. Y., and W. H. Doolittle, Lockwood, N. Y., for June meeting; Drs. L. S. Betowski, Waverly, N. Y., and G. S. Carpenter, Waverly, N. Y., for September meeting; Drs. G. M. Cady, Nichols, N. Y., and A. C. Hartnagle, Berkshire, N. Y., for December meeting.

The report of the Treasurer showed a balance on hand of \$6.70.

Dr. W. L. Seil, Waverly, N. Y., was elected to membership in the Society.

Dr. C. S. Johnson, Spencer, N. Y., had his name transferred from membership in the Livingston County Society to membership into this Society.

The scientific program consisted of the exhibition of sex reels of medical movies by Dr. D. W. Stark of Buffalo.

EUGENE BAUER, *Acting Secretary*.

OSWEGO COUNTY

Dr. J. J. Brennan, Secretary of the Medical Society of the County of Oswego, asks that a correction be made in the third paragraph of the report of the meeting of the Society printed on page 36 of the January first Journal so that the paragraph will read:

"On motion it was decided that the Medical

Society of the County of Oswego will not adopt the fee schedule formulated by the Committee on Medical Economics of the Medical Society of the State of New York and the Insurance Company carriers; but our County Society will be guided by a fee schedule formulated by our own Committee on Economics.

ORANGE COUNTY

The following account of the meeting of the Orange County Medical Society, at which forty doctors were present, appeared in the Middletown *Times-Herald* of December 2, 1931

"Dr Samuel W Mills of Middletown was elected president of the Medical Society of Orange County at the hundred twenty-fifth annual meeting of the organization last night at Mitchell Inn Dr Mills succeeds Dr E C Waterbury of Newburgh, retiring president He was vice-president in 1931

"Dr Hilton J Shelley, city health officer here, was elected for the twenty-fifth consecutive year as secretary and treasurer of the organization Dr M R Bradner of Warwick was chosen vice-president

"The Board of Censors for the 1932 term includes Dr W W Davis of Chester, Dr Harry Pohlman of Middletown Dr Edgar Cuddeback of Port Jervis and Dr W H Snyder of Newburgh

"Dr M A Stivers and Dr J B Hulett were

chosen delegates to the State society, with Dr L C Waterbury of Newburgh and Dr J D Mars of Florida as alternates Dr Robert Cordner school health officer here, was elected first district branch delegate

"During the business session, which followed dinner at seven o'clock, four new members were elected They are Drs E H Douglas and Leo C DuBois of Newburgh and Raphael Spano and Lawrence Lief of Middletown The Committee of the County Unit was to continue to function under chairmanship of Dr J B Hulett, it was decided Drs W W Davis, H J Shelley, Frank Bullard and Myron Osterhout comprise the health committee, and were to meet today at two o'clock with the Board of Supervisors to discuss ways and means of obtaining financial backing for their work

"Dr Charles McKendree, consulting neurologist of Roosevelt Hospital, New York, was a guest at the meeting He led a brief discussion of brain lesions"—H J SHELLEY, *Secretary*

CHAUTAUQUA COUNTY

The annual meeting of the Chautauqua County Medical Society was held on Wednesday, December sixteenth, at the Hotel Jamestown, Jamestown, N Y Dinner was served at 12 30 P M, followed by a business meeting and scientific session, with about fifty members in attendance The following officers were unanimously elected

President—Dr Joseph Rieger, Dunkirk

1st Vice President—Dr E L Hazeltine, Jamestown

2nd Vice President—Dr W J Sullivan, Dunkirk

Secretary—Dr Edgar Bieber, Dunkirk

Treasurer—Dr F J Pfisterer, Dunkirk

Censors—Drs L W Powers Westfield, J H Kellogg, Bemus Point, and L D Bowman, Jamestown

Delegates to State Society—Drs D W Buckmaster, Jamestown, and Dr Edgar Bieber, Dunkirk

Drs J N VanderVeer and Albert Pfeiffer of Albany presented a most interesting and instructive symposium on syphilis its symptoms and treatment, from the viewpoint of the State Society and the State Health Department

EDGAR BIEBER, *Secretary*

ULSTER COUNTY

The annual meeting of the Medical Society of the County of Ulster, held on December 8, 1931, was outstanding in that it proved that the physicians of the county were interested in the administration of the Public Welfare Law The Society appointed a committee to meet the Kingston City Board of Charities and the Ulster County Board of Supervisors and arrange to have the attending physician paid whether caring for indigents in their homes or in hospital wards

The Medical Society of the County of Ulster pledged the amount of four hundred and sixty two dollars to furnish the lobby of the new Ulster County Tuberculosis Hospital, and it was duly collected at once

The question of caring for the sick unemployed in the present emergency was discussed, and the society finally voted that the County Society cooperate with the local Emergency Welfare Board and render any services they may look for

Dr Thomas F Crowley of Kingston, N Y, was appointed Reporter for the County Society for the year 1932

The election of officers was followed by the retiring President's address The attendance was fifty-eight per cent of our membership, some men driving over thirty miles to attend

R H VOSS, *Secretary*

ALBANY COUNTY

The annual meeting of the Medical Society of the County of Albany was held in the auditorium of the Albany College of Pharmacy on December 14, 1931, with the president, Dr. Charles K. Winnie, Jr. presiding.

The secretary reported a membership of 250 with an average attendance of 91 at the meetings.

It was pointed out that during the year 26 subjects relating to scientific and economic medicine were presented by 28 speakers; and of these 18 were members of our society and 10 visiting speakers. It is worthy of note that one entire meeting was devoted to a consideration of the much discussed workmen's compensation problem, and an opportunity was provided for an enlightened membership on certain phases of this subject.

The high water mark of the year was the celebration of the 125th anniversary of the founding of the society. This took the form of a dinner at the De Witt Clinton Hotel, on October 28, 1931. Over 150 physicians gathered to commemorate this event. The principal address was made by Dr. George W. Crile of Cleveland, and he was followed by Dr. William D. Johnson, President of the Medical Society of the State of New York, and the Honorable John Boyd Thatcher, 2nd, Mayor of Albany. Our President, Dr. Charles K. Winnie, gave an address which was a notable resumé of contemporary local and medical history during the first century and a quarter of our existence.

The Committee on Public Health reported that the State Department of Health had made a public health survey of the City of Albany.

Dr. Arthur J. Bedell, Chairman of our Board of Censors, reported that twenty-two physicians had registered in the County Clerk's office during the year. It was also reported, with pleasure, that no member had been brought before the board of censors.

Dr. Francis W. Dodge, Secretary of the Committee on Medical Economics, stated that as a result of a conference with members of the society, it suggested that the president appoint a committee of physicians to meet with a similar committee selected by a group of insurance carriers for the purpose of modifying the compensation practice so that there would exist:

1. A competent free choice of physician by the patient.

2. The formation of an appeal board by the parties concerned (physicians and carriers) to which questions of mutual interest or differences may be referred for discussion or adjudication.

No steps in this direction have as yet been taken.

The following officers were elected for 1932:

President—Dr. Arthur M. Dickinson

Vice-President—Dr. Richard A. Lawrence

Secretary—Dr. Homer L. Nelms

Treasurer—Dr. Frances E. Vosburgh.

HOMER L. NELMS, *Secretary*.

BRONX COUNTY

A regular meeting of the Bronx County Medical Society, held at Elsmere Hall, on December 16, 1931, was called to order at 9 p.m., with the President, Dr. Smiley, in the Chair.

The following physicians were elected to membership: Drs. Jacob H. Ackerman, Abraham L. Ceasar, Jacob Clahr, John V. D'Angelo, David Louis Engelsher, Philip Factor, Charles Kent Gould, Isidore Koulack, David Mesnik, Edward A. Pfeiffer, Pasquale A. Piacentine, Morris A. Raif, Henry Reiter, George Schwartz, Samuel Sherman, Solomon B. Singer, Anthony P. Vernaglia, Max J. Weinstein, Hyman Willinger, and Philip B. Wahrsinger (Associate Member).

Dr. Lefcourt, Chairman of the Social Committee, reported on the beefsteak dinner and show held on December first. The profit is to be devoted to the relief fund.

Dr. L. A. Friedman submitted a report for the Committee on Public Health. He referred to the recommendation of the committee that the

society again favor the passing of a regulation by the Board of Education to the effect that children on admission to school present a certificate of immunization against diphtheria.

Dr. Bick, Chairman of the Special Committee on Physiotherapy, reported on a recent meeting of the State Physical Therapy Committee, at which a plan was drawn up whereby a course will be given on physiotherapy, which will be open to all members of the county societies. This course will be given at six hospitals in New York City.

The scientific program proceeded as follows:

1. The Role of the Adrenals in Health and Disease, Max A. Goldzieher.
2. Disease of the Pituitary with Special Reference to Tumors, Leo M. Davidoff.

The papers were discussed by Drs. Emanuel D. Friedman and Cornelius G. Dyke.

I. J. LANDSMAN, M.D., *Secretary*.

ROCKLAND COUNTY

The Annual Banquet of the Medical Society of the County of Rockland was held at the Hotel St George, Nyack, on the afternoon of Wednesday, December 2nd, 1931. Thirty-eight members of the Society were present.

The following officers were elected for the year 1932: President, Dr S R Monteth of Nyack, Vice-President, Dr George M Richards of Stony Point, Secretary (re-elected), Dr William J Ryan of Pomona, Treasurer (re-elected), Dr Dean Miltmore of Nyack, Chairman of the Board of Censors (re-elected), Dr R R Felter of Pearl River, Chairman of the Legislative Committee (re-elected), Dr C D Kline of Nyack, Chairman of the Committee on Public Health and Public Relations (re-elected), Dr Royal F Sengstacken of Suffern, Chairman of the Membership Committee (re-elected), Dr G F Blauvelt of Nyack, Delegate to the State Society (re-elected), Dr George A Leitner of Piermont, Alternate Delegate (re-elected), Dr C D Kline of Nyack.

The Society voted to contribute \$200.00 from the funds of its treasury to the Unemployed Relief Bureau of Rockland County, and \$50.00 to the Reconstruction Hospital at West Haverstraw for the children's Christmas Fund.

Different phases of Public Health was the topic of discussion for the day, and the speakers were as follows:

"Public Health and the Physician," William J Ryan, M.D., of Pomona.

"Public Health and the Layman," A J Miller, Esq., of Ramapo.

"Public Health and the State," Richard Slee, M.D., Deputy Commissioner of Health, Westchester County.

Dr Ryan stressed the close relation that exists between curative and preventive medicine. He stated that the public health work cannot be confined to the few local health officers and boards

of health, but that the practicing physician who is daily coming into intimate contact with families is in the position to teach preventive medicine. The State Medical Society in the last few years is appreciating more and more its responsibility in this field of work and is urging the organization of committees in the county medical societies for the purpose of surveying the local health situation and to adopt progressive programs.

Mr A J Miller, an official of the Rockland County Branch of the State Charities Aid Association, and a member of the Child Welfare Board, and who was a guest of the Society, discussed the activities of the Social Welfare Organizations in Rockland County. The work of the State Charities Aid Association in the placement of dependent children and the Mother's Allowance was especially emphasized. Mr Miller made an appeal to the medical profession to cooperate in the unemployed relief situation which is now existing in the county.

Dr Richard Slee, Deputy Health Commissioner of Westchester County, where a county health unit is now in operation, explained the great value of the centralized organization. Dr Slee, who had been a District State Health Officer for many years and at one time in charge of Rockland County, showed his enthusiasm of the county unit system over the town and village health departments which now exist in most counties of New York State. Dr Slee demonstrated the value of organized nursing service in public health by its work in Westchester County. While the doctor did claim a county health unit to be more expensive than the present system, he feels that there is no comparison in its results.

The entertainment presented by Mr Francis R King was voted as the best ever presented at an Annual Banquet. The members of the Society had a very enjoyable and profitable afternoon.

WILLIAM J RYAN, *Secretary*

CLINTON COUNTY

The Clinton County Medical Society at its annual meeting on November 5th, elected the following officers for 1932:

President, Dr I S Haynes, Plattsburg, Vice-President, Dr I A Rowson, Plattsburg, Secretary, Dr A S Schneider, Plattsburg, Treasurer, Dr F K Ryan, Plattsburg, Delegate, Dr A S Schneider, Plattsburg, Alternate, Dr L F Schiff, Plattsburg, Censors

Drs G D Darc, W F Ladue, K M Clough.

At this meeting the committee on Public Welfare Charges reported the probability of securing an arrangement at a meeting of the County Supervisors, which was then in session, for the compensation of physicians taking care of indigent cases throughout the county of Clinton.

LEO F SCHIFF, *Secretary*

HERKIMER COUNTY

The 125th Annual Meeting of the Medical Society of the County of Herkimer was held Tuesday evening, Dec. 8th, in the Guild Room of Christ Episcopal Church in Herkimer, N. Y. The Annual Banquet, a delicious turkey dinner, was served by the Ladies' Guild at 6:30 P.M. and about 35 members of the society were present.

At the business meeting which followed, the matter of compulsory county health units was discussed; and while no specific action was taken, the consensus of opinion was that the previous action of this society in September, 1930, opposing the formation of compulsory county health units, be allowed to stand until the State Legislature rules otherwise.

A committee consisting of Doctors Sabin, Diss, and Santry was appointed to confer with the Herkimer County Board of Supervisors regarding amendments and revisions to the present fee bill.

A motion was carried that the society accept the gift of a safe from the widow of the late Dr. Ingham of Little Falls and that it be removed to the office of our Secretary, Dr. W. B. Brooks, at Mohawk, to be used by the society for the safeguarding of the records of the past 125 years.

The following officers were elected for the ensuing year: President, T. B. O'Neil, M.D.; 1st Vice-President, O. H. Love, M.D.; 2nd Vice-President, C. C. Whittemore, M.D.; 3rd Vice-President, Henry Field, M.D.; Secretary, W. B. Brooks, M.D.; Treasurer, A. L. Fagan, M.D.; Librarian, W. H. Petrie, M.D.; Censors: F. C. Sabin, F. H. Moore, Henry Field, J. L. Crofts, F. B. Conterman; for Delegate to N. Y. State Medical Society, T. B. O'Neil, M.D.; for Alternate, O. H. Love, M.D.

Doctors Aloisio and McDonald, both of Herkimer, were elected to membership in this society.

The retiring President, Dr. H. C. Murray, after thanking the members and committees for their cooperation during the past year, proceeded to the reading of his paper, "The Physician and the Public." He showed that the present day medical profession was being imposed upon, besieged and exploited for selfish gains by cultists, lay organizations, lay press, State legislatures, politicians, welfare organizations, free clinics, etc., and warned the members to be alert concerning such encroachments upon our rights. He also brought out the fact that apparent lack of ethics, petty jealousies and commercialism among the members themselves were harming the profession in the esteem of the public.

Doctors Love and Chattaway escorted the new President, Dr. T. B. O'Neil, to the Chair. Dr. O'Neil appointed the following committees to serve for the coming year:

Executive: Doctors O'Neil, Brooks, Murray, Sabin, Fagan, Conterman, Santry.

Membership: Doctors Albones, Diss, and Gallo.

Public Relations: Doctors Graves, Parkinson, Vickers, Barney, Albones.

Publicity: Doctors Sabin, Moore, and Conterman.

Legislative: Doctors Crofts, Fagan, C. G. Strobel, Eveleth, Jones.

Obituary: Doctors Love, Moore, and Jones.

Program: Doctors Love, Whittemore, Henry Field.

The meeting adjourned at 10:15 P.M.

F. B. CONTERMAN, *Publicity Committee.*





THE DAILY PRESS



DARWIN'S CENTENARY

The New York *Herald Tribune* of December 27, 1931, has a descriptive article on the one hundredth anniversary of the beginning of the scientific career of Charles Darwin. The writer says:

"On the 27th of December, 1831, the British surveying ship *Beagle* sailed for South America, with Charles Darwin, twenty-two years old, on board as naturalist. "The voyage of the *Beagle*," said Darwin in his autobiography, "has been the most important event of my life and has determined my whole career." Consequently it was one of the most important events in modern history—to be mentioned after battles and birthdays are forgotten. During those five years Darwin's main interests were established, his careful habits of observation were developed, and he began to brood over those basic questions which he afterward answered, for the approval or dismay of the world.

"Among the few books in the crowded cabin he shared with FitzRoy, Darwin had the first volume of Charles Lyell's 'Principles of Geology,' recently published. That work will never receive

its due from the general public, but it was epoch-making in geology, and it prepared the way for 'The Origin of Species.' From Lyell Darwin learned to interpret the past in terms of the present, to understand that the formation of the earth was the result of slow, gradual changes over vast periods of time rather than the result of Biblical catastrophes which took place within a few thousand years. The power of all-conquering time is easier to appreciate than the occasional finger of God."

The *Beagle* arrived in England on September 2, 1836, and Darwin spent the next few years in writing his observations. The newspaper article closes with the following paragraph:

"In 1838 Darwin read Malthus on the 'Principles of Population,' and only then did he have a key to the 'mystery of mysteries,' for if the birth rate increases more rapidly than the food supply, a ceaseless struggle for existence will ensue, leading to the 'appearance of new beings on this earth.'"

MEDICAL PUBLICITY

The effects of premature publicity are described in the following editorial in the New York *Herald Tribune* of December 27, 1931:

"A few weeks ago a Middle Western physician whom we leave nameless and unlocated to save him further trouble, had the somewhat doubtful good fortune to discover what may be a successful way of treating baldness with certain gland products. A conservative, carefully guarded and entirely proper notice of this fact was issued through the American Medical Association. One result the physician now writes to the association, is that he has received several thousand letters which he is totally impossible to answer. Commercial organizations interested in exploiting the supposed cure have besieged the unfortunate discoverer. Less scrupulous individuals have claimed to be associated with him. Undoubtedly he and his associates are greatly, and rightly, annoyed. All of which is an object lesson in why scientific men even outside the field of medicine and whose work

deals with matters of less insistent interest than the hair on the public's head, are acquiring grave distrust of publicity, as a sword with two sharp edges.

"Abundant publicity and corresponding public interest in scientific advances have been responsible no one doubts, for much of the present prosperity of scientific research in money and in men. It is inevitable that these boons like most others in this world, must be bought. The fear is that the price is too high, for more is likely to be paid than mere inconvenience like that of the bedeviled discoverer of the possible baldness cure. What happens to scientists, after all is not of any great importance, even, perhaps, what happens to science. Far more significant, no philosopher can doubt, is what happens to public thinking. Too much attention to science which is still raw and indigestible may easily result in new varieties of superstition under which clear thinking again may drown."

MODERN MAGIC

The New York *Times* of December 22, 1931 has the following comment on the reaction of modern man to ideas of magic:

"Slogans such as 'an apple a day keeps the doctor away' and admonitions to 'brush your teeth twice a day' are no more than modern survivals

of the magic of the primitive savage, who, when common sense failed him, fell back on amulets and talismen, according to Dr. Clark Wissler, anthropologist, who delivered the address as retiring president on 'the primitive background of civilization' at the annual dinner last night of the New York Academy of Sciences and affiliated societies at the Hotel Biltmore.

"The savage had his slogans, and we still have them in slightly different form. The savage used common sense on anything he could verify by experience. When common sense failed he resorted to magic. Thus he distinguished between being struck by a bear and being hit by lightning. For defense against the former he used practical

weapons. For defense against the latter he employed amulets. His slogan was: Put feathers in your hair and keep lightning away.'

"The savage attempted to build up interpretations of life and experiences, and we do the same. These attempts are divided into four groups of main ideas—common sense, magic, the supernatural and the aesthetic.

"As science and civilization progress, the common sense and aesthetic ideas grow stronger, while the magic and the supernatural elements grow weaker. But they are never fully eradicated and they lurk somewhere within us, buried a little deeper than before, but yet ready to assert themselves at the proper moments."

HEALTH AND BUSINESS DEPRESSION

The New York *Times* of January 5 has an editorial comment on the favorable showing contained in the annual report of the New York City Department of Health, saying:

"When the full record of the year 1931 is written, no chapter will be more striking than the one dealing with public health. The country was in the grip of the most serious industrial depression in a generation. No large area was exempt from its effects. Town and country, farmer and mechanic, East and West, North and South—all were affected. Everywhere poverty was accentuated. Family budgets had to be sharply reduced. Men and women skimped their own rations to provide for their children. The demands on charitable organizations were without parallel, coming often from families who never before knew the meaning of want. By all the signs and all the

precedents, hard times so seriously prolonged should have brought in their train disease and death. Actually, 1931 was one of the healthiest years in the history of the country.

"No one can say how long the present favorable health conditions will last. 'Sooner or later we must expect evidences of increased morbidity and mortality if the economic stringency is much prolonged,' Dr. Dublin warns. Nor is the other side of the picture to be ignored. Providence may be kind to man, but man is still ruthless enough in his dealings with his neighbor and himself. Murders and suicides reached an all-time peak in New York State last year, and in New York City the deaths resulting from automobile accidents exceeded those from typhoid fever, measles, scarlet fever, diphtheria, whooping-cough, cerebro-spinal meningitis and childbirth all combined."

ALMS-GIVING

The laws of both the State and the City of New York forbid public begging; and yet the practice is openly carried on. The New York *Times* of January 5 makes the following editorial comment on the warning and advice issued by the Welfare Council of New York City:

"Any one can easily satisfy himself that no needy person, man or woman, must beg in the streets for food or lodging. There are available more beds and more free meals than have yet been required. On the coldest nights this Winter hundreds of beds have been unused and facilities for serving warm food indoors have not thus far been fully used. Within an hour the homeless man asking for food and lodging at the Central Registration Bureau at South Ferry has both. If he happens to be nearer to one of the forty offices cooperating with the central bureau, he can

get what he needs quickly. The full list of agencies was published in yesterday's *Times*.

"The Welfare Council is opposed to giving away meal and bed tickets as well as to the indiscriminate handing out of cash. Many suggestions for books of such tickets, to be carried by citizens who are asked for alms, have been made and some have been tried. The Welfare Council has discovered that any such plan provides an incentive for begging. Tickets are used for money in card and dice games, and three nickel tickets sell among men on the Bowery for a dime. One who feels that he does not condone begging when he gives a meal ticket is in reality encouraging it. If instead he directs the beggar to the nearest agency of the Welfare Council, the man will be cared for, not only with an immediate meal, but until he is able to provide for himself."



BOOKS RECEIVED



Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits, or in the interests of our readers.

A THOUSAND MARRIAGES. A Medical Study of Sex Adjustment. By ROBERT LATOU DICKINSON and LURA BEAM. Octavo of 482 pages, illustrated. Baltimore, The Williams & Wilkins Company, 1931. Cloth, \$5.00. (Medical Aspects of Human Fertility Series, issued by the National Committee on Maternal Health, Inc.)

ESSENTIALS OF PSYCHIATRY. By GEORGE W. HENRY, A.B., M.D. Second edition. Octavo of 304 pages. Baltimore, The Williams & Wilkins Company, 1931. Cloth, \$4.00.

SURGICAL CLINICS OF NORTH AMERICA. Vol. 11, No. 5, October, 1931. (Pacific Coast Surgical Association Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues). Cloth, \$16.00 net; paper, \$12.00 net.

PREPARATION OF SCIENTIFIC AND TECHNICAL PAPERS. By SAM F. TRELEASE and EMMA SAREPTA YULE. Second edition. 12mo of 117 pages. Baltimore, The Williams & Wilkins Company, 1930. Cloth, \$1.50.

CHILD HEALTH AND THE COMMUNITY. An Interpretation of Cooperative Effort in Public Health. By COURTNEY DINWIDDIE. Octavo of 80 pages, illustrated. New York, The Commonwealth Fund, 1931. Cloth, \$1.00.

HOW'S YOUR BLOOD PRESSURE? By CLARENCE L. ANDREWS, M.D. Octavo of 225 pages. New York, The Macmillan Company, 1931. Cloth, \$2.50.

THE MEDICAL RECORD VISITING LIST OR PHYSICIANS' DIARY FOR 1932. Revised. 16mo New York, William Wood & Company, [1931]. Flexible Cloth, \$2.00.

PHANTASTICA NARCOTIC AND STIMULATING DRUGS. Their Use and Abuse. By LOUIS LEWIN. Octavo of 335 pages. New York, E. P. Dutton & Company, 1931. Cloth, \$3.75.

THE CONQUEST OF OLD AGE. Methods to effect rejuvenation and to increase functional activity. By PETER SCHMIDT, M.D. Translated by EDEN and CEDAR PAUL. Octavo of 307 pages, illustrated. New York, E. P. Dutton & Co., Inc., 1931. Cloth, \$5.00.

RECLAIMING THE DRINKER. By CHARLES B. TOWNS. 12mo of 77 pages. New York, Barnes & Company, [c.1931]. Cloth, \$1.00.

MEDICAL CLINICS OF NORTH AMERICA. Vol. 15, No. 3, November, 1931. (Chicago Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues). Cloth, \$16.00 net; paper, \$12.00 net.

APPLIED PHYSIOLOGY. By SAMSON WRIGHT, M.D., M.R.C.P. Fourth edition. Octavo of 552 pages, illustrated. New York, Oxford University Press, 1931. Cloth, \$5.50. (Oxford Medical Publications.)

THE GREAT PHYSICIAN. A Short Life of Sir William Osler. By EDITH GITTINGS REID. Octavo of 299 pages, illustrated. New York, Oxford University Press, 1931. Cloth, \$3.50.

CRITERIA FOR THE INTERPRETATION OF ELECTROCARDIOGRAMS. Prepared with the aid of the Committee on Research of the Heart Committee by ARTHUR C. DE GRAFF, M.D. 12mo of 13 pages, illustrated. New York, New York Tuberculosis and Health Association, Inc., 1931. Paper, 35c.

GUIDE TO RADIOLOGIC DIAGNOSIS IN HEART DISEASE. Prepared with the aid of the Committee on Research of the Heart Committee by GEZA NEMET, M.D. 12mo of 25 pages, illustrated. New York, New York Tuberculosis and Health Association, Inc., 1931. Paper, 35c.

INTRODUCTION TO THE HISTORY OF SCIENCE. By GEORGE SARTON. Two volumes in two parts, from Rabbi Ben Ezra to Roger Bacon. Quarto of 1251 pages. Baltimore, The Williams & Wilkins Company, 1931. Cloth, \$12.00. (Carnegie Institution of Washington Publication No. 376.)

EMERGENCY SURGERY. By JOHN WILLIAM SLUSS, A.M., M.D., and JOHN WALTER MARTIN, M.D., F.A.C.S., and CAMILIUS BOWEN DEMOTTE, B.D., M.D. Fifth edition. 12mo of 879 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Flexible cloth, \$5.00.

A SURVEY OF THE MEDICAL FACILITIES OF SAN JOAQUIN COUNTY, CALIFORNIA. 1929. By NATHAN SINAI, D.P.H. Octavo of 214 pages. Chicago, The University of Chicago Press, [c.1931]. Paper, \$1.00. (Publications of the Committee on the Costs of Medical Care: No. 12.)

THE SURGICAL CLINICS OF NORTH AMERICA. Vol. 11, No. 6, December, 1931. (Philadelphia Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues): Cloth, \$16.00 net; paper, \$12.00 net.

THE VITAMINS. By ETHEL BROWNING, M.D. Quarto of 575 pages, illustrated. Baltimore, The Williams & Wilkins Company, 1931. Paper, \$10.00. (Monographs of the Pickett-Thomson Research Laboratory, Volume 1.)

THE HUMAN VOICE: ITS CARE AND DEVELOPMENT. By LEON FELDERMAN, M.D. 12mo of 301 pages, illustrated. New York, Henry Holt and Company, [c.1931]. Cloth, \$2.50.

A NON-SURGICAL CONSIDERATION OF PROSTATIC ENLARGEMENT: Including a lecture on The Myth of the Bladder Neck Bar. By EDWIN W. HIRSCH, M.D. Octavo of 79 pages, illustrated. St. Paul, Minn., Bruce Publishing Company, 1931. Boards, \$2.00.

HANDBOOK OF SKIN DISEASES. By FREDERICK GARDINER, M.D. Third edition. 12 mo of 283 pages, illustrated. New York, William Wood & Company, 1931. Cloth, \$3.50.

MODERN MEDICAL TREATMENT. By E. BELLINGHAM-SMITH, M.D., F.R.C.P., and ANTHONY FEILING, M.D., F.R.C.P. Two volumes. Octavo of 1406 pages, illustrated. New York, William Wood and Company, 1931. Cloth, \$12.00.



BOOK REVIEWS



RECENT ADVANCES IN THE STUDY OF THE PSYCHONEUROSES. By MILLAIS CULPIN, M.D., F.R.C.S. Octavo of 348 pages. Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Cloth, \$3.50. (The Recent Advances Series.)

As the name of this book indicates, the author presents the modern advances in the study of the psychoneuroses.

The first chapter is a historical review including the contribution of Charcot and Freud to our knowledge. There then follows a discussion of the psychoneuroses of war. This leads to a presentation of the author's conception of the present position of psychoanalysis with which he is extremely sympathetic.

In the last two chapters of the book the author discusses the psychology of childhood and the set-up of a psychotherapeutic clinic. He traces the development of interest in child behavior during the post-war years, with the establishment of child guidance clinics.

This book is of value to the physician interested in keeping up in a general way with the recent advances in the psychoneuroses. STANLEY S. LAMM.

MEDICAL ADMINISTRATION OF TEACHING HOSPITALS. By EMMET B. BAY, M.D. Octavo of 136 pages. Chicago, The University of Chicago Press, 1931. Cloth, \$2.00. (Medical Economics Series.)

Medical schools utilize clinical material in affiliated hospitals for student instruction. Dr. Bay submits a carefully prepared report of an investigation of medical administration in nineteen hospitals connected with medical schools. The extent and manner of utilization of clinical material in hospital and out-patient departments for teaching purposes by the affiliated schools has been studied, and, as far as possible, made the subject of total and comparative study.

This report, in one small volume of 130 pages, is one of a group of studies known as the "Medical Economics Series," under the capable editorship of Dr. Michael M. Davis. Its preparation and issue was made possible through a grant from the Rockefeller Foundation.

An approach to this excellent study is set forth in the opening paragraph in Chapter XIII and could well have been included in the introduction:

- (1) To present as clearly as possible the many different problems which arise in medical administration; and
- (2) To develop a technique for studying administrative matters in such (teaching) hospitals.

The author, in his foreword, "hopes the following pages will contain some of the elements to interest others in this field." To engender such interest, the following quotation is a challenge to the hospital administrator:

"Hospital superintendents were found to be too absorbed in the management of their large physical plants and the non-professional personnel, and too influenced by the community purposes of many teaching hospitals, to have much interest in or knowledge of the teaching and research functions of their institutions." If this were not enough to engage our attention, he concludes:

"Under such circumstances it is obvious then that some other administrative officer must carry the supervision of these activities."

This observation, based upon facts submitted with the report, challenges the consideration of governing boards of hospitals and their administrators wherever clinical material is utilized for teaching purposes.

One arrives at a very definite conclusion as to the medical administrator of the future. Where teaching of

medicine depends on the clinical opportunities of the affiliated hospital, it is clearly shown there must be strong, vigorous representation of the needs of the medical school to secure cases in kind and quantity to meet its requirements. If the hospital administrator envisions these needs, if he exhibits a sympathetic cooperation in meeting them fairly and impartially no additional administrator is needed. Failing to secure satisfactory consideration, the medical school is forced to protect its interests in securing adequate clinical facilities through representation primarily responsible to it.

Those interested in the clinical aspects of medical education, both undergraduate and graduate, will find this book interesting. It is not dry, and will cause the reader to pause, think, and possibly stimulate to further study. It will at least urge the introspective hospital administrator to ponder. JOHN E. DAUGHERTY.

TEXT-BOOK OF HISTOLOGY for Medical and Dental Students. By EUGENE C. PIETTE, M.D. Octavo of 466 pages, illustrated. Philadelphia, F. A. Davis Company, 1931. Cloth, \$4.50.

The subject matter of this book is presented in a brief style. The essentials of histological technique are given in a short chapter of about fifteen pages. This is followed by another short chapter on cytology. The following five chapters are devoted to general histology and fourteen chapters to special histology.

Nothing new or original in histology is presented in this work. Original illustrations are very scarce. There are numerous excellent illustrations carefully selected from the well-known works of authors such as: Schafer, Stöhr-Möllendorff, Gurwitsch, Böhm-Davidoff, Triepel, Schmaus-Herxheimer, Landois and others.

Being partly intended for the dental student, the author dwells at relatively fair length, on the subject of Teeth, which phase, some other text-books on histology tend to neglect. SILIK H. POLAYES.

MODERN PROCTOLOGY. By MARION C. PRUITT, M.D., L.R.C.P. Octavo of 404 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, \$8.00.

In this volume of 404 pages with 233 illustrations the author—according to his preface—aims to present a concise, yet comprehensive text-book on proctology, for the student and busy practitioner. As such, it is a welcome additional contribution to our fast growing literature on diseases of the Colon, Rectum and Anus.

This comparatively recently recognized medical specialty, has been gaining an ever-growing number of adherents among the general practitioners. They are beginning to recognize, that the diseases of the Rectum and Anus neither deserve to be treated lightly, nor to be relegated to the care of the irregular practitioner, as it has been customary heretofore. But, in order to successfully compete with the quack, the physician must possess an up-to-date knowledge in the treatment of these diseases and this is the reason for the author's issuing of the book, in order to include in it the most recent advances made in this field.

The author follows the orthodox arrangement and division of his book into chapters, beginning with anatomy, methods of examination, anesthesia and following with chapters on specific diseases. In discussing the various operative procedures, the author is objective in his method, presenting a fair and accurate description of the respective methods employed by different authorities. The illustrations in the book—the diagrammatic as well as the photographic—are very illuminating, and

facilitate the reader's understanding of the pathology or operative technique. Among the newer methods of treatment the author includes four methods of electric treatment of Hemorrhoids, the injection treatment of Pruritis Ani and the vaccine treatment of Ulcerative Colitis.

It is a well written and instructive book and is a distinct contribution to Proctologic literature.

MICHAEL CANICK.

CUTANEOUS X-RAY AND RADIUM THERAPY. By HENRY H. HAZEN, A.M., M.D. Octavo of 166 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, \$3.00.

It is indeed surprising that so small a book as this gives one the feeling that the subject of X-Ray and Radium therapy of the skin has been rather completely covered. The author has given the history of both the X-Ray and Radium, described the apparatus, given the estimation of dosage and dealt with the technique of administration. He has considered the action of these agents upon the normal and diseased skin, and, finally, after a résumé of their effect on various diseases he has discussed these diseases individually, describing the intensity of the single treatment and the number of treatments permissible within the zone of safety.

The book leaves little else to be said except the dis-
courses on the many theoretical problems facing the dermatological therapist, and is well worth possessing.

E. ALMORE GAUVAIN.

A TEXT-BOOK OF PATHOLOGY. By FRANCIS DELAFIELD, M.D., LL.D., and T. MITCHELL PRUDEN, M.D., LL.D. Fifteenth edition, revised by FRANCIS CARTER WOOD, M.D. Octavo of 1339 pages, illustrated. New York, William Wood and Company, 1931. Cloth, \$10.00.

In the 15th edition of the Text-Book of Pathology by Delafield and Prudden, edited by Francis Carter Wood, the original edition of this work has almost completely lost its identity because of the tremendous increase in knowledge in tissue pathology since that first edition was published.

The present edition consists of three parts: the first of which is devoted to general pathology; the second to special pathology, and the third to post-mortem technique. The field is very well covered although the individual subjects are treated tersely and briefly. This must be expected, however, in a work which covers so much ground and is intended mainly for students. A number of subjects, such as immunology and parasitology are included. The space devoted to these may have been better utilized for more detailed discussion of pathology itself. Over 800 illustrations, very clearly and comprehensively amplify the texts. Many of them are new and depict the pathology in an unusually excellent way. The section on post-mortem technique is complete. The procedure is described as carried out by the author and therefore is not to be viewed too critically. A mass of references to outstanding articles on the various subjects are incorporated.

As a whole, the work reflects the excellent standard set by Delafield and Prudden and serves to carry on the tradition of these noted pioneers. The book as a whole can be highly recommended to both students and practitioners as an exceedingly valuable text-book for the study of pathology.

MAX LEDERER.

COMMUNICABLE DISEASE CONTROL. Report of the Committee on Communicable Disease Control, George H. Bigelow, M.D., Chairman. White House Conference on Child Health and Protection, Octavo of 243 pages. New York, The Century Co., [c.1931]. Cloth, \$2.25.

This committee seems to have found that its duties might be quickly and well done by recommending that

the various cities and states adopt and live up to the program of the American Public Health Association as expressed in the "Handbook" of the Association. Comparative morbidity, mortality and case fatality tables are included to prove the universal success in Smallpox, Diphtheria and Typhoid prevention and the need for more painstaking application of Quarantine and Isolation to lower the fatality of Whooping Cough and Measles in the younger age groups. The chapter devoted to the definition of terms used to designate various control procedures is illuminating. For example, Quarantine is now used to mean the limitation of the freedom of movement of human or animal contacts for a period equal to the longest usual incubation period of the disease; whereas Isolation means the limitation put upon the movements of the sick person or carrier. Individually tabulated are the advised control measures in fifty-two communicable diseases, excellent for ready reference to standard practice. We learn that fumigation has been generally abandoned and that placarding is rapidly being discarded. Where good medical supervision of school children obtains, selective quarantine is increasing the freedom of movement of adult contacts who are probably immune to children's diseases and of immune contacts among the children; the loss of schooling is being reduced by allowing non-immune contacts to continue at school until a day or two before the expected onset of prodromes especially in the milder diseases like German Measles, Chickenpox and Mumps in which the incubation period is relatively long. The usual plea is made for better trained Doctors of Public Health, better salaries for them, well-staffed laboratories, more public health nurses for follow-up work, better standardization of the laws governing reporting, minimal quarantine and isolation periods, and finally for gradual education of the governing bodies and of the people in general so that the laws may be more effectively enforced. In general the publisher has done everything possible to make the book easily readable and interesting. Very little attention has been given to the General Practitioner's part in control and in some places the English construction is awkward. The index is well done.

KENNETH G. JENNINGS.

A CLINICAL STUDY OF ADDISON'S DISEASE. By LEONARD G. ROWNTREE, M.D., and ALBERT M. SNELL, M.D. 12mo of 317 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, \$4.00. (Mayo Clinic Monographs.)

In the foreword of this excellent study we find the following statement, "We often marvel at those physicians who, only a few decades ago, were so capable in the art of medicine that they could make a diagnosis of an obscure disease almost without accessory aids. In 1855 Thomas Addison was able, with great accuracy, to describe a syndrome of disease of the suprarenal glands." The authors give a review of the scant knowledge of the suprarenal glands before the time of Addison's description of the disease which he believed due to pathology in the suprarenal glands. So valuable and accurate is this description clinically and at post-mortem examination, as given by Addison that the authors state, "Because of its great intrinsic value and its relative inaccessibility this article is presented in full."

A study of 117 patients having Addison's disease is presented in this volume. Thirty-three of these patients were examined post-mortem. The histories, symptoms and physical findings of all of the patients are given in detail, and a careful review of all this data is made. This volume will well repay a careful study as it is one of the most complete works on the subject ever presented. It has been carefully prepared, is well written, with excellent tables, diagrams and figures, and presented in the best manner of the publishers.

HENRY M. MOSES.



OUR NEIGHBORS



CONFERENCE OF COUNTY SECRETARIES IN NEW JERSEY

The December Journal of the Medical Society of New Jersey contains a fifteen-page account of the seventh annual conference of the secretaries and reporters of the county medical societies of the State; held in Trenton on November 4, 1931, with twelve counties represented and a total attendance of twenty-six. This proportion of attendance is about the same as that at the New York Conference. (See this Journal, October, 1931, page 1221.)

The general topic of discussion was "Publicity and Advertising." Dr. John F. Hagerty, President of the Medical Society of New Jersey, introduced the subject, and said:

"This meeting is intended to lead the profession into a discussion of the advisability of advertising what organized medicine has accomplished, and I think we are fully justified in proclaiming to the world the aims of scientific medicine. If we just recall the countless thousands of lives that have been saved, the millions of dollars worth of property salvaged; and if we reflect a minute upon the sum total of human misery that has been alleviated, I think we are amply justified in proclaiming those facts to the public and in looking to the public and to the legislators for approval of any steps that we might wish to take."

Dr. Edward G. Waters of Jersey City presented a plan for periodic health examinations which involved some radical changes in publicity by county societies. The plan is described in four sections as follows:

"1. The adoption of a form of procedure for periodic physical examinations with delineation of minimum requirements for the examining doctor to meet.

"2. The adoption of a standard fee for the community. It must be unalterable by the physician and include all that the standard form of procedure delineates. In addition, there must be definitely known charges for any additional examinations, such as x-rays and blood chemistry, and these must be compatible with the scale of charge for the entire examination.

"3. Publication of a list of members of the County Society of the district, indicating those members willing to give the examination at the standard fee.

"The public must be apprised of the adoption of such a plan, and must know what physicians are available for making examinations. To avoid any possibility of confusion as to

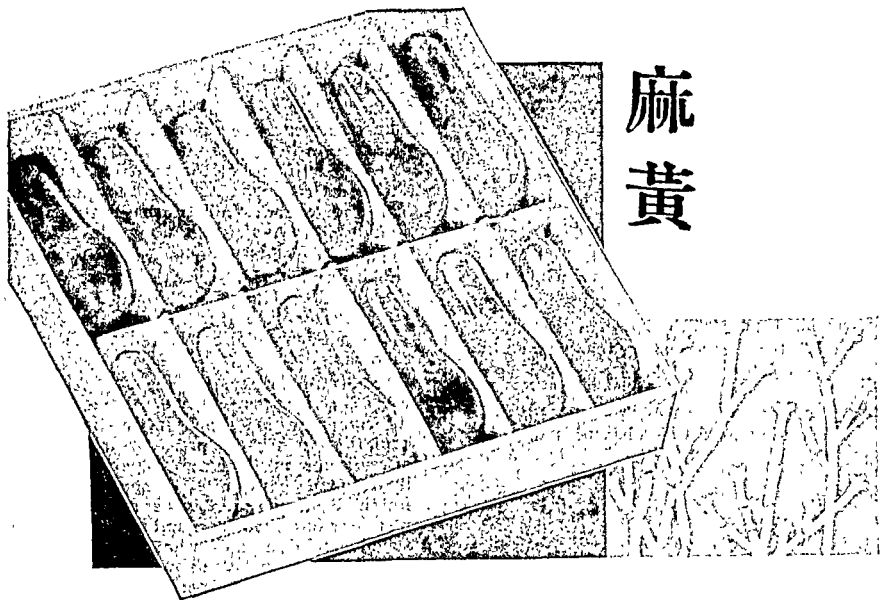
medical standing, the entire roster of the county society—which means the roll of men acceptable to the medical brotherhood—should be published. However, as plan-acceptance is elective with our Society members, such published lists should clearly indicate those men who are willing to make health examinations, as contrasted with men in good standing who neither subscribe to the form of procedure nor the standard fee.

"Publication of such lists will prove of material assistance to the county societies. The public will be enabled to ascertain the identity of medically eligible men. Many able practitioners who for various reasons do not join their county's society will be forced to do so to maintain their professional standing in the eyes of the public. Illegitimate practitioners will find the going harder, and twilight practitioners will be refused the light of community acceptance. A reference list of competent physicians will be available in emergency. Physicians will profit individually and as a group, for an ethical type of advertising is then available. The public will profit vastly from the opportunity to distinguish the medically acceptable from those who are not, and through elimination of the undesirables in medicine.

"4. Publication of the detailed form of procedure. The public at large does not know what a complete medical examination means. The average person knows that for a cold his chest is examined, and for a sore throat his nose and throat are gone over, but he has seldom, if ever, gone to his physician for a complete examination when he was not sick. This fact doubtless accounts in large measure for the reputation of completeness and thoroughness acquired by lay-controlled clinics specializing in health examinations. A patient visiting the office for treatment of a head cold, or sebaceous cyst of the scalp, would think it very queer if the doctor tested the ocular movements and reflexes, took the height and weight, looked in the ears, tried the patellar reflexes, and so on; but the same patient, subsequently taking a routine physical examination at a clinic specializing in such examinations, would doubtless widely advertise the thoroughness of the going-over he received.

"When the examination is completed, the patient should be given a written report on the

(Continued on page 110—Adv. xii)



FOR CONVENIENT RELIEF OF NASAL CONGESTION . .

While the Chinese drug Ma Huang has been used for centuries, the value of ephedrine—its active alkaloid—has only recently become known. Investigation has shown that it is effective in the treatment of nasal congestion.

CAPSULES EPHEDRINE COMPOUND SQUIBB contain ephedrine oleate in combination with aromatic oils and preservatives in a petrolatum base.

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DIGITALIS

ADOPTION OF AN INTERNATIONAL ASSAY STANDARD

WITH a view to promoting a more accurate method of standardizing digitalis, the Frankfurt Conference of 1928 proposed: "That when the dosage of digitalis or its preparations is expressed in units of activity, the unit employed for any preparation *and in any country* should be an international unit, which should be defined as the specific activity contained in 0.1 gramme of the International Standard Powder."

Since 1928 a powder equal in strength to the international Digitalis Powder has been used as an official standard in Germany.

Adoption of the international standard has likewise been recommended by the French Codex and the Sub-Committee on Digitalis of the British Pharmacopœia.

In the belief that the international unit provides the clinician with greater uniformity of strength, Upsher Smith are pioneering this method of standardization.

We now put one international unit of digitalis in one cc. of tincture and in one capsule or tablet. Note how this simplifies dosage:

- 1 International Unit = 2 grains U.S.P. Digitalis Powder
- 1 cc. Tincture = 2 grains U.S.P. Digitalis Powder
- 1 International Unit Capsule = 2 grains U.S.P. Digitalis Powder
- ½ International Unit Tablet = 1 grain U.S.P. Digitalis Powder

Full information on the International Unit is supplied in our new booklet, "New Thoughts on Digitalis Action and Dosage."

Write for your copy today and for clinical trial package of Upsher Smith Digitalis.



(Continued from page 108)

examination, with notation of defects which require attention. The detailed record of the examination is to be held and filed by the examiner. However, if the patient decides to take treatment elsewhere, a copy of the complete record of the examination must be forwarded to the doctor treating that patient should he request it. This is proper and ethical and cannot fail to materially increase confidence in our efforts along these lines."

The discussion was confined to a motion, which was carried, to invite Doctor Waters to present the plan to the State Society. Dr. H. J. Perlberg, of Jersey City, described the same publicity done in Hudson County, as follows:

"Hudson County, during the past spring, waged a vigorous and, we believe, a successful campaign for prophylactic diphtheria inoculations using the press by means of paid advertisements. The newspapers helped along by frequent editorials. A special rate of \$6 for the 3 inoculations was agreed upon by the members of our society, and immunization was so advertised. I know that the response was most encouraging. We now intend to go ahead on a plan of boosting periodic health examinations, each to be made by the patient's own private physician. We believe that this should also prove successful, but it must be borne in mind that the patient must receive a bona fide examination, and not a cursory physical inspection. Permit them to learn the difference between a hurried, slipshod looking over and a really competent, physical examination, from head to toe-nails, and the people will remain or become our friends, instead of regarding us with suspicion, as is often the case nowadays."

Dr. J. M. Kuder, of Mount Holly, described the medical publicity conducted by the Burlington County Society, through its Committee on Public Relations and Information:

"This Committee is prepared to furnish a speaker at any time, at any place, on any question of public health, or any reasonable request, made by any responsible lay organization presented to the secretary of the society. Furthermore, this committee is promulgating a series of free public lectures on health matters, to be given during the coming autumn and winter months, by members of the Burlington County Medical Society, in as many towns and communities throughout the county as shall express a desire to have such a series of lectures. It is our endeavor to educate the public to look to the County Medical Society as headquarters for health information.

(Continued on page 111—Adv. xiii)

(Continued from page 110—Adv. xii)

"In the Burlington County Medical Society, the agency which we have employed with very gratifying results has been the Woman's Auxiliary to the Medical Society. These women, as loyal as a group to our organization as they have been to us individually in our private practices, should receive no small credit for the encouraging prospects which we anticipate. Through the ramifications of their personal and individual interests in civic and social organizations, and frequently their identification with program committees, these women have been able to place members of our local society, as speakers on health subjects, on the programs of many lay organizations. This has paved the way for wider publicity, and now requests for similar talks are coming in independently of the efforts of the Auxiliary; so that the increase in requests is multiplying in geometric rather than arithmetic progression.

"Our county society has also been fortunate in being able to bring its message of health education before Rotary Clubs, Y's, Men's Clubs, and other service organizations.

"Our county is wide in extent and but sparsely populated. It contains no metropolitan center. It possesses but one community of wealth. We have but a few dozen members in our medical society. We have no funds to finance broadcasting, to purchase publicity space, to placard communities. All the cooperation we receive must come from the hearts and intelligence of the people. And perhaps our satisfaction is not entirely unmixed with a little pardonable pride, in that our publicity has been attained without an appeal to agencies of publicity through their purses, but perhaps through their conviction that the service which we are rendering is above price.

PRESS PUBLICITY IN FLORIDA

The December number of the Journal of the Florida Medical Association, Inc., contains a report on press publicity made by the Public Relations Committee of the State Association:

"There have been approximately twenty papers handed in of about 400 words each, for press publication. It was moved by Dr. McEwan and seconded by Dr. Holden that these articles start in the press at once. Passed. The secretary was instructed to arrange them in chronological order and send them to the Business Manager of the Journal for release as per his arrangements. The time when these articles should appear was thoroughly discussed. Moved by Dr. Irwin and seconded

(Continued on page 112—Adv. xiv)

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LLOYD PAUL STRYKER

Formerly General Counsel for the Medical Society of the State of New York

The author is particularly well qualified to write this book because of his recognized ability as trial counsel and the experience gained by years of successful handling of mal-practice suits against doctors.

DR. CHARLES GORDON HEYD, President-Elect of the Medical Society of the State of New York, says in the preface, "The book should not only be owned but read by every doctor as a means of informing himself as to his inherent rights and privileges, and the conditions under which he might invite a suit; and finally, for the sane advice that the author has been able to present by example and precept, whereby a physician may, in a measure, protect and fortify himself against shameless attacks upon his professional conduct, art and skill . . . I heartily recommend it to my colleagues of the medical profession."

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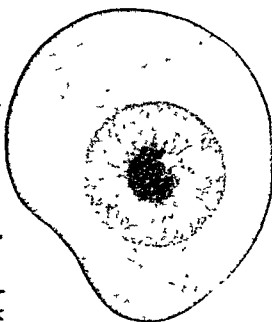
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(Continued from page 111—Adv. xiii)

by Dr. McEwan that the articles should appear in the Sunday editions insofar as possible. These articles, therefore, would leave the business manager's office on or before the Wednesday preceding the Sunday of publication. Passed."

"This committee is not functioning for one month or one year, but it is laying the ground work for functioning on a much larger scale, as time goes on, for some years in the future. At present, we are doing the ground work, and literally re-writing and fitting articles to our own Florida needs from articles that have been previously used, largely by the Illinois State Society. It is indeed a kindness for these component states to thus enable Florida to make a better start by using their articles and their experience of years back. These articles, however, will soon be exhausted, and Florida must build up her own library and use her own articles, so that we can function independently and so that we can be in a position to help other State societies from time to time, as the States now functioning have helped us. With this end in view, we now request all county societies to send in articles, however short or long, that are of interest to the medical profession, which have appeared in their local society meetings, or which have been broadcast over local radio stations. These articles, that can be collected from the past, will be appreciated and the articles and talks that appear from time to time in the future should be sent in by the county society secretary to Dr. Wells, Daytona Beach, so that he may arrange them in their proper position, and thus keep up the sequence of press articles for the months and the years to come.

"Three local radio broadcasting stations report as follows: Orlando is broadcasting every Tuesday and Thursday at 11 A.M.; Tampa has started; Miami started the week of December 7, 1931."

CHIROPRACTIC IN MASSACHUSETTS

The *New England Journal of Medicine* of October 29, 1931, contains the following editorial description of a proposed attempt of the chiropractors to get recognition by means of an initiative petition:

"A recent item in the daily press reported that the chiropractors were about to file an initiative petition seeking passage of a law for the establishment of a state board of registration in chiropractic. It is suggested in the report that the board would consist of three persons to be appointed by the Governor to

(Continued on page 114—Adv. xvi)

DETOXIFICATION

A Clinical Fact



WHEN confronted with one of those indefinite toxemias as manifested by headache, vertigo and general malaise—where you feel certain that the condition is due to an absorption of toxin from the intestinal tract—is it not reasonable to expect relief from intestinal detoxification?

Larson, through the discovery of the detoxifying properties of sodium ricinoleate, and Morris and Dorst by their demonstration of the practicability of detoxifying the intestinal tract, have offered to the medical profession a new solution of the problem of intestinal toxemia.

The detoxifying principle, sodium ricinoleate, has been made available for clinical use under the name Soricin—offered in two forms—Soricin Capsules and Soricin Surgical Solution.

Soricin Capsules administered orally detoxify the content of the bowel, preventing the absorption of this material from the enteric tract.

Soricin Surgical is intended for colonic irrigation—to clean out the colon and to detoxify it. This is recommended in stubborn cases in conjunction with Soricin Capsules by mouth.

In administering Soricin Capsules it is important that they be given in cold water, and on an empty stomach, about one-half hour before meals.

The average dosage of Soricin Capsules is three to four 10-grain capsules daily during the first week or two, and followed by three to four 5-grain capsules over the balance of treatment. THE WM. S. MERRELL COMPANY, CINCINNATI, OHIO

(Continued from page 112—Adv. xiv)

pass upon the qualifications of applicants desiring to practice as chiropractors. The qualifications required were a preliminary 'equivalent of a high school education and to be grounded in the subjects of physiology, anatomy, chemistry, symptomatology, hygiene, sanitation, pathology and chiropractic analysis. The measure also provides that the applicants are to be graduated from a reputable chiropractic school giving a course of twenty-two hundred daylight hours'.

"Article 48 of the Constitution defines the difference between an initiative and a referendum. The former is an attempt to have new legislation referred on a ballot to the voters for their approval or disapproval, whereas a referendum is an attempt to change an existing law by the same method. An initiative petition must first be submitted to the attorney-general and must be signed by ten or more registered voters. If this subject has not been presented to the voters for at least three years and the signatures are those of registered voters, it is accepted by the attorney-general as proper material and the petitioners are so notified. This petition with the signatures of twenty thousand registered voters must be

placed in the office of the Secretary of State before 5.00 o'clock on the first Wednesday in December. Not more than five thousand signatures may be obtained in any one county. The bill then goes before the next session of the Legislature and, if accepted by it, goes on the ballot. If the action is adverse, five thousand more signatures must be obtained and submitted to the Secretary of State's office before the first Wednesday in August. It would then be legally approved and the initiative placed upon the official ballot in November.

"There has been but one standard for the qualification of fitness to practice the healing art in this Commonwealth, namely, passing the examinations given by the Board of Registration in Medicine. This method has been acceptable to the Homeopaths, Osteopaths and members of the regular school of medicine. It would be a definite step backward to change this policy. The official stamp of approval is thus placed upon every legalized practitioner of medicine in the State of Massachusetts; and, if a minor or a stranger calls a registered physician in an emergency, the public realizes that that physician has been examined and authorized to alleviate suffering and cure disease."

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Literature and sample on request

BOOKS FOR DOCTORS

The weekly Bulletin of the Wayne County Medical Society (Detroit, Michigan) for October, 1931, contains the following list of one hundred books, nearly all of which were written by doctors, and have to do with doctors and medicine

- History of Medicine—Fielding Garrison
Annals of Medical History—Paul Hoeber, publisher
Medical Leaders—Lambert and Goodwin
Essays in the History of Medicine—Newburger Garrison
Essays in the History of Medicine—Sudhoff Garrison
Medical History of Michigan—2 volumes
Devils, Drugs and Doctors—Haggard
Magicians and Leech—W. Dawson
Stalkers of Pestilence—Wade W. Oliver
History of Medicine in the United States—Francis R. Packard
Medicine, a History of—M. C. Seelig
History of—
The Doctor—Collins
The Doctor Looks at Literature—Joseph Collins
Taking the Literary Pulse—Joseph Collins
Luke the Physician—W. M. Ramsay
With Sabre and Scalpel—John Allan Wyeth
Samuel Reynolds House of Siam—Pioneer Medical
Missionary—George H. Fellus
Microbe Hunters—Paul De Kruif
Labrador Looks at the Orient—Sir William T. Grenfell
The Genuine Works of Hippocrates—Adam
The Infancy of Medicine—Dan McKenzie
Life of William Osler—Cushing
Bibliography of the Writings of Sir William Osler—M. W. Biggs
The Work of Gerber—Richard Russell
Paracelsus—His Life and Doctrine—Franz Hartman
The Religio Medical Masquerade—Frederick Peabody
Christian Science—Mark Twain
Mary Baker Eddy—Dakin
Gilbertus Anglicus—Harry E. Henderson
Montaigne and Medicine—James Spotswoode Taylor
Moral Principles and Medical Practice—Rev. Charles Coffers S. J.
The Merging of Disease—William A. White
The Memoirs of a Physician—Vikerty Veressayew
Book on the Physician Himself—D. W. Cathell
Francis Rabelais—Albert Jay Nock and C. R. Wilson
Sir Victor Horsley—Stephen Paget
Doctor Versus Folks—Robert T. Morris
San Michele—Axel Munthe
Memories and Vagaries—Axel Munthe
The Gold Headed Cane—William MacMichael
The Quacks of Old London—C. J. S. Thompson
Arrowsmith—Sinclair Lewis
The Medicine Man—E. C. Dudley
Goethe—Carre
Guy Patin
Doctor's Dilemma—Bernard Shaw
Moliere—Malade Imaginaire
Biographic Clinics—George M. Gould
Building a Profitable Practice—Reilly
Chronologia Medica—Sir D'Arcy Powers
The Papers and Speeches of John Chalmers DaCosta
M. D. etc.
The Recovery of Myself—Marian King
Sorrel and Son—Warwick Deeping
Health Heroes—Edward L. Trudeau
The Book of My Life—Jerome Cardan—by Jean Stoner
Florence Nightingale—Mr. I. B. O'Malley
Jungles Preferred—Janet Miller

(Continued on page 116—Adv xviii)

PREVENTS RICKETS
AND SPASMOPHILIA

Ever since 1914, when S. M. A. was first developed as a diet compound adapted to breast milk, it has always contained enough cod-liver oil to make it anti-rachitic and anti-spasmophilic. The kind of food constituents and their correlation also contribute to prevent rickets and spasmophilia

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and thanks to our
readers for their
loyal patronage of
the advertisers in
this JOURNAL during
1931.



Committee on Publication

(Continued from page 115—Adv. xvii)

Medical Man in the Time of Christ—Robert N. Wilson.

Maimonides—David Gellin and Israel Abraham.

Syphilis—Hieronymus Fracastor.

Postmortems—C. MacLaurin, M.D., etc.

Mere Mortals—C. MacLaurin.

Fads, Frauds and Physicians—Harding.

Life of Pasteur—D. Vallery Radot.

My Easy Chair—James H. Dempster.

Pathfinders of Physiology—James H. Dempster.

Doctors Recreation Series—10 volumes.

Doctor Serocold—Helen Ashton.

Freud and His Time.

Noguchi—Gustav Eckstein.

Hatter's Castle—Dr. A. J. Cronin—novel.

Sherlock Holmes—Doctor Watson.

Laennec—Gerald B. Webb.

Ambrose Pare—Travels—5 Foot Library.

Autobiography of a Quack—Weir Mitchell.

A Doctor of the Old School—Ian MacLaren.

The Human Mind—Karl A. Menninger.

The Human Body—Logan Clendening.

Percival's Medical Ethics.

Peaks of Medical History—Dana.

Medieval Medicine—Walsh.

Cures—Walsh.

Anatomic Illustration—Garrison.

Atlas of History of Medicine—I. S. DeLint.

Consecratio Medici—Harvey Cushing.

The Doctor in Court—Williams—Excellent.

Confessio Medici—Unknown Author.

Our Medicine Men—Paul de Kruif.

Domus Doloris—Compton Leith.

The Charaka Club—Transactions of.

Evolution of Anatomy—Singer.

The Beloved Physician—Sir James MacKenzie, by A. MacNair Wilson.

Writings of Oliver Wendell Holmes — especially Essays.

Story of a Surgeon—C. Cope.

Havelock Ellis—Sex—Evolution of Modesty, etc.

Religio Medici—Sir Thomas Brown.

Life of Claude Bernard—Sir Michael Foster.

William Harvey—D'Arcy Power.

PUBLIC HEALTH PRACTICE IN ARKANSAS

The December issue of the Journal of the Arkansas Medical Society contains the following report of a subcommittee of the Council of the State Society; which was adopted by the Council:

"At the Texarkana meeting of the Arkansas Medical Society a subcommittee of the Council was appointed to investigate the activities of the County Health Units of the State Board of Health, including those of the County Health Officers and County Health Nurses, and report back at a subsequent meeting of the Council.

"Much objection was found to the activities of the health agencies. The activities objected to may be briefly stated as follows:

"1. The free immunization of large numbers of people against typhoid and diphtheria without attempting to differentiate between those able and those unable to pay for such services.

(Continued on page 117—Adv. xix)

(Continued from page 116—Adv. xviii)

"2. The activities of unsupervised County Health Nurses.

"3. The practice of curative medicine by full-time salaried health officials.

"4. The conducting of tonsil-removing and other clinics without consultation with physicians resident in the locality where the clinics are held.

"Of these, the greatest part of the objection was to the immunization program, and a minor part to the actual practice of medicine by health officers and nurses, and the manner in which the clinics were conducted. In fairness to the health authorities it was found that in certain counties the health work has been approved by the county medical society.

"The causes for the objections to the health activities may be briefly summarized as follows:

"1. Physicians feel that everything pertaining to the health, public or personal, of the community in which they reside and practice should be within the sphere of their activities, and that preventive and curative medicine should not be practiced without their knowledge, cooperation, and consent.

"2. Physicians believe that the examination of school children and other persons for physical defects and the administration of immunizing substances are a part of the practice of medicine and should not be done by a nurse or other unlicensed person.

"3. Physicians believe that providing medical services of any kind for persons able to pay for such services is an injustice and should not be permitted."

The Council adopted the following recommendations:

"1. Public health programs can be better carried out with the cooperation of the medical profession and the health authorities than with the antagonism or non-support of the physicians. For this reason, we believe that plans should be perfected by the Board of Health whereby the physicians of the different counties may, if they wish, have active participation in any health program that is instituted. We believe that the physicians can be utilized in the examination of school and pre-school children for remedial physical defects. We would recommend that, in those counties where objection has been raised to the wholesale immunizations by health nurses, this work be done by the physicians.

"2. Your committee would recommend the retention of the health nurses in those communities in which they are already at work, and that plans be instituted for securing nurses where there are none now. We believe that the services of the nurses will be invaluable in a cooperating health program. By defining the activities of the nurses so that there will

(Continued on page 118—Adv. xx)



When decalcification occurs during pregnancy

IT IS important to warn expectant mothers of the danger of calcium deficiency during pregnancy. For unless there is sufficient calcium to take care of the developing fetus, there will be a withdrawal of calcium from the maternal structures—resulting, among other things, in rickets, soft bones, and carious teeth.

Does this sound like a bad thing?

in itself is an essential source of calcium.

Recommend this delicious chocolate flavor food drink to expectant mothers. Not only does it contain Vitamin D—not only does it add 70% more nourishment to milk—not only is it tempting to finicky appetites—it supplies extra body-building proteins, carbohydrates and minerals so essential to the mother and to the coming child.

Recommend Cocomalt to your young patients, too. They'll love it. Cocomalt is high in concentrated food value—low in cost. At grocers and leading drug stores— $\frac{1}{2}$ lb., 1 lb., and 5 lb., family or hospital size.

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MORE
NOURISHMENT
TO MILK

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Literature and samples upon request.

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Jersey City, N. J.

(Continued from page 117—Adv. xix)

be no conflict with those of the physicians, invaluable aid will be rendered by them. In publicity work, in house visitations, in dietetic management, and in many other ways, the nurses should be used.

"3. Your committee would recommend that County Medical Societies actively participate in the management of tonsil-removing and other clinics.

"4. Your committee feels that it would be unwise to complete this report without cautioning the members of the different county medical societies that they must abandon their traditional position of isolation, and must take an active part in preventive medical and other health programs. We believe these activities will be conducted, preferably under the leadership of regularly licensed physicians; but when such leadership is not available without the cooperation of physicians and in spite of their antagonism. Such leadership entails planning, foresight, work, and cooperation to such an extent possibly not heretofore undertaken by the medical profession."

COLLECTING AGENCIES IN WEST VIRGINIA

The President's page in the September issue of the *West Virginia Medical Journal* contains the following remarks by President C. H. Maxwell, on collections:

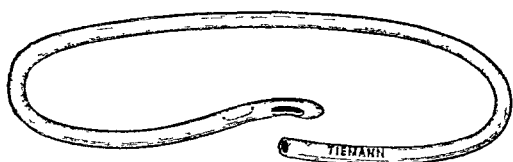
"I suppose I have not used proper discernment in placing my accounts for collection. I find that a justice of the peace or a constable has better success than regular collecting agencies, and their commissions are less and success is greater. The law specifies their commissions, which are extremely reasonable. If suit is brought the expense is borne by the doctor, and no commission goes to the officer. Often when a careless one finds the grist in the mill ready to grind, he will become interested at once in the amount of toll to be taken.

"If one makes a regular custom of seeing that bills are paid promptly, there will be little complaint of poor collections except in grievous times like the present. Personal appeals have worked best in most cases. Yet some substantial private citizen with discretion is satisfactory.

"I sometimes envy the adeptness of some doctors in getting pay for what they do. Certain ones have everybody understand that if their services are to be had they must be paid for. This is fine from a purely financial business proposition.

"When I think of the immense amount of work done by some of us that has never been paid for, I feel envious of those who have met with financial success by making those that owe them come across with the goods, thus allowing them and their families to live in ease and comfort.

The Lockwood Colon Tube



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This perfectly moulded colon tube made by TIEMANN of an exclusive, secret rubber compound, and embodying the famous "Velvet Eye" feature, may now be purchased at the following prices, postpaid.

Nos. 34, 35, 36	\$2.00 ea.
37, 38, 39, 40.....	2.50 ea.
41, 42, 43, 44.....	3.00 ea.
45, 46, 47, 48, 49, 50.	4.00 ea.

Send for descriptive circular, or better still, let us send you a tube so that you can actually examine it.

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CONFERENCES OF COUNTY SOCIETY OFFICERS IN IOWA

The December number of the *Journal* of the Iowa State Medical Society describes a new form of county society conferences in which two new features are introduced.

1. All the officers are included instead of the secretaries only.
2. The meetings are held in each of eleven councilor districts, instead of one for the whole State

The description reads:

"The 1931 conference of county society officers was held in a series of councilor district meetings instead of in Des Moines as in the past; and the remarkable attendance at these conferences as well as the resultant interest and activity, proved the plan highly successful. Secretary Parker proposed the district conferences as a means of promoting freer and more practical discussions of matters of common and local interest and the trustees approved the plan since it would greatly reduce the cost of the annual conference. Despite the fact that 245 county society officers, representing 87 county societies, attended the eleven councilor district conferences, the total cost to the Iowa State Medical Society was only \$207, as

compared with the \$1,558 cost of the largest previous conference, that of 1929, when 106 county society officers represented 73 counties.

"It is a noteworthy fact that of the 97 component county societies, 87 were represented at the various conferences, but still more significant was the active and general participation by all present in the discussions of State and county medical society activities. In several districts consideration was given to the formation of councilor district societies which are made practicable by the new division of the State into compact councilor districts.

"The programs of the conferences were practically the same, consisting of a presentation of State society activities expenditures and future programs, by various officers of the State society, followed by free discussion of these subjects and numerous local problems. In each case Dr Parker pointed out that in future conferences the ideal would be to devote the entire time to a consideration of local questions of medical organization and medical economics, which would be made the more feasible by the fact that such meetings are held in small compact groups."

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STUDY CLUB IN IOWA

A physician's club is described in an editorial in the December *Journal* of the Iowa State Medical Society, as follows:

"With the advent of better means of communication through the use of the automobile over hard surfaced roads, there is little in the way of medical education and medical contacts which is denied the physician in the smaller communities. At one time, not so long ago, it was felt that the physician who did not locate in or very near to a large city became 'buried in the country,' and unless he was sufficiently progressive to make frequent pilgrimages to a Mecca of learning soon became obsolete in his practice. It is, indeed, pleasing to know that here in our State a group of physicians, quite removed from the larger medical centers, have, through coordinated cooperation developed a Medical Study Society, patterned after and apparently functioning as successfully as the medical clubs in teaching centers.

"Several months ago the progressive physicians of Fayette, Clayton, Delaware and Buchanan counties developed a plan of organization for a study club in which any member in good stand-

ing with his respective county society might obtain membership.

"Members of the club must participate in the preparation and discussion of all club programs, and that each member would assist any other member with advice or counsel upon request. Realizing that the life of such an organization depends upon maintaining a very active membership, their constitution provides that any member absenting himself more than three meetings during the year without good cause becomes automatically expelled, thus making room for the election of a new member.

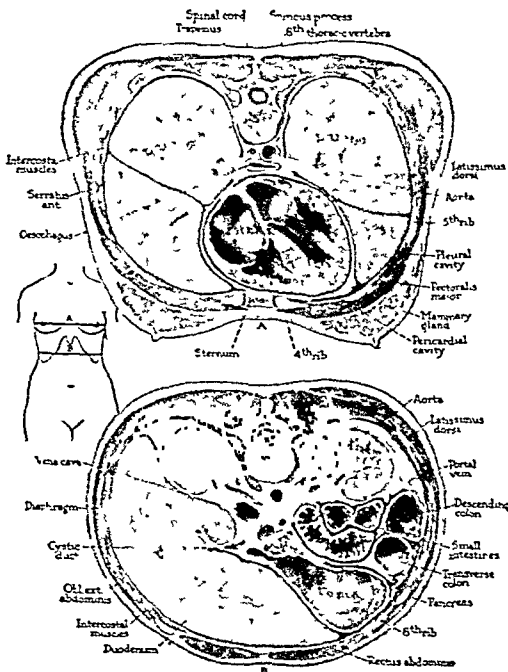
"The club held its first meeting in May of this year, and has continued with punctuality to date. Current reports would indicate that the society is eminently successful and that great benefit is being derived by participants in the club's activities. The following lists the subjects and speakers at the meetings held since the new club came into existence:

"Arrhythmias, ear conditions, hyperthyroidism, pulmonary tuberculosis, x-ray in chest tuberculosis, obstetric anesthesia, and medical experience in Samoa."

ANATOMICAL STUDIES

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Practitioner*

A Set of Anatomical Studies (in book form) furnished to physicians on request—upon receipt of 20c to cover mailing costs.



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(Key figure at left shows levels)

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MEDICAL ECONOMICS OF COLORADO, INC.

The December number of *Colorado Medicine* contains the proceedings of the Annual Meeting held on September 15-17, 1931, in Colorado Springs. The report of the Committee on Medical Economics discussed fee bills, accounting, collecting, professional advertising, hospital relations, the indigent, and public health units.

The Committee also gave much thought to a plan for incorporating the department of economics to the State Society, and presented the following outline of the organization and scope of the corporation.

"MEDICAL ECONOMICS OF COLORADO, INC.

"Organization

"(A) Executive

"1. Board of Directors

"a. Seven members; one each from Denver, El Paso, Pueblo, four from state other than above counties.

"b Method of election, by stockholders through House of delegates, from nominations by advisory council (Board of Trustees, Colorado State Medical Society.)

"2. Advisory Council (the Board of Trustees of Colorado State Medical Society shall constitute the advisory council of Medical Economics.)

"(B) Financial

"1. Authorized capital, \$1,000,000.00

"2. Authorized sales, 1,000 shares.

"3. Par \$100.00, quote \$150.00, \$100.00 into capital stock, \$50.00 into surplus.

"4. Initial paid-in capital, \$100,000.00.

"5. Initial paid-in surplus, \$50,000.00

"Object and duties of Board of Directors

"1. Transact all business of the State Society.

"2. Direct all policies pertaining to Hospital Relations.

"3. Direct in cooperation with the Advisory Council all policies pertaining to Public Relation with allied professions.

"a. Legislative Program.

"b. Public Health, Boards and other similar activities.

"c. Relations with Executive Staffs of Federal, State, County and Municipal hospitals.

"d. Relations with State Board Medical Examiners.

"e. Professional advertising.

(Continued on page 122—Adv. xxiv)



FOOD FERRIN

THE BEST IRON FOR BLOOD BUILDING



PHYSIOLOGISTS long have known that the best iron for blood building is to be found in the green leaf of certain vegetables.

The trouble is in getting patients to eat or tolerate the excessive amounts of spinach, etc., which their anemic condition would demand.

However, it is possible to reinforce the organic iron in the regular diet by simply adding the scientifically prepared food-iron concentrate

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Extracted and concentrated from the chlorophyll of plants, Food-Ferrin has been described as a natural and physiologic source of iron.

Food-Ferrin is easy to take, easily assimilated — free from the well-known objections associated with the old-fashioned iron preparations.

Let us send you a physician's sample bottle.

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Dept. NYM-1-32, Battle Creek, Michigan

Send me without obligation, literature and trial bottle of Food-Ferrin.

Name

Address

PROGRAM OF ANNUAL MEETING IN TEXAS

The December number of the *Texas State Journal of Medicine* has the following editorial description of a new feature of the scientific program of the annual meeting to be held May 5-7, 1932, in Waco:

"The Council on Scientific Work has decided upon a radical change for the scientific work of the session. It is believed that the innovation will be received by our members as a splendid solution of our greatest problem. It is a sort of compromise between clinics or scientific assemblies, and the character of meetings heretofore held.

"First, the Council will request the House of Delegates to so arrange its meetings as to interfere as little as possible with the scientific work of the Association. A plan has been devised which it is believed will help to do this and to which the House of Delegates will likely accede. One of the criticisms usually advanced in connection with our annual sessions, is that delegates are not able to attend the meetings of the scientific sections, which is a two-edged sword.

"Second, the meetings of the sections have been so arranged as to leave clear the last two afternoons of the session.

"Third, the scientific sections will join in the General Meetings, on these two afternoons, the two programs being filled by the distinguished guests of the Association. In order to do this, it has been found necessary to crowd things a bit, beginning the meetings a little earlier and adjourning a little later, with a minimum time for discussions. It is believed that those who attend the annual sessions will warmly approve of the change."

It is requested that those who have papers to offer communicate with the proper section officers without delay. The program will be closed irrevocably January 15th. Other things being equal it is, of course, a matter of first come, first served.

THE CLINICAL SOCIETY OF THE NEW YORK POLYCLINIC MEDICAL SCHOOL and HOSPITAL

345 WEST 50TH STREET
NEW YORK, N. Y.

STATED MEETING

Monday, Feb. 1st, 1932
8:30 P. M.

Program

1. DUODENITIS. (Lantern Slides), Edward Leland Kellogg, M.D.
2. SOME PATHOLOGICAL LESIONS IN SUDDEN NATURAL DEATH. Thomas A. Gonzales, M.D. (by invitation)
3. ESOPHAGEAL STENOSIS. (Motion Pictures and Lantern Slides). Chevalier L. Jackson, M.D. (by invitation)

Discussion opened by Harlow Brooks, M.D. General Discussion.

Collation

QUACKS IN IOWA

The editor of the *Journal of the Iowa State Medical Society* has written an editorial for the December issue in which he proves that Iowa is getting a reputation for getting rid of quacks. He writes:

"In the Omaha *World-Herald* of November 15th appears a full-page feature article headed, 'Rounding Up Medical Quacks in Iowa.' The article was prepared by one having access to the confidential files of the Law Enforcement Division of the Iowa Department of Health and accurately deals with the recent activities of this department. It is significant that these law enforcement activities should have been considered of sufficient interest and importance to constitute copy for a full-page story in the Nebraska daily. Our sister state evidently approves of our stand on law enforcement and our effort to rid Iowa of the public bloodsucker—the medical quack.

"An editorial in the Mason City *Gazette* entitled 'Iowa Lures Cancer Quacks,' states 'Iowa is "getting played for the sucker" by the cancer cure quacks. Whenever the authorities of another state clamp down on the faker, he invariably makes tracks for this state.' If this statement is true one can readily appreciate the attitude of the neighbor state in seeing news in the Iowa cleanup.

"With our State Department of Justice cooperating wholeheartedly with the Department of Health's investigators, positive action has been obtained of which we may justly be proud. The record is a good one and we have made and are making rapid strides toward giving the citizens of the state the protection in health matters that their lawmakers provided. Iowa is cleaning up and before long will be definitely off the sucker list of medical quacks."

Iowa seems to have been the happy hunting ground of the illegal practitioners; but within the last two years the State authorities have made great progress in eliminating the illegal practitioner, the quack and the faker.

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ANESTHESIA—A ROUND TABLE DISCUSSION

On March 19, 1931, the Buffalo Surgical Society held a round table discussion on the subject of anesthesia, at which leading anesthetists of the city were invited to participate. The titles of the papers and their order of reading were as follows:

Ether and Nitrous-Oxid Anesthesia—Dr. J. H. Evans.

Avertin Anesthesia—Dr. E. H. Stumpf.

Spinal Anesthesia—Dr. J. B. Mulholland.

Infiltration Anesthesia—Dr. Marshall Clinton.

Carbon Dioxide, its Aid to Anesthesia—Dr. E. H. Stumpf.

Blood Pressure as a Safeguard in Anesthesia—Dr. C. J. Durshordwe.

"Don'ts" in Anesthesia—Dr. T. Craig Burns.

ETHER AND NITROUS-OXID-OXYGEN ANESTHESIA

By JOHN H. EVANS, M.D., BUFFALO, N. Y.

AS this is the opening paper in a symposium on the various kinds of anesthetic agents it seems advisable to consider briefly the field of anesthesia in its relation to the patient and the surgeon before dealing with the merits and demerits of ether and nitrous-oxid.

The anesthetist is an important member of the surgical team for the reason that the life of the patient is in his hands during the operation. A mistake in the dosage of the anesthetic or a failure to comprehend the condition of the patient may spell disaster. The ability to administer a given anesthetic so that the patient leaves the operating room alive is but a minor part of the anesthetist's duty, the major part being to know when the patient begins to show signs of approaching shock so that its establishment may be prevented and to judge intelligently as to the amount of surgery the patient is able to withstand. This he cannot do unless he has studied the patient beforehand and is aware of the patient's handicaps whether they be in defective kidneys, liver, heart, arteries, blood or lungs. His study should include a history of the case; for example, a loss of weight is a factor which detracts from the patient's endurance. An anesthetist has no right to anesthetize a poor-risk patient, especially for a serious operation without knowing as much about the patient as the surgeon does. Sometimes, unfortunately, this is very little.

The anesthetic and the anesthetist are closely associated with the operation. The anesthetist should be in position to observe the operation so

that he can anticipate the needs for relaxation. When he cannot see, it is necessary to carry the patient in a constantly deep anesthesia, thus unnecessarily inflicting upon the patient an excess of the anesthetic.

If the surgeon and anesthetist held more frequent conferences in selecting the anesthetic for the handicapped patient, the mortality rate would probably be reduced.

Anesthetics as a whole fall into two distinct groups, namely the revocable and the irrevocable. The revocable anesthetics are under direct control of the anesthetist, that is, the dosage may be varied at will and, if an overdose is accidentally given, it may be eliminated and the patient brought back to the zone of safety. This group is made up of the inhalation anesthetics, which include ether, nitrous-oxid, ethylene, chloroform and ethyl chloride.

The irrevocable group consists of those agents which, when once administered, cannot be recalled. If alarming symptoms develop, all that can be done is to combat them. It is impossible to reduce the amount of the agent in the circulating blood. In this group belong the various local anesthetics, cocaine, novocaine, neocaine, quinine urea hydrochloride, stovaine, sodium amytal, pernocton, avertin and colonic oil-ether. These agents are used to induce local, block spinal, intravenous and rectal anesthesia.

As the specialty of anesthesia has advanced and surgeons have become more alert to the importance of the anesthetic in the recovery of the

patient, there is a tendency to get away from using any one anesthetic routinely and to study the requirements of each case individually, especially the poor-risk patient. If any anesthetic is to be used routinely it should be selected from the revocable group. However, there are two agents in the irrevocable group namely, novocaine and quinine urea hydrochloride, whose toxicity when used for local anesthesia is so slight that their use routinely is justifiable.

The routine use of spinal, intravenous or rectal anesthesia is, in the writer's opinion, not justifiable for the reason that these methods of anesthesia are not yet sufficiently well developed as to make them entirely safe. They should be employed only in those cases where their special advantages more than out-weigh the danger incurred by their use.

Ether and nitrous-oxid-oxygen are the two most widely used anesthetic agents in this country and Canada. Each has distinct advantages and disadvantages. Used together they are capable of satisfying both the patient and the surgeon. Nitrous-oxid furnishes a pleasant induction for the patient and ether furnishes relaxation for the surgeon.

The advantages of nitrous-oxid-oxygen over ether are that it is pleasanter to inhale, is less irritating to the respiratory mucous membranes, disturbs metabolism less, does not interfere with the function of impaired kidneys as much and is more quickly eliminated.

The advantages of ether over nitrous-oxid-oxygen are that it is more reliable in producing muscular relaxation, is safer in the hands of the novice, does not require an expensive apparatus for its administration and is less costly.

Their comparative safety is dependent upon the qualifications of the one administering them. A report of deaths from anesthesia means very little

if the qualifications of the anesthetist are left out of the picture.

It is impossible to obtain a correct mortality rate for any anesthetic for the reason that the deaths are not published.

Dr. Keen has compiled records of 262,002 ether anesthetics with a death rate of one in 7,705.

Dr. Teter collected reports totaling 1,161,820 nitrous-oxid-oxygen administrations with but two deaths.

Dr. Buxton reports a compilation of 1,001,000 cases of nitrous-oxid-oxygen anesthetics with but one death.

Dr. Gwathmey estimates the rate in major surgery as being one in 20,000 with nitrous-oxid-oxygen.

The death rate from nitrous-oxid is, no doubt, much greater than these figures indicate.

In the hands of the qualified anesthetist the death rate from both ether and nitrous-oxid should be practically nil, the one having no advantage over the other as far as the safety of the patient during the operation is concerned.

The writer believes, however, from his experience of approximately 30,000 anesthetics, that the postoperative mortality and morbidity are less with nitrous-oxid-oxygen than with ether.

Although it has been repeatedly emphasized during the past twenty years that nitrous-oxid is a dangerous anesthetic in the hands of the untrained, yet surgeons have not become aware of this fact generally and many are willing to employ the novice who is equipped with a gas-oxygen apparatus.

The reason why nitrous-oxid-oxygen anesthesia is not safe except in the hands of those who have been properly trained is that the signs of deep anesthesia and approaching consciousness closely resemble each other and the novice is inclined to push the nitrous-oxid when he should be administering pure oxygen.

AVERTIN ANESTHESIA

By ELMER H. STUMPF, M.D., BUFFALO, N. Y.

MUCH interest has been aroused in Europe and this continent in the basal anesthetic avertin or tribromethylalcohol first produced by Willstaetter and Duisberg in Germany four years ago. Many reports of pharmacologic studies, clinical observations, together with articles by anesthetists, have appeared in medical journals, mainly European. In this country its use has been increasing rather rapidly in the past two years. Investigation of this drug, even though reports have been made of over 300,000 cases, is being continued in order to throw light on certain aspects of its action, indications and contraindications.

The early investigators were naturally handi-

capped by lack of knowledge of its effects, and in the attempts to produce complete anesthesia with this drug, a number of fatalities resulted. It was not until the dosage was reduced to a point where its action became basal, requiring the addition of either general or regional anesthesia to produce the complete anesthetic effect, that its use became widespread, first in England, then in the United States and Canada. Anesthetists generally, we have found, use a moderate dosage of 70 to 90 milligrams of avertin fluid per kilogram of body weight for the average adult patient, the variation depending upon physique, age, and general physical condition; but the Germans are now advocating from 85 to 95 milligrams.

This avertin fluid is a solution of avertin in amylene hydrate, 1 cc containing 1 gm of the drug. It is readily soluble in water. The solution of avertin fluid in water (distilled) must be freshly prepared for each case, and at a moderate temperature of 100° to 104° F. It may be a few degrees below this limit, but extreme care must be exercised not to allow the temperature of the water at the time of mixing to rise higher than 104° F. Above this temperature hydrobromic acid is split off with formation of dibrom-acetaldehyde. This will cause marked irritation and even necrosis of the intestinal mucous membrane. A few drops of Congo red are used to test the solution at each preparation. A pink color signifies the solution is stable, while a violet tinge indicates that deterioration has taken place, and it must not be used. The dosage is estimated from tables depicting the exact amounts of the ingredients for each 2 kilograms of body weight up to 100 kilograms.

The patient is prepared in the usual way, with sedation the night before operation, when the cleansing enema is given. The rectal irrigation should not be given within two hours before injection of the avertin solution, as the fluid remaining in the bowel may delay absorption. We advise against the use of morphine preliminary to operation, since it increases the depressing effect of the avertin on the respiration. The injection is made rectally with the patient on the left side. We prefer to have him (or her) on the surgery cart. The room is then darkened. As avertin is rapidly absorbed from the rectum, consciousness is lost quickly and quietly. Usually within five minutes the patient's eyes close and he will respond languidly to questions. In fifteen minutes more he is usually ready for the operation.

There is usually a decline of 10 to 30 mm in the systolic blood pressure, which seems to be temporary and may be effectively controlled by ephedrine. The breathing is quiet and regular, somewhat depressed, and the color is usually normal. It is of supreme importance that the air passages remain clear, so that respiration may be in no way impeded. It may be necessary to add some carbon dioxide in the mixture of gases being used for anesthesia. Experiments have been made on dogs showing the beneficent effect of a free respiration on the blood pressure. The amount of nitrous oxide or ethylene used may be reduced markedly, increasing the oxygen to as much as 50% or more. The narcotic effect of the avertin usually begins to disappear in 45 minutes although the decrease in the density of narcosis is gradual. We advise against its use in combination with spinal anesthesia because of the depression of circulation and respiration.

The patient will usually fall asleep after regaining consciousness momentarily and may sleep from two to twenty-four hours or more. The

amnesia is a good feature, patients having only a hazy recollection of events for the first several days after the operation. Liquids are tolerated soon after return to bed and nausea is infrequent. The patient should be constantly watched while in this somnolent state, so that the air passages remain clear. Frequent shifting of position is advocated, of course, as soon as possible after the effect of the narcosis has disappeared, as with other anesthetic agents.

Data recently submitted by Widenhorn of Freiburg throw significant light on the effect of avertin on the blood. Tests were made before and after operation, avertin being used alone as the anesthetic agent, and in smaller doses with ether, nitrous oxide, and ethylene as supplementary anesthesia. It was shown that avertin alone lessened the carbon dioxide combining power of the blood markedly, producing a prolonged period of acidosis lasting twenty four hours or more, also showing a large increase in blood sugar. When combined with ether the effect was almost the same, only slightly less in degree. Avertin combined with nitrous oxide oxygen or ethylene oxygen anesthesia produced little change in the carbon dioxide combining power of the blood or the blood sugar. From these studies it would appear that avertin used as basal anesthesia with either nitrous oxide or ethylene offers the best results.

Because of its irritating qualities avertin is contraindicated when lesions of the rectum are present. Other contraindications are an impaired circulatory system, severe organic disease of the liver, serious bilateral disease of the kidneys, acidosis, debility, grave cachexia, excessive obesity and dehydration. While children are more tolerant to avertin than adults and no allowance need be made for youth in determining the dose, it should not be used in the aged. It is much more efficient in small dosage, the effect depending more on the rapidity of its action than the amount used. If the blood pressure is low, 50 milligrams of ephedrine in the enema will stabilize it nicely.

While avertin has been found to be ideal in brain and cord surgery, producing fewer post-operative complications, the writer has still to be convinced that its advantages outweigh its disadvantages when used for general surgery. Considering the possibility of irremediable damage through unsuspected rectal liver or kidney pathology, the depression of respiration and circulation, the difficulty of gauging the depth of anesthesia and maintaining a proper level with supplementary nitrous oxide or ethylene and the tendency to hypoventilation of the lungs in the postoperative sleep because of possible inattention to obstruction of the air passages it seems that the barbiturates combined with nitrous oxide or ethylene or gas ether sequence anesthesia produce very nearly the same hypnotic effect, and more safely.

SPINAL ANESTHESIA

By JOHN B. MULHOLLAND, M.D., BUFFALO, N. Y.

IN recent medical literature there has appeared a tremendous amount of discussion on spinal anesthesia. Most of the surgical and anesthetic meetings have devoted a section to this topic. In this manner a vast wealth of experience and information has furthered the advancement of this form of anesthesia. According to some, spinal anesthesia should be considered an analgesia, because all forms of sensation are not abolished by the intra-spinal block, which consists of an injection of anesthetic solution into the subarachnoid space, bathing the roots of the cord within the dural cavity. It will be observed that loss of sensibility to pain will constitute a complete and successful operative state; yet the patient may tell you of tactile sense, pressure, traction and sense of heat and cold.

It is not the intent of the writer to cover the ponderous work that has been done on spinal anesthesia, but to bring briefly to your mind that Corning was the first to experiment with it in 1885—to 1888. Dr. Bier of Germany really got the credit for its practical application to surgery. Since that time spinal anesthesia has run the gamut of pit-falls, starting with cocaine, tropocain, stovain and novocain as the anesthetic agents. Cocaine probably contributed largely by its toxic action, to the disrepute that befell this form of anesthesia, for a considerable period. A few men, firm in their convictions as to the merits of spinal anesthesia, withstood the barrage of criticisms for a number of years. One, I might add, was Dr. Babcock, who kept improving his methods and solution, so that he has lived to see the barrier of prejudice melt away.

The cerebrospinal fluid is continually being secreted by secretory or epithelial cells of choroid plexus and ependyma membrane. The volume of fluid ranges from 50-150; average 100 cc. in the subarachnoid space, the ventricles of the brain and the central canal of the spinal cord, the specific gravity of clear watery fluid being 1.004-1.007. The movement of fluid is drained from above down through the arachnoid, sheath of the spinal and cranial nerve roots and perivascular lymphatic sheaths. Permeability is from within outward and endosmosis does not occur. The pressure of spinal fluid is about 100 mm. water or 10 mercury.

The principal agents in use today are novocain, stovain and nupercain, each of these agents having been modified or enhanced by additional medication to bring about solution, which in themselves offer certain advantages in technic.

Novocain may be used alone in purified crystals known as neocain. This is dissolved in the patient's own spinal fluid. Dosage is usually about 1 centigram to 15 pounds body weight. In cer-

tain clinics this method is highly admired. Often no premedication is used and no ephedrine nor adrenalin employed. Diversity of opinions always brings forth newer ideas. Barker used glucose to make a heavier-than-spinal fluid mixture with novocain solution. The solution with glucose was designated as non-diffusible, while solutions of novocain or stovain with alcohol added to make lighter solutions, were known as diffusible. Lactic acid has been added to solutions to overcome chemical action of sodium chloride or other alkalies, which deteriorate the action of novocain.

Stovain and strychnine have been used extensively in the past. Stovain, lactic acid, absolute alcohol and aqua distilled, is one formula used by Dr. Babcock. He says after using many preparations he prefers stovain as a basic agent. Nupercain is a quinine derivative used in 1-200 solution, 2 cc. for spinal injection in the usual manner. Four to six hours anesthesia is claimed. Some surgeons combine nupercain $\frac{1}{2}$ and neocain crystals $\frac{1}{2}$ for a long anesthesia. Spinocain, developed by Dr. George Pitkin, has a novocain base with strychnine and gliadin (which is the mucilaginous portion of wheat starch) and delays dissemination of anesthetic solution. Alcohol is added to make it lighter than spinal fluid. Strychnine is also introduced to off-set depression and the toxic action of novocain.

Spinocain by now has reached a wide acquaintance of users. Many have been greatly pleased with the action of this solution because it offers:

1. Controllability.
2. Sure and longer anesthesia.
3. Less shock.
4. Less acidosis.
5. Less dehydration.
6. Less suppression.
7. Less headache.

Sphincter paralysis is seldom seen with this solution. It must be thoroughly understood that in using any method of spinal anesthesia, the advocate's instruction should be rigidly adhered to in order to attain the best results and to avoid more hazards.

Stovain is slightly more toxic than novocain. In experimentation on animals with 2 or more repeated injections of stovain, there later appeared degeneration of some of the anterio-lateral tracks of the cord itself, but no action on roots. Repeated injections of novocain did not cause any degeneration of cord or roots. Likewise the examination of spinal fluid following stovain injection in humans sometimes shows an increase of the cell

count often to 50, while following the use of novocain, no increase of cell count appeared. Barbitals has shown a decided antidote action for large doses of novocain and for this reason, barbitals has been advised in premedication.

The use of alcohol in the solution acts not only as a preservative, keeping the solution sterile, but tends, I believe, to enhance the anesthesia, also aiding in diffusibility and making the solution lighter for control feature. It is used in 7-10% amounts. Few cases of abducens paralysis have occurred since its adoption.

It is needless to say that this type of anesthesia should not be used as a routine. Some consideration must be allowed the patient. Willingness of the patient should come first if no operation is expected. Cases in which you know spinal anesthesia is best, the patient must be consulted and offered truthful explanations for its advantages. The patient will usually accede, if he has confidence in his doctor. Pushing spinal anesthesia on patients who are ward cases or compensation cases, without their knowledge, will soon bring condemnation on this invaluable form of anesthesia. Some people detest ether and some prefer to be conscious, but the success of many operations depends on the relaxation which can be obtained best with this type of anesthesia. In short, any patient that has the contra-indication for general anesthesia, usually becomes a suitable subject for spinal anesthesia (anatomically limited, or from the diaphragm down).

<i>Favorable</i>	<i>Unfavorable</i>
Diabetes	Mental instability
Toxemia	Severe shock
Severe infections	Advanced cardiac lesions
Acute T B.	Pleural effusion
Chronic T B	New growth in chest
Chronic nephritis	Advanced arterio sclerosis
Uremia	Hypotension below 80 mm systolic pressure
Cholemia	
Eclampsia	
Mitral stenosis	
Hemiplegia	
Alcoholism	
Asthma	
Drug addicts	

These various conditions are not particularly absolute, but this is where the experience of the surgeon and anesthetist counts, in being able to eliminate the risks. As one prominent surgeon says "You get a hunch."

Do not expect the debilitated patient with one foot on a banana peel and the other foot in the grave to weather the ordeal. Robust youth with firm tissue, stout heart and courage do better under this form of anesthesia.

Premedication. Give Barbitals in the evening and morning preceding operation, 5 gr each to overcome toxic action of novocain, and morphine

in fractional doses, $\frac{1}{4}$ gr, 75 minutes before operation. Also scopolamine about 1/200 to act on the intrinsic nerve fiber of the vagus. These drugs used judiciously offer a great deal of solace and tranquilize the patient. Many patients sleep along during the anesthesia.

Technique. Personal supervision in sterilization of needles and solutions should be encouraged by the anesthetist. The procedure of administration should be conducted in the fashion of a minor operation—under aseptic conditions, skin to be prepared from nital cleft to costal angle with iodine and alcohol, and patient draped. Select the interspace and deposit local infiltration of skin and supraspinous ligament with novocain and ephedrine. Test needle for breakability, go in a straight line between interspinous ligament to the dura, a snap will be transmitted to the operator when going through at this point. Use small calibre needles and do not allow too much of the spinal fluid to escape, as this prevents headache later. Use Luer-lock needles that do not permit air to enter or fluid to escape and inject solution very slowly. On the tap, if spinal fluid shows pus, do not inject but treat case for meningitis. Yellow spinal fluid or Zanthochroma is indicative of stasis, very often brain tumor, in which case do not inject solution as the results are usually disastrous. If fluid is bloody, wait for fluid to clear before using syringe. Known cases of cerebro spinal syphilis should not be anesthetized as their symptoms are often aggravated.

After the patient has been injected, he may be put in slight Trendelenburg position. The eyes may or may not be covered, to suit the wishes of the patient.

The reactions presented by the patient are usually of transient nature and require intelligent care rather than actual treatment. The symptoms are variable and may be expected to appear in this order:

- 1 Slight flush of the face from ephedrine
- 2 Slight drop in blood pressure
- 3 Slight nausea
- 4 Consciousness of traction
- 5 Occasional complaint of pain left shoulder (phrenic neuralgia)
- 6 Slight pallor
- 7 Restlessness

Many of these are dependent on fall in blood pressure, in which case 5 mm of adrenalin may be injected in the deltoid, massaging the area and repeating if necessary.

Respiratory embarrassment is an alarming symptom, though frequency and gravity are proportional to the amount of novocain used and the method of its control, also on the experience of the anesthetist. Anesthesia is too high, when patient cannot talk above a whisper, or there appear

a mild degree of cynosis and the blood pressure may register zero over nothing. Then increase the Trendelenburg position and use oxygen. During the operation words of cheer and confidence should be offered to encourage the patient; of course, no disquieting news should be given to alarm the patient. The surgeon can contribute greatly to the success of spinal anesthesia by operating with speed that is consistent with thoroughness. Gentle handling of viscera in the manner practiced under local anesthesia can be expected to give the patient better convalescence from increased amount of abdominal distension as a post-operative factor. In Cesarean section, use no premedication because it causes difficulty in starting respiration in the new-born. Uterus,

ureters and intestines contract under spinal anesthesia and involution of uterine muscles occurs uninterrupted. Spinal anesthesia is contra-indicated in ruptured ulcers of the stomach or bowel.

The percentage of failure at anesthesia runs from 1% to 30%, depending on the operator. A review of deaths from spinal anesthesia shows about 1-1,000.

An absolute and uncompromising inspection of spinal anesthesia carefully conducted, will convince you that it is best for greatest relaxation, less post-operative sequelae and time saving. A short circuit to recovery. It has a distinct place in surgery. Its scope has widened and will continue to widen as indications and contra-indications are more clearly understood.

INFILTRATION ANESTHESIA

By MARSHALL CLINTON, M.D., BUFFALO, N. Y.

Infiltration anesthesia was introduced many years ago for the performance of various kinds of surgical procedures. While never developing into a method of choice in general work, it has found a place in the armamentarium of the surgeon.

During the development of infiltration anesthesia, it was found that there are two main factors on which the efficiency of this method depends—first, the concentration of the drug used; second, the degree of infiltration of tissue by the solution. The stronger solutions of any of the cocaine derivatives were more efficient in infiltration anesthesia as the various sensory nerve filaments were more quickly brought into contact with the stronger solutions.

It was found after trial, however, that very weak solutions could be used and their efficiency depended upon. Their success depends first, on the complete infiltration of all the tissues in the field of operation, and second, waiting a proper length of time until these weaker solutions could affect the filaments in the operative area. Today, we have derivatives of cocaine which are almost non-toxic. Years ago, we used novocaine in 1/2, 1/5, 1/10 of 1% solution. The method of anesthesia, not the drug is important.

An experiment which we reported many

years ago in the State Journal succeeded in producing complete anesthesia in a double herniotomy by the use of sterile water, but to produce anesthesia, we had to produce the maximum amount of edema of every structure to obtain an anesthetic effect. When inflammatory lesions reach the stage of edema, pain automatically begins to decrease which is the same effect as that produced by infiltration anesthesia.

In observing local anesthesia operations, we think that the students are not taught in the Medical School as they are in the Dental School, that after the injection of a local anesthesia, especially when a weak solution is used, a period of five or more minutes should elapse before any surgical procedure is attempted.

We still believe that in an ordinary operation, when the more painful structures such as skin and peritoneum are anesthetized before incision and the peritoneum blocked after the operation by 1/4 of 1% solution of quinine urea hydrochloride, we have materially diminished the volume of pain impulses that patients receive. Their postoperative convalescence is generally more comfortable than when quinine urea has not been used.

The big point of local anesthesia is that tissues have to be well infiltrated and hands and instruments must be used with gentleness.

CARBON DIOXIDE—ITS AID TO ANESTHESIA

By ELMER H. STUMPF, M.D., BUFFALO, N. Y.

THAT carbon dioxide is an essential factor in the smoothly and safely conducted inhalation anesthesia has long been recognized by anesthetists. This has been particularly so since nitrous oxide came into general use as an anesthetic agent with the manufacture of various types of apparatus for its delivery. The principle of re-breathing is used in these machines, whereby on the average 300 to 400 cc. of the patient's exhaled breath, depending on the tidal volume, are re-inhaled, thus using only 100 to 200 cc. of fresh gases with each respiration.

This practice has been found to result in

1 A saving of gases

2 A stabilization of respiration through the stimulating effect of the carbon dioxide on the respiratory center

3 The replacing of the carbon dioxide eliminated from the blood stream through the increased tidal respiration of anesthesia, thus preventing acapnia or lack of carbon dioxide, the tendency being rather to hypercapnia, thus conserving the alkali reserve of the blood, which depends on the carbon dioxide concentration, and guarding against post-anesthetic acidosis

4 The reduction of post-anesthetic nausea to a minimum because of this conservation of the acid base balance

5 The reduction of the amount of the anesthetic agent needed, especially when ether is used a much lower concentration sufficing

In recent years, following extensive experimentation by the physiologists Henderson and Haggard, and various anesthetists, notably Watters, Sword, Chipman and others, the manufacturers have equipped the machines for the use of four gases, nitrous oxide, ethylene, carbon dioxide, and oxygen. Many anesthetists are now using carbon dioxide from the tank, either in the form of a mixture with oxygen, called "carbogen," or pure, in conjunction with the other gases at various stages of the anesthesia. It has been found to materially assist in the smooth induction of a gas ether sequence in concentrations as high as 30 per cent. The blood pressure rises, particularly marked in those cases where the blood pressure has fallen below normal, the rise being due, according to Hanau, to an increase in the supranal output. It stimulates the vasomotor centers dilates the heart but increases diastolic and systolic volume.

We have found it of great value at the conclusion of gas oxygen ether anesthetics to "de-etherize" the patient, and have so used it for the

past several years. The administration of a 5 to 10 per cent mixture of carbon dioxide and oxygen for several minutes at the conclusion of the operation produces a thorough hyperventilation of the lungs and the ether is rapidly eliminated. Reflexes return promptly and, by the time the patient returns to the bed, recovery from the anesthesia is very nearly complete.

In addition to this "de-etherization," the hyperventilation of the lungs overcomes the condition which is the prelude to post-anesthetic atelectasis. In a prolonged operation, the depression in the sensitivity of the respiratory center to stimulus, caused by the preliminary medication of morphine and the anesthesia, proves too much for the normal 5.5 per cent pressure of carbon dioxide in the blood to overcome. The diminished respiration which you may notice when the mask is removed causes a clogging and blocking of the lung air ways or bronchioli by plugs of mucus which may easily lead to an atelectasis and the conditions characteristic of an undrained infection within 24 to 48 hours. This is often aided by the patient's deliberate lessening of tidal respiration after consciousness has returned because of the pain from a high abdominal incision. The center responds nicely to 5, 7, 10 to 15 per cent carbon dioxide according to the degree of depression, the 5 or 7 per cent mixture being sufficient in the average case.

When post anesthetic atelectasis has developed we have administered carbon dioxide and oxygen with gratifying success. The marked and rapid rise in temperature, the trichypnea, the tachycardia and general distress are usually relieved promptly. There is no better way to abort the incipient pneumonia.

In conclusion, we are using carbon dioxide and oxygen routinely at the end of the operation to hyperventilate and "de-etherize" the patient when ether has been used. We have the tank close at hand during a spinal anesthesia in case of severe respiratory depression, although we have been fortunate thus far in not needing it. We have observed that it has overcome respiratory failure during anesthesia when oxygen alone, delivered under pressure, had failed. We administer it at the first sign of atelectasis or embarrassed respiration from other causes after operation. We have found it valuable in post anesthetic hiccup. While expert anesthetists use mixtures up to 30 per cent carbon dioxide, we would caution against its use by the inexperienced in mixtures over 10 per cent which is normally the border line between stimulation and depression.

BLOOD PRESSURE AS A SAFEGUARD IN ANESTHESIA

By C. J. DURSHORDWE, M.D., BUFFALO, N. Y.

THE purpose of this paper is not to reveal anything new, but to review some of the methods which we have at our disposal, that, when applied, aid in safeguarding the life of the patient. And safeguarding the life of the patient, when the final word is said, is the primary responsibility of both anesthetist and surgeon.

These methods require a certain amount of extra work that is easy to omit for it, seemingly, has little if any bearing on the actual giving of the anesthetic. However, the routine pre-operative examination, besides giving us an opportunity to become acquainted with the patient and win his confidence, affords us certain definite data that enable us to select the type of anesthetic most suitable in carrying the patient smoothly and safely; and also enable us to make a prognosis of the patient's chances of withstanding both the anesthetic and the shock of the operation.

In entering into a discussion of the value of recording blood pressure readings before and during anesthesia, I feel that the technique is familiar to all and a description of it may, therefore, be omitted. However, it might be well to reiterate the general principles governing the blood pressure picture and to attempt to show the importance of the correlation of these principles to the surgeon and the anesthetist in safeguarding the patient.

Primarily, blood pressure depends on the force of the contractions of the heart, the elasticity of the vessel to accommodate the additional blood from the contracting heart, the amount and viscosity of the blood and the vasomotor control.

The systolic pressure is the pressure of the heart at the height of contraction; the diastolic pressure is the pressure of the resting heart; the pulse pressure is the difference between the two; or as Adams states—the "working pressure" of the heart.

The diastolic pressure is more constant and, therefore, a better guide than was formerly supposed. Langford, in a recent article in "American Medicine," made several statements with reference to diastolic pressure which are important enough to bear repeating. He says: "The diastolic pressure is less variable and if persistently up to 100 or more, kidney complication is becoming important. If ranging 120-160 (diastolic) and not reducible by corrective measures, the kidney disease is grave and the phthalein efficiency will be found below 40%. Essential hypertension is a misnomer, or rather, it is cardiorenal disease in its incipency." These statements are borne out by a study of insurance risks from the companies' points of view. They place a diastolic pressure above 94 as in the "possible danger zone." Evans, even more conservatively, places the normal between 74 and 90.

The systolic pressure varies greatly as it is easily influenced by physiological factors: fear, excitement, anger or nervous strain and conversely, does not hold the importance once attributed to it. Grover states that "while the systolic pressure taken alone may give some idea of the vascular tension, it is of little value in interpretation." One of New York's larger insurance companies places 140 mm. as a normal maximum for the systolic pressure of healthy men and women. "It is quite within the limits of safety," says Evans, "to consider the normal systolic pressure as 100-140 mm. in adults regardless of age, sex, height or weight."

Pulse pressure, which is credited by Adams with being the most important single feature of the blood pressure picture that aids in the prognosis of the ultimate outcome of the operation, is placed normally between 39-50 mm.

It would be very desirable, were it possible, to make a set of rules governing the limits between which the systolic, diastolic and pulse pressures were safe or dangerous as the case might be. Unfortunately, this cannot be done. Each case must be studied and treated as a separate problem. Granting that certain factors are more important than others, it is the consideration of the blood pressure picture as a whole that affords us the best data for interpretation.

Barach has worked out a rule of energy index which is based on the amount of energy expended by the cardiovascular system per minute that is very simple to apply and is a useful working guide to the ultimate outcome. Normal range of safety is placed between 13,000 and 20,000 and is computed by multiplying the systolic and diastolic pressures by the pulse rate and adding their results.

Moots evolved an index of operability that utilizes the ratio between the pulse pressure and diastolic pressure and is expressed in percentage. He states that cases where the "pressure ratio lies between 25% and 75% are probably operable."

Froes' nerve shock index, while not depending entirely on the blood pressure readings, is deserving of consideration as a prognostic sign. The test is made as follows: Multiply the patient's systolic pressure by 100 and divide the product by the hemoglobin per cent times the numeral indicating the hundred-thousandths of red blood cells. To illustrate: A patient with a systolic of 170, having a blood count of 3,500,000 and a hemoglobin of 65 would have an equation thus:

$$\frac{170 \times 100}{35 \times 65} = \frac{17000}{22.75} = 744$$

The limit of safety according to Froes' law is 7. Any case with a resultant answer above 7 is likely to suffer shock. Not having used this rule sufficiently to express any personal opinion that would be worthy of consideration, I must resort to the opinions of some of the men who have

Dr E E Lashbrook of the University Hospital of Iowa City states "Froes' Nerve Shock Index is apt to give a more illuminating prognosis of the risk that the patient runs than even Moots' Index based on the deviations from normal of the pulse pressure ratio per cent."

Dr E Klaus of Cleveland, after pointing out the difficulties in obtaining accurate hemoglobin percentages that are so important in the computation, summarizes by stating "I feel that it has possibilities for routine use in connection with other tests for the evaluation of risk and should not be neglected."

Dr Harry Lakin of Harrisburg believes the Froes' nerve shock index is the "most reliable test of operative risk that we have" and in his series of cases stated that every abdominal operation case in which the index was over 7, evidenced shock.

The spectre facing the surgeon and the anesthetist during an operation is the ever present possibility of the patient going into a state of shock. This may be induced by surgical trauma in exploring and roughly handling the tissues, by using cold packs or too many packs in the abdomen, or by the loss of blood. Nor can we lose sight of the fact that the depressing effect of the anesthetic, per se, may induce this condition. After the initial rise in the blood pressure due to the stimulating effect of the anesthetic and occurring usually during the first fifteen minutes we have its depressing effect, depending on the kind of anesthetic used, the duration and depth of the narcosis under which the patient is carried.

The outstanding single feature of surgical shock is the constant drop in blood pressure. This

feature is always present and occurs for some time before there are any other signs of the impending condition and early enough to enable the anesthetist to inaugurate measures to counteract its effect and aid in saving the life of the patient. The fall in blood pressure may precede all other evidences of shock by from five to twenty minutes.

With a fall in the blood pressure we usually look for an increase in the pulse rate to compensate for the lowered pressure. However, with a lowering of the blood pressure there is a lowering of the function of all the organs, including the heart and a depression of the central nervous system, so that the rise in pulse rate and other manifestations of shock may not come under our observation for some time after the fall of blood pressure. Thus much valuable time has been lost in aiding the patient to overcome the handicap under which his system is working.

A point that cannot be over-emphasized is the cooperation necessary between the surgeon and the anesthetist. Apathy on the part of the surgeon, or failure to heed the warnings of the early signs of shock as evidenced by the blood pressure picture, may result disastrously for the patient if the necessary means of combating the condition are not employed. Nor can the cooperation of the surgeon be overlooked in making a prognosis of a case. A slow operator or one who will not act during the operation or who fails in his post-operative care to maintain a blood pressure bridge, adds considerably to the operative risk.

In closing may I emphasize that blood pressure records may assist greatly in the evaluation of the risk which the patient faces, as well as furnish useful and important information of the condition of the patient during the operation. In my opinion, it is the composite picture of the blood pressure findings that must be considered and interpreted. These rules, to which I have referred, are not infallible but their application will assist in safeguarding the life of the patient.

"DON'TS" IN ANESTHESIA

By T C BURNS MD, BUFFALO, N Y

THE first and most important Don't is not to lose sight of the responsibility of carrying a patient through a surgical operation, taking away his sensibility without a general motor paralysis and restoring him to normal. The anesthetist must work with the surgeon to accomplish the best surgical results with the least amount of physical disturbance. There must be team work. The anesthetist should anticipate the moves of the

surgeon so that there will be proper relaxation at the right time. For example, in closing the peritoneum, when nitrous oxide is being administered, secondary saturation produces relaxation, causing an easy approximation of the peritoneum.

Next, don't forget that there is not only a choice of anesthetics but also of methods. But in choosing, the patient's safety is the most important consideration. It was not so long ago that

our stand-bys were ether and chloroform, but today, along with them, we have spinal, avertin, locals, nitrous-oxide-oxygen and ethylene. There is no need of going into a discussion of these agents as they have already been discussed by other essayists here tonight. It sometimes seems to me that we all get into a rut and are liable to adapt our cases to the anesthetic, instead of the anesthetic to the case. Each anesthetic has certain advantages and disadvantages and I believe the choice should be made after carefully weighing the facts in each individual case, especially for the handicapped patient.

How can we best conserve the patient's vitality? It is sometimes easy to diagnose, for instance, a cardiac complication but quite different to estimate accurately myocardial exhaustion and give dependable judgment upon the operability of the patient. However, besides the history, we have to aid us in a preoperative estimation of the surgical risk, the blood pressure, which is most valuable as it may indicate nephritis, myocarditis, traumatic shock and high blood pressure. The index has the pulse pressure as the numerator and the diastolic as the denominator. In health, a fraction of $\frac{1}{2}$ or 40/80 is normal. In myocarditis and traumatic shock it is lowered, and increased in nephritis and aortic regurgitation. The energy index, obtained by multiplying the sum of the systolic and diastolic pressures by the pulse rate per minute and eliminating the last three figures in the result, gives a normal of 16, the normal range being 12 to 18. This represents the energy expended by the circulatory system in one minute. We also have the breath-holding test which is important. If the patient is unable to hold his breath at the end of normal expiration for 25 seconds it indicates lack of cardiac compensation.

The anesthetist should not neglect, some time previous to the operation, to make an examination of the patient, especially the heart, lungs and mouth, and to read the history on the chart before giving an anesthetic, not only for the patient's safety but for his own benefit and protection. In the physical examination of the heart it is safe to assume that the larger the heart, the poorer the risk, as it is evidence of myocardial damage. Also those hearts which haven't clear cut sounds or have re-duplication of the first heart sound indicate danger of failure in a hypertrophied heart. Confidence will be instilled in the patient by a

careful examination as there is not one-third the fear of an operation as there is of the anesthetic. The anesthetist who makes it a rule to perform a careful examination of the patient enhances his position in the surgical team and helps to make surgery safer. It is my opinion that there is only one place to give an anesthetic, except, of course, in an emergency, and that is in the hospital where all clothing can be removed and the proper care and precautions taken.

The anesthetist's responsibility during the operation is to acquaint the surgeon with the condition of the patient, helping him decide as to what the patient can stand and upon the first signs of approaching shock to order stimulation, not waiting until a vicious cycle is established. The most dependable stimulant is Digitalis which increases cardiac tonis enabling the heart to expel the same amount of blood as before with smaller heart volume. It causes a general constriction of the vessels with a consequent decrease of total capacity of the vascular system. The intravenous preparations as digitan solution and digifolin are used. Other drugs such as caffeine sodium benzoate, adrenalin and pituitrin, which have more rapid but less lasting action, may be given to carry on until salines, glucose and transfusions are started. It is advisable to give glucose solution before severe operations where the liver deficiency is suspected, as in jaundice. Also where the metabolic rate is high as in Graves' Disease, in under-nourished cases, after severe operations where loss of blood has been great, and in those postoperative acidoses and dehydrated conditions in which the patients need dextrose and water. They are starved and thirsty and have a constant hyperglycemia.

In giving anesthesia, remember that the principal signs to watch are the pupillary reflexes, pulse, blood pressure, breathing, whether free or obstructed, muscular relaxation and color. Do not look for cyanosis in cases of traumatic shock and anemia which have that ashen gray color. Great care should be exercised when giving nitrous oxide to these cases as this gas is taken up more readily than oxygen and a condition of anoxemia results which cannot be estimated by cyanosis on account of the low hemoglobin content.

In closing, may we repeat, don't forget the importance of the anesthetist and his responsibility in the administration of the anesthesia.



RECORDED AND RESIDENT DEATH RATES IN NEW YORK STATE

By J. V. DE PORTE, Ph.D., ALBANY, N. Y.

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No. II—TUBERCULOSIS, ALL FORMS: 1926-1930

THE recorded death rates from tuberculosis in 1930 in the sixty-two counties of the State ranged from a minimum of 7.8 per 100,000 population, in Schuyler to a maximum of 446.3 in Franklin—the rate for the entire State being 70.9. A variation of such magnitude cannot be explained altogether by the greater or lesser salubrity of climate or differences in the make-up of the population according to nativity, sex, age, occupation; it is influenced by some extraneous factor which is evidently the matter of residence. Franklin County, with the highest recorded death rate, has a number of nationally and internationally celebrated institutions for the treatment of tuberculosis, most of whose patients are non-residents of the county. This is also the reason for the next highest death rate—371.2 in Sullivan County, and the rate of 325.8 in Essex.

The table below shows the death rates from tuberculosis per 100,000 population, recorded and corrected for residence, in New York City and in the urban and rural Upstate territories in 1926-1930:

The effect of the allocation of deaths according to residence is most significant. Considering the figures for one year, 1930, we note that the New York City rate is increased by 10 per cent while the death rate of the rest of State is decreased by 13 per cent. The most interesting fact is the reversal in the relative position of the rates of the urban and the rural Upstate sections. The recorded rate of rural New York is 53 per cent above the urban (exclusive of New York City); when a correction is made for residence it is

of places over 25,000 population there were but four exceptions:

	<i>Recorded</i>	<i>Resident</i>
Buffalo	75.6	71.1
Kingston	124.6	92.6
Newburgh	83.0	54.3
Rome	67.6	47.3

Rural Area of Counties. The resident death rates are lower than the recorded rates in the rural areas of the majority of the counties. While thirteen counties had recorded rates in excess of 100, only one had a resident rate of such magnitude—Hamilton (102.2), this rate being based on only 4 deaths.

The following table shows the rural recorded and resident tuberculosis rates of the thirteen counties mentioned above:

	<i>Recorded</i>	<i>Resident</i>
Dutchess	396.8	67.6
Essex	111.7	63.9
Franklin	333.8	69.9
Greene	131.0	97.0
Herkimer	111.6	58.0
Monroe	102.4	37.8
Montgomery	160.0	85.0
Oneida	107.8	75.7
Onondaga	110.3	49.9
Rensselaer	164.0	67.5
Schenectady	190.3	63.4
Sullivan	199.1	64.0
Westchester	123.7	37.5

YEAR	NEW YORK CITY		REST OF STATE		URBAN		RURAL	
	Recorded	Resident	Recorded	Resident	Recorded	Resident	Recorded	Resident
1926.....	85.4	94.2	85.2	74.6	70.6	83.3	88.4	60.0
1927.....	78.1	85.9	78.2	68.8	64.3	75.2	81.7	57.4
1928.....	79.4	88.0	77.4	67.0	63.6	73.9	82.1	56.2
1929.....	75.5	83.3	74.0	64.5	58.8	71.1	80.6	54.1
1930.....	73.1	80.3	68.3	59.5	51.5	63.3	78.6	53.4

found that the urban exceeds the rural rate by 19 per cent.

Cities. The correction for residence increases the rates of practically all cities. In the group

The high recorded death rate of Dutchess County is due to the large number of non-resident patients in the Samuel W. Bowne Memorial Hospital located in the town of Poughkeepsie.

AN EPIDEMIC OF VINCENT'S ANGINA*

By HAROLD J. HARRIS, M.D., WESTPORT, N. Y.

NO attempt is to be made to give a full dissertation on Vincent's angina. I want only to describe an epidemic of this infection occurring in my practice and to emphasize a virtually specific cure. As the epidemic is not yet over, I hope that this paper may be of some value. I claim no originality for the method, of course.

To compile an accurate list of all the cases I have seen within the past year would entail a tremendous amount of work. I am, therefore, estimating conservatively the total number of cases seen as about four hundred. This is an unprecedented number of cases in private practice. I do not recall more than a score of cases in the previous nine years.

The diagnosis in almost all of these cases was confirmed by direct smears examined at the State Laboratory at Albany, N. Y. A few typical cases were diagnosed and treated as Vincent's angina in spite of one or more negative smears. Cases of gingivitis due to pyorrhea in which the organisms of Vincent's angina happened to appear as a secondary or incidental infection were not classified as Vincent's angina nor treated in the same way.

There was one death in this series of cases—a neglected case in which the attending physician was called too late. This case I saw in consultation, but the infection had long since become generalized and treatment was without avail. There were many extremely ill patients of all ages, the youngest being six months and the oldest seventy-five.

The cases were classified as follows:

1. Those in which there were only greyish plugs in the crypts of otherwise normal looking tonsils.

2. Those in which one or both tonsils were simply congested and swollen.

3. Those in which there was ulceration of one or both tonsils, with anterior cervical adenitis.

4. Those in which there were scattered ulcers throughout the buccal mucous membrane, as the tonsillar pillars, the pharynx, the gums, the hard palate and the uvula—even rarely on the red border of the lips.

5. Those in which there were pre-ulcerative lesions on the mucous membrane of the mouth that resembled mucous patches or beginning "canker sores."

6. Those in which there was superficial or deep ulceration of the gums only, and

7. Those in which there was only a gingivitis.

Naturally, any or all of the above types of lesions occurred in some of the same patients.

Early in the epidemic diagnosis was difficult as

most cases then presented very mild and vague symptoms—moderate malaise, slight afternoon temperature rise and perhaps loss of weight, over a period of a month or two. In these cases the only findings were a few greyish plugs in the tonsillar crypts which might easily be mistaken for the ordinary plugs of detritus or food debris. The tonsils themselves were not reddened or swollen and there was only slight, if any, anterior cervical adenitis in these mild, early cases. Smears made from material obtained by firmly rotating a cotton swab over the tonsils were usually reported as showing a few or a moderate number or many fusiform bacilli and spirochaetes. The number of organisms found bore no relation to the severity of the infection in any of the series of cases.

The first of these mild cases I treated with the Kromayer lamp, using a pyorrhea quartz rod in contact with the tonsil and raying several areas of each tonsil every third day for three or four treatments which were usually sufficient to get rid of the organisms and cure the case. Along with any other method of treatment used, five grain potassium chlorate tablets were used in the mouth and as a solution for a mouth wash and gargle.

The more severe cases apparently had gone through the stage above described before they consulted me, as they gave histories of having felt mildly ill for from one to three months, had lost weight, and then had become rapidly worse with the onset of sore throat, anterior cervical adenitis and temperatures ranging from 101 to 104. One such case occurred in a woman of seventy-five; she was almost moribund when first seen with a temperature of 104, marked prostration, a mass of necrotic gum tissue, deep ulceration of both tonsils, and marked swelling of the anterior cervical glands. She also had a broncho-pneumonia, presumably due to the same infectious agent, which cleared up along with all the other areas (except the gums) within a week.

Most of these severe cases had advanced ulceration of the gums, and some had osteomyelitis of the alveolus about one or more teeth that ended with the spontaneous or surgical loss of one or many teeth. The throats of some bore such a marked resemblance to peritonsillar abscess that one would be tempted to incise except for lack of fluctuation and the knowledge gained by previous experience.

One of the characteristic symptoms of nearly every case in which the tonsils or tonsillar pillars were involved was pain radiating to the ear or just earache. In only one case was there any reddening of the drum. In another case a typical Vincent's infection of the gums and pharynx preceded a bilateral acute purulent otitis media; no

* Read before the Medical Society of the County of Essex, October 6, 1931.

organisms suggesting Vincent's were recovered from the purulent drainage

Some of the cases in which only the tonsils were involved presented very nice problems in diagnosis as they were indistinguishable from diphtheria or non-specific follicular tonsillitis. These cases had markedly swollen reddened tonsils studded with plugs of purulent exudate. They usually had high temperatures which helped to rule out diphtheria. If they failed to respond to treatment to the point of being actually well within forty-eight hours I learned to know that they were not Vincent's, regardless of what the smears might show. Within a week, recently, I saw four such cases, identical in practically every detail—two in adults and two in children. Cultures for Klebs-Loeffler bacilli were taken routinely as well as smears for the detection of organisms associated with Vincent's angina. Without waiting for reports intravenous and local treatments were begun and every patient was free of fever, sore throat and all local and general symptoms within forty-eight hours. All were much improved within twenty-four hours. One case seemed perfectly well except for a temperature of 99.6 and a very small patch of yellowish membrane involving one posterior tonsillar pillar. In the meantime both a positive diphtheria culture and organisms of Vincent's angina were reported. The other three had positive smears showing the organisms associated with Vincent's angina but negative diphtheria cultures. This child was then given diphtheria antitoxin and all symptoms disappeared within two more days. Thus, then, was a case of Vincent's angina co existing with diphtheria.

Those cases with only a few patches of reddened, swollen, easily bleeding gum tissue were more stubborn to cure than the other lesions, even though dentists co operated in their treatment.

One patient receiving a routine course of intravenous mercurous for an old-standing lues developed a Vincent's infection of the gums which might easily have been mistaken for a mercurial stomatitis.

The patient who died was a married woman of thirty-eight who had been vaguely ill at a hospital for months and had suddenly become worse on returning home. Her family doctor was not called until she was extremely ill with deep ulcerations studding her gums, lips, pharynx, hard palate, uvula, vagina and at least as far up the colon as could be seen with a sigmoidoscope. She was extremely ill with severe throat symptoms, a bloody mucoid diarrhea and a profuse blood-tinged purulent vaginal discharge. No organisms of any kind were isolated in this case which I saw in consultation a few days before her death. Local and intravenous treatment instituted by the attending physician were without avail. Clinically, this was Vincent's angina in its worst form. Treatment failed presumably because she was so

overwhelmed by her extensive involvement that the toxicity was too great for her to survive.

The treatment given routinely to every case, except the first few, was intravenous sulfarsphenamine in doses varying from 0.1 gm to 0.6 gm, depending upon the age. I soon found that I could almost promise a clinical cure after one treatment, that within twenty-four hours the patient would be much improved and within forty-eight hours clinically cured. The deep ulcerations would naturally take a few more days to heal. I can only recall two exceptions to this rule, in both of which there was deep ulceration about the teeth and of the mucosa over the hard palate, this probably is attributable to the lessened blood supply in these tissues. Early in the series many cases relapsed in two or three weeks after the one dose of sulfarsphenamine. After two injections, a week apart, were instituted as a routine only a few relapsed. Finally, I gave three doses of sulfarsphenamine to every case and none relapsed. In a few cases sulfarsphenamine in glycerine was applied locally to ulcerations of the gums.

Potassium chlorate tablets seemed to protect other members of the family, if used frequently—that is, a tablet kept in the mouth almost constantly. Also it was found that many mild cases of the patch type would clear up with no other treatment than potassium chlorate. Sodium perborate, plain or aromatised as in Vince, was used occasionally instead of potassium chlorate.

In no case was removal of tonsils necessary to cure the case clinically.

A few case histories, picked at random from my files, follow.

B G, Female, age 15, was first seen on September 6th 1931, complaining of sore throat and soreness of the gums of a week's duration. The tonsils had been cleanly removed several years before. There was ulceration of one anterior pillar, scattered ulcers over the posterior pharynx, gums and buccal aspect of the cheeks and lips with reddening of the gum margins in patches. Temperature was 100 and pulse 90. Smear showed a moderate number of fusiform bacilli but no spirochetes having the morphology of those associated with Vincent's angina. Sulfarsphenamine 0.3 gm was given intravenously and was repeated in four and eleven days. Improvement was not as prompt as expected after the first treatment but was rapid after the second. The ulcerations had healed and only a few patches of slightly reddened gums remained on September 17th.

H P, Male, age 10, was seen on September 2nd, 1931, because of the rapid development of sore throat in the preceding twenty-four hours. He had a marked bilateral anterior cervical adenitis, a temperature of 103 and both tonsils were greatly swollen and studded with plugs of purulent exudate. He complained of severe pain on swallowing and sharp pain radiating to one

ar. Sulfarsphenamine 0.25 gm. was given intravenously at once. The tonsils were less swollen and the exudate nearly gone next day and the temperature was 99.4. The tonsils were only lightly swollen and the exudate was gone forty-eight hours after the first treatment; temperature was 98 and the patient felt well. At the time of the second dose of sulpharsphenamine on September 9th a small yellowish patch of membrane on the right posterior pillar showed diphtheria bacilli. The patient felt entirely well. Five thousand units of diphtheria antitoxin were given intramuscularly. The patch of membrane disappeared within forty-eight hours and the temperature returned to normal. The third dose of sulfarsphenamine was given, as usual. The smear in this case showed a moderate number of fusiform bacilli and spirochetes having the morphology of those associated with Vincent's angina.

J. P., Male, age 25, was first seen on September 1st, 1931, complaining of a severe sore throat and swollen anterior cervical glands with sharp pains radiating to both ears, of twenty-four hours duration. There was extreme swelling of both tonsils which were thickly studded with a yellowish purulent exudate. He was extremely ill with a temperature of 103.6 and marked prostration. Smear showed no organisms having the morphology of those associated with Vincent's angina and culture showed no diphtheria bacilli. Sulfarsphenamine 0.4 gm. was given intravenously the same day. Twenty-four hours later the patient was out of bed, able to swallow solid food, the swelling and exudate had nearly disappeared and his temperature was 100. Within forty-eight hours he was well but still somewhat weak. Two more doses of sulfarsphenamine were given at weekly intervals to prevent recurrence.

N. D., Female, age 15, was first seen on February 2nd, 1931, at which time she complained of general malaise for the previous two months and a gradually increasing sore throat for the past two weeks, accompanied by progressive anterior cervical adenitis and soreness and bleeding of the gums. Her temperature was 100. Nothing was evident on examination of her throat and mouth except slight swelling of the tonsillar fossae (the tonsils were out), redness of several patches of gum margin and the adenitis. Smears and cultures were negative. Slight improvement occurred with the use of potassium chlorate as a gargle and

the tablets dissolved in the mouth but the gums became progressively worse with ulceration about the teeth. Sulfarsphenamine was not given until February 5th and was followed by prompt improvement in the glandular swelling and subsidence of the fever and malaise, but osteomyelitis of the alveoli had already progressed to the point where three teeth were loosened and were lifted out. Sulfarsphenamine was continued weekly and the gums healed promptly. Smears from the purulent exudate from the tooth sockets showed many of the spirochetes and fusiform bacilli of the type associated with Vincent's angina.

H. H. N., Female, age 65, had had medical treatment without relief of sore throat over a period of three weeks before I saw her on August 11th, 1931. She presented a moderately congested pharynx with reddening of both tonsils and a few areas of reddened gum margin. Aside from the sore throat her only complaint was occasional sharp, stabbing pain radiating from the throat to one or the other ear. Temperature was normal. Complete relief in forty-eight hours following the first dose of sulfarsphenamine of 0.4 gm. Although the throat looked normal a week later, two more doses were given as routine and potassium chlorate advised to prevent a possible flare-up of the gum infection. Smear showed a few spirochetes and fusiform bacilli having the morphology of those associated with Vincent's angina.

Comment: The treatment of choice in Vincent's angina seems to be three doses of one of the arsphenamines, along with the less important local measures. Probably the only advantages of sulpharsphenamine over arsphenamine or neoarsphenamine are the ability to give it intramuscularly to small children, and the lessened danger to tissues if it is spilled outside a vein.

It seems necessary to make clinical diagnoses and ignore laboratory smears under exceptional circumstances.

Diphtheria cultures are wise in every case, no matter how typical of Vincent's angina, as the two conditions may be clinically identical or may co-exist.

Pyorrhea, with which spirochetes and fusiform bacilli may be associated, should not be confused with clinical Vincent's angina.

Prompt and efficacious treatment with a potent remedy seems essential if severe illness or death is to be prevented in some cases.



CONTRALATERAL CAVERNOUS SINUS THROMBOSIS*

Following Furuncle of the External Auditory Canal: Recovery.

By ADOLPH WEIZENHOFFER, M.D., SCHENECTADY, N. Y.

THROMBOSIS of the cavernous sinus is a rare disease, about 350 cases having been reported since its first observation at autopsy about 100 years ago. In Johns Hopkins Hospital between 1889 and 1919, Chisolm and Watkins found the condition 8 times in 50,000 surgical cases, which averages 1 in 6,250. In the Ear and Throat Department of the Royal Infirmary at Edinburgh, between 1908 and 1925, Turner and Reynolds found 12 cases in 56,886 patients, an average of 1 in 4,740. There is no doubt that, when necropsy is not performed, many cases are overlooked due to the fact that the classical eye symptoms are not always present, the patient dying of a rapidly developing meningitis.

The cavernous sinus is a venous channel lying one on either side of the sella turcica. It is traversed by many fibrous bands, making its lumen very irregular. It is about 2 cm. long and 1 cm. wide, extending from the sphenoidal fissure to the tip of the petrous portion of the temporal bone. Within its inner wall lie the internal carotid artery and the sixth nerve, and in the outer wall, the third, fourth and the first two divisions of the fifth nerves. It is separated from the sphenoid sinus by a thin plate of bone, while the gasserian ganglion lies directly external to it. It is also in close relation to the optic nerve and chiasm and pituitary gland. It communicates directly or indirectly with the veins of the face, orbit, nose, mouth, throat, ear and scalp mostly by means of connecting or emissary veins. Anteriorly, the cavernous sinus receives the ophthalmic veins which drain the orbit, and posteriorly it opens into the superior and inferior petrosal sinuses, the former joining the knee of the lateral sinus, and the latter running into the jugular bulb. A connecting vein between the superior ophthalmic and the facial vein establishes communication between the cavernous sinus and the veins of the face. The absence of valves in these veins makes this communication more intimate. A few short veins run from the mucous membrane of the sphenoid air sinus into the cavernous sinus, and the superior ophthalmic receives branches from the ethmoid air sinuses. Passing through the foramen ovale, the foramen Vesalii and the middle lacerated foramen are veins connecting the cavernous sinus with the pterygoid and pharyngeal plexuses, which drain the mouth and throat. The carotid plexus surrounds the intracranial portion of the internal carotid artery and connects the internal jugular vein with the anterior portion of the cavernous sinus. By means of the mastoid emissary vein communica-

tion is established with the veins of the postauricular and occipital regions through the lateral sinus. It is also connected with the veins of the scalp by way of the diploic veins. The cavernous sinuses of both sides communicate with each other by means of the circular sinus, running in front of and behind the pituitary gland. The two inferior petrosal sinuses are united by the basilar sinus lying on the basilar portion of the occipital bone.

Infections of the middle ear, orbit and face are the origin of 75 percent of cases of cavernous sinus thrombosis. The most common organisms found are the streptococcus and the staphylococcus, the latter being present mostly when the original infection is small, localized and apparently unimportant.

Besides the symptoms of general sepsis, the cardinal diagnostic signs are produced by venous obstruction and pressure on adjacent nerves. The former causes exophthalmos, edema of the lids and chemosis of the conjunctiva, the latter, headache and eye pain due to irritation of the fifth nerve, paralysis of the eye muscles and rigidity and dilatation of the pupil from paralysis of the third, fourth and sixth nerves, and impairment of vision due to involvement of the second nerve. The second eye is almost always affected within 48 hours after the first, this being the most important differential sign distinguishing cavernous sinus thrombosis from orbital cellulitis. The symptoms develop more rapidly if thrombosis begins at the anterior end of the cavernous sinus than when coming from the petrosal end, due to the fact that in the latter case the collateral circulation has more time to establish itself. Death occurs mostly within a week after development of eye symptoms and is due to meningitis. Of 300 cases reported in the literature 23 or 7 percent got well. Eagleton reports 6 recoveries in 32 personal cases, which is 19 percent.

The treatment is mostly symptomatic with drainage of the focus of infection where possible. It is very important to avoid all mechanical and surgical interference in cases of furunculosis of the face especially of the nose and upper lip, before localization has taken place. To combat sepsis and increase resistance, the use of frequent small transfusions and the intravenous injection of mercurochrome, acriflavine or similar preparations, are recommended. The consensus of opinion points towards early diagnosis and prompt attack of the cavernous sinus itself. Eagleton claims that most of his cures were surgical, while others claim the contrary to be the case. The sinus should be approached through the orbit if the eye is destroyed or by the temporal route used

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in the gasserian ganglion operation, the latter being the most commonly used. Some operators employ the trans-sphenoidal or the maxillary route.

Mrs. N. S., aged 29, first seen March 28th, 1931, complained of pain in the right ear of two days' duration. Examination showed a slight blush in Shrapnell's membrane and along the handle of the malleus. The floor of the canal was somewhat reddened, but not swollen. Marked tenderness was elicited by pressure on the tragus, by traction on the pinna and on touching the canal floor with the probe or speculum. There was also some pain on moving the jaw. The mastoid was neither tender nor swollen. The ear was otherwise normal as were also the nose and throat. Wet dressings were applied.

March 29—Pain and tenderness worse and there was a little edema under the ear and a small abrasion but no swelling on the floor of the canal.

March 31—The edema spread under, behind and in front of the lobule. The patient claimed that the pain decreased following a feeling of "something giving" in the ear. The canal floor was red and slightly swollen. Toward the end of the day there was sudden pain in the left side of the chest and left shoulder accompanied by cough and expectoration of blood-tinged sputum. The temperature rose to 103.

April 1—The canal floor was incised but no pus was found. T. 104.6.

April 2—On slight pressure below the ear a drop of pus exuded from the cut in the canal floor. The incision was enlarged; but no more pus was found. The patient was removed to the Ellis Hospital.

April 3—The edema below the ear spread rapidly, so that in two days it had reached the clavicle. The whole right side of the neck was very red and tender and greatly indurated. The temptation to incise this area was very great; but as no fluctuation developed, this feeling was fortunately overcome.

April 4—An x-ray of the chest showed a shadow in the left lower pulmonary lobe. The blood count was W.B.C. 13,000, Polymorphonuclears 78%, lymphocytes 20%, eosinophiles 2%. The pulmonary infarct gave no trouble except pain on coughing, which disappeared in about three weeks, while that in the left shoulder caused only pain and limitation of motion and was gone in about four weeks without ever showing any redness or swelling.

April 5—The patient complained of pain in the left eye radiating to the occiput. The left upper lid became rapidly swollen so that the eye could not be opened. There was slight exophthalmos. Blood culture was positive for *Staphylococcus Aureus*.

April 6—There was marked edema of the left upper lid, proptosis of the eyeball and chemosis

of the conjunctiva. The right upper lid also began to swell.

April 7—The right eye was completely closed although the swelling was less than in the left. On forcibly opening the left eye the external rectus was found paralyzed. The temperature which previously fluctuated between 103 and 104, reached 105.4 on this day. The patient was restless and irrational, picked at the air and bed-clothes and voided involuntarily.

April 9—The swelling of the right eye began to subside as did also the induration in the lower part of the neck.

April 11—The patient opened the right eye partly, and the swelling in the left eye was diminishing. The temperature for the past two days slowly fell so that in a week it went down to 101. The first transfusion of 300 c.c. of citrated blood was given.

April 13—The right eye was normal and the swelling in the left was considerably reduced; but now paralysis of the levator could be noticed. All the other muscles supplied by the third nerve were normal. The retina was almost normal and vision was unimpaired.

April 14—The second transfusion was given. Repeated urinalyses showed a fraction of one percent of sugar, and nothing else. This disappeared after two weeks. There was no history of any previous glycosurea.

April 15—Patient complained for the first time of pain in the back of the neck.

April 16—Blood culture was negative after 48 hours incubation. There was a slight chill in the afternoon and the temperature rose to 103.

April 17—Patient was restless and irrational. Had another chill in the evening and the temperature rose to 104.4.

April 18—Patient more comfortable. Third transfusion given. Blood count: R.B.C. 3 million, hemoglobin 58%, W.B.C. 14,800, Polymorphonuclears 83%, lymphocytes 12%, eosinophiles 4%, basophiles 1%.

April 19 to 21—There was still pain in the back of the neck. The left pupil reacted to light and all the extrinsic eye muscles were normal except the levator and external rectus. Edema of the left upper lid was practically gone and exophthalmos had diminished.

April 22—Fourth transfusion given.

April 24—Blood count: R.B.C. 3,180,000, hemoglobin 54%, W.B.C. 14,300, Polymorphonuclears 79%, lymphocytes 18%. Blood culture was negative after 48 hours' incubation.

April 25—Fifth transfusion given.

April 28—Recurrence of pain in the left eye with headache and slight edema of the upper lid.

April 29—Pain and swelling better. Sixth transfusion given. Induration of the neck was almost gone.

May 2—During the past two weeks the tem-

perature slowly declined until it fell below 100. This continued for six days when suddenly on

May 9—The exophthalmos and swelling of the left upper lid increased, the eyeball became fixed, congestion of the conjunctiva returned, the pain in the neck grew worse and the temperature rose to 101.8. The patient didn't feel so well and was irrational at times. The knee-jerks were exaggerated. Kernig's sign was present on both sides, ankle clonus was present on the left side only, there was no Babinsky and the abdominals were present and equal.

May 11 and 12—The left pupil reacted very weakly. The patient vomited a little fluid before breakfast and was still irrational. The clonus was gone and the reflexes were quieter.

May 14—The patient complained of severe headache radiating from the back of the neck forward, but claimed that she was subject to such pains before her present illness. A cathartic gave relief. The left pupil was now dilated and rigid.

May 16—The temperature dropped to less than 100 and remained so during the rest of the illness, excepting for an occasional slight rise lasting a day.

May 19—Exophthalmos decreasing. Seventh and last transfusion given.

May 23—The patient left the hospital after a stay of 52 days, feeling better except for pain in the back of the neck, which was now worse on the right side. The left external rectus showed signs of beginning activity.

May 25 to 28—Pain in the left eye. Left upper lid swollen. Vomited three times.

May 29—Well except for occasional severe shooting pains in the left eye. Edema of left lid gone.

June 1—Shooting pains in both eyes. Right upper lid swollen.

June 3—Swelling of both eyelids gone. From now on there was progressive improvement of all the symptoms. The external rectus was the first to improve, then the levator followed by the other ocular muscles except the pupillary sphincter. The proptosis and edema gradually disappeared.

June 20—Patient still complained of pain in the back of the neck, confined chiefly to the region of the right trapezius muscle and shooting pains in the left eye.

July 16—For the past five days there has been no pain in the back of the neck. The left pupil reacted only very slightly to light. The patient felt well and was up and about.

July 21—The following is an extract of the report of Dr. O. J. Park on his retinal findings. At the beginning of the illness there was marked engorgement of the ciliary and fundus veins of the left eye with swelling of the disc. The right eye when it became involved, showed only a mild choking of the disc. On July 21 "her field of

vision showed an annular contraction of from 10 to 30 degrees with no enlargement of the blind spot. The venous engorgement in both fundi was practically nil."

Aug 7—The pupil reacted slightly to light and outward rotation of the left eye was incomplete. In attempting to look to the extreme left, vision became blurred.

Oct 3—Pupillary contraction of the left eye was improved. The external rectus was still weak.

Oct 6—Report of Dr. Park. Left eye, disc pale, fundus veins normal, external rectus weak, field contracted. Central vision and pupil normal. Right eye, disc slightly congested, field normal. Patient gained about 20 pounds.

The treatment was mostly symptomatic with the forcing of food and fluids. Seven transfusions of 300 cc of citrated blood were given. The only surgical treatment, namely, incision at the site of the focus of infection, was at the beginning of the illness, but after the blood stream had already been invaded.

The important features of this case are

1 The unusual location of the infective focus and its trivial nature.

2 The involvement of the cavernous sinus of the side opposite the focus previous to its invasion of the same side. The mechanics of the thrombosis is probably as follows. The infection entered the venous system at about the junction of the inferior petrosal with the jugular bulb, forming a retrograde thrombus up to the entrance of the basilar sinus into the petrosal. The blood flow being diverted at this point, carried an embolus across the basilar to the opposite inferior petrosal, where it found lodgment. Here another retrograde thrombus was formed which rapidly invaded the left cavernous sinus. Following this, the right cavernous sinus was involved through the circular sinus either by thrombosis or embolism. In the meantime the collateral circulation on the right side had sufficient time to establish itself, thus explaining the mildness and the short duration of the symptoms in the right eye. The subsidence of the circulatory symptoms in the left eye is due not only to the collateral circulation but in a large measure to a recanalization of the venous channels.

3 The gradual development of the ophthalmoplegia, beginning with the external rectus and levator, then involving the other external eye muscles and finally the pupillary sphincter, with return to normal in the same sequence.

4 The presence of a mild transient glycosuria which may have been due either to irritation of the pituitary or to the infection.

5 The undoubted low virulence of the infective organism. The septic symptoms were of a mild type, rigors, sweats and wide excursions of the temperature being rare.

6 The reappearance of eye symptoms on two

perature slowly declined until it fell below 100. This continued for six days when suddenly on

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2. The involvement of the cavernous sinus of the side opposite the focus previous to its invasion of the same side. The mechanics of the thrombosis is probably as follows: The infection entered the venous system at about the junction of the inferior petrosal with the jugular bulb, forming a retrograde thrombus up to the entrance of the basilar sinus into the petrosal. The blood flow being diverted at this point, carried an embolus across the basilar to the opposite inferior petrosal, where it found lodgment. Here another retrograde thrombus was formed which rapidly invaded the left cavernous sinus. Following this, the right cavernous sinus was involved through the circular sinus either by thrombosis or embolism. In the meantime the collateral circulation on the right side had sufficient time to establish itself, thus explaining the mildness and the short duration of the symptoms in the right eye. The subsidence of the circulatory symptoms in the left eye is due not only to the collateral circulation but in a large measure to a recanalization of the venous channels.
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4. The presence of a mild transient glycosuria which may have been due either to irritation of the pituitary or to the infection.
5. The undoubted low virulence of the infective organism. The septic symptoms were of a mild type; rigors, sweats and wide excursions of the temperature being rare.
6. The reappearance of eye symptoms.

occasions during the course of the illness; the first due probably to an extension of the clot, and the second, to a temporary inadequacy of the collateral circulation.

7. The absence of any visual impairment. Jansen proved by autopsy "that thrombosis of the cavernous sinus is possible with the absence of any change in the fundus, or any impairment of visual acuteness or of the function of the ocular muscles."

8. The long interval between the invasion of the blood stream and the beginning of eye symptoms; five days. This points to the posterior route, undoubtedly the inferior petrosal as the path of the thrombus.

9. The positive blood culture. This is very frequently negative.

10. The presence of ankle clonus for one day.

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WHAT THE MEDICAL SOCIETY OF THE COUNTY OF MONROE IS DOING IN HEALTH EXAMINATION, ORGANIZATION AND PROGRESS

An address given before the Seventh District Branch of the Medical Society of the State of New York, at Iola Sanatorium, Rochester, N. Y., September 24th, 1931.

By SOL. J. APPELBAUM, M.D., ROCHESTER, N. Y.

From the Periodic Health Examination Committee, Medical Society of the County of Monroe.

IN the development of a program on behalf of any problem in any community, the environmental factors of the particular problem will always influence the character of the program. The problem itself, the size of the community, the individuals and organizations involved, the objects in view, must all be taken into consideration. Our program in Monroe County on behalf of periodic health examination was developed and modified with due consideration to the above factors.

During the past year the County Medical Society under the auspices of a Committee on Public Health and more directly under the auspices of a Sub-Committee on Health Education has been conducting a weekly Radio Broadcast. The central thought in all these broadcasts was the preservation of health, with stress on the value of periodic health examinations. There was considerable expression of interest on the part of the community to these messages as evidenced by the experience of many physicians, but the concrete results were not as great as anticipated. Early this year the Rochester Chamber of Commerce in a communication to the County Medical Society expressed an interest in periodic health examinations and sought to secure the cooperation of the Medical Society for an increased public interest in such examination. The Monroe County Medical Society had already for the past year been working in cooperation with the Tubercu-

culosis and Health Association to the extent that the Executive Secretary of the Tuberculosis and Health Association was the Acting Secretary of the Public Health Committee of the Monroe County Medical Society and of its sub-committees. At the very outset then the Medical Society in constructing its program could count on the support of these two lay organizations. Following the receipt of the communication from the Chamber of Commerce, on February 20th, a special committee of the Sub-Committee on Health Education was appointed for the purpose of developing a program in Monroe County with reference to periodic health examinations.

At its very first meeting this committee had the benefit of consultation with Dr. Iago Galston, Secretary of the Greater New York Committee on Health Examination, representing the five County Medical Societies of Metropolitan New York. The personnel of this committee is of interest. It consists of Dr. Benjamin J. Slater, President of the County Medical Society; Dr. John R. Williams, Chairman of the Committee on Public Relations; Dr. Edward G. Whipple, Chairman of the Committee on Public Health; Dr. William A. Sawyer, Chairman of the Sub-Committee on Health Education; Dr. Nathaniel W. Faxon, Director of the Strong Memorial Hospital; Dr. Albert D. Kaiser, President of the Tuberculosis and Health Association; and of the speaker as its Chairman. In its structure the Committee com-

prises those individuals whose advice and influence through their official positions in the County Medical Society and allied organizations of a medical character would be of greatest value to this movement. Through their official connections, they constitute a group which in itself can coordinate the interests of various committees in this special activity of the County Medical Society, it being the policy of the County Society that the activities of the other committees should give way to the program of the Committee on Periodic Health Examination.

After several conferences of this Committee, a number of recommendations were submitted to the Sub-Committee on Health Education. These recommendations were as follows:

First, that the County Medical Society establish headquarters; that it maintain a suitable office for the activities of the County Medical Society. This recommendation was made so that the County Medical Society could have a more definite entity; that anybody inquiring for the County Medical Society would have a definite place to go to, and that anybody wishing to telephone to the County Medical Society could on consulting the telephone directory find it listed there.

The second recommendation provided for the appointment of a permanent committee of seven (referred to above) to develop and conduct both an intensive preliminary and permanent program on behalf of periodic health examinations, which committee shall have a budget assigned to it and shall have authority to function without constant reference to higher authorities. This provision made the committee a primary committee of the Medical Society and gave it a free hand in the development of its program and the expenditure of its funds.

The third recommendation requested an appropriation of five hundred dollars (\$500) from the capital account of the Medical Society for the use of this Committee. This appropriation was granted by the County Medical Society at a meeting held on May 19th.

The fourth recommendation suggested the seeking of an additional two thousand dollars from other sources to cover an estimated budget from the period of October 1st to December 31st.

The fifth recommendation provided that after sufficient funds were secured that the Committee conduct an intensive preliminary health examination program to be followed later by a permanent program which was to be considered a regular function of the County Medical Society.

The sixth recommendation suggested securing the service of a part time executive secretary for this Committee and urged that the Committee be authorized to engage the services of such other personnel as might be necessary to carry on the program.

The seventh recommendation suggested that the permanent financing of this and other projects included in the Public Health Program of the County Medical Society be provided for after January 1, 1932, by increasing membership dues of the Medical Society of the County of Monroe to sixteen dollars. Dues at the present time are eleven dollars, ten dollars of which (as you know) goes to the State Society leaving only one dollar for local needs. This increase of membership dues would give the County Society approximately the twenty-three hundred dollars additional income needed to carry out the program as planned.

The eighth recommendation suggested seeking the cooperation of various civic and private organizations of a health, educational, labor, social service, and professional character, in bringing the message of health examination to the general public.

The ninth recommendation singled out the Rochester Chamber of Commerce, stating that the cooperation of the business interests represented by the Chamber was valuable and would be welcome.

The tenth recommendation suggested securing the cooperation of hospitals and dispensaries in providing limited facilities for the examination of indigent clients on proper refer in accordance with a definite understanding with the County Society.

The eleventh recommendation suggested that a series of bulletins to the profession on the subject of periodic health examination be inaugurated through the cooperation of the Tuberculosis and Health Association. For this purpose we were fortunate in being able to arrange for the printing of a Rochester edition of the *Health Examiner*, a monthly publication of the Greater New York Committee on Health Examination. We also were fortunate in being able to interest the Tuberculosis and Health Association in publishing two special reports, one of which lists the names of 252 practicing physicians who have signified their willingness to give basic health examinations.

The twelfth recommendation provided for securing the services of Dr. Iago Galdston, Secretary of the Greater New York Committee on Health Examination and Director of the Medical Information Bureau of the New York Academy of Medicine as consultant.

The Committee held its first meeting on March 13th with Dr. Galdston and Raymond H. Greenman, Executive Secretary of the Tuberculosis and Health Association, present. The above recommendations were adopted and Mr. Greenman was appointed Acting Secretary. They were presented to the Sub-Committee on Health Education on March 27th and were approved by it. They

were presented to the Committee on Public Health on April 1st, and were approved by that Committee. They were presented to the Comitia Minora on April 7th and again were approved. They were also considered and approved on April 22nd by the Directors of the Rochester Academy of Medicine who hold title to the Academy of Medicine building on Prince St., in so far as their approval was necessary for establishing Monroe County Society offices in that building.

A more detailed program was then developed with a desire to put into practice the recommendations reported. This program was divided into two sections. Section one concerns itself with activities within the medical profession. Our plans called for the completion of the activities in this section of the program before October 1st. However, vacation periods and the intense heat made this impossible. Nevertheless, the following has been accomplished: Arrangements have been made to open an office of the County Medical Society at 13 Prince Street. A budget of five hundred dollars was secured for the use of this Committee and the Committee is assured that funds will be provided to carry on until the first of the year. An intensive program has been conducted within the profession to familiarize it with the various questions and problems connected with health examinations. One hundred and twenty-six doctors in general practice and eighty-six physicians in the various fields of medical specialty including x-ray, eye, ear, nose, and throat, dermatology and genito-urinary, gynecology, orthopedics, surgery, neurology and pediatrics, were consulted in groups of about twenty for discussing program plans, examination procedure, record forms, refer methods, flexible fees, etc. Twelve such conferences were held, and in addition there were fourteen committee meetings. There was unanimous agreement that in order to make health examinations available to as large a section of the public as is possible it would be necessary that the fees for both basic, and special examinations when indicated, should be within the means of the individual. There was complete agreement that health examinations should be made available to the general public. There was full agreement with the thought that in so far as is possible health examinations be confined to private practice and that it is desirable that the general practitioner—family physician—should be prepared to make these examinations.

These various conceptions with reference to periodic health examinations had previously been agreed upon by the members of the Committee. It is of especial significance that they were approved of by more than three hundred members of the County Society (please recall the membership is just over four hundred), each of whom, under various circumstances, had an opportunity to express his opinion. As a matter of fact three

hundred and thirty-eight have agreed in writing to give health examinations. Although the program has not been officially approved by the County Society, nevertheless it has been approved by the individual members of the Society to the extent to which these three hundred and thirty-eight members accepted our invitations to be present at the various group meetings or gave us their approval in writing.

As part-time secretary, we have the services of the Executive Secretary of the Tuberculosis Association and make use of his clerical staff to the extent of our needs, making payment for the latter. To date the Rochester edition of the *Health Examiner* has been mailed every month to every practicing physician in the County. After the first of the year, our mailing list probably will include only such physicians who are sufficiently interested in health examinations as will subscribe to it at one dollar per year, this covering only the actual publication cost.

In conjunction with the Committee on Medical Education, a course of lectures on early diagnosis (of which Dr. Alvarez's lecture this afternoon is a part) has been arranged (for this week) in relationship to this program on periodic health examination.

Supplies, such as uniform examination records, cards suggesting examinations and report forms, are now in the process of preparation and will be made available to those desiring them.

Portions of this program have not yet been acted upon by the membership of the Society. Formal approval by the County Society of this entire program has not yet been given. We anticipate favorable action, which will include provision for the permanent financing of this and other educational projects in the public health program through an increase of dues. There has not been time as yet to discuss with the hospitals and dispensary authorities the problem of making provision for the examination of indigent clients. This opens up an entirely new field of procedure in the practice of medicine in Rochester. It is our purpose to attempt to arrange not only for this service but also to arrange for special examinations when such are indicated on refer of the individual by the examining physician. This arrangement, of course, would operate only with those who are unable to pay even very moderate fees for such special examinations. The patient and the report on his examination would be returned to the physician who requested the special examination.

If this procedure is put into practice there will be placed at the convenience of the examining physician all facilities for special examinations within the means of all individuals. This method of reference and report should tend to keep the public within the field of private practice rather than increase the present trend towards the insti-

tutionalizing and socializing of medical practice. This procedure should also correct the too common conception that complete examinations—that is a basic examination and such indicated special examinations—can only be made in clinics, can not be made in the offices of practicing physicians.

As a part of this program for the purpose of improving the quality of the work done, it is hoped that arrangements may be made with the Medical School of the University of Rochester to give post-graduate instruction in the use of various diagnostic instruments and diagnostic procedures.

In furthering a program for relating the services of the Medical and Dental professions in a coordinated educational program the Rochester Dental Society has been invited to and has accepted an important place in the field of educating the public in regard to the value of Periodic Health Examination. Through the radio, in their offices, to their patients, and through literature the Dental Society through a recently appointed educational committee, will work in close cooperation with a similar committee of the Medical Society on behalf of periodic health examinations. One special feature of this program is the loose leaf book of sixty one radio broadcasts—one hundred and forty three copies of which are in the hands of doctors, dentists, school instructors, agencies and public libraries of the City and in the hospitals and dispensaries. This has proved to be of value as a means of systematic health education.

The second section of this program consists almost entirely of publicity directed to the general public. This portion of the program will be carried out by the Chamber of Commerce and the Tuberculosis and Health Association in consultation however, with the Medical Society. This division of work will no doubt obviate much criticism of the medical profession. The public is too ready to attribute commercial motives to any propaganda regardless of how much it benefits through this propaganda.

The objectives of this program are *first* to impress upon the public mind the importance of periodic health examinations and *second* to point out that the family physician is best qualified to make such examinations. His intimate knowledge of the individual's history and environment places him in a position where he usually can interpret better the individual's symptoms and can evaluate them more correctly. The public will be reached through circularization of the membership of many civic fraternal labor and educational organizations, issuance of special articles in specialized publications, through short talks to various groups through radio broadcasting, special exhibits, newspaper releases and advertising, special educational motion pictures and distribution of special prepared leaflets, notably "Pity the

Poor Ostrich." This program will be officially inaugurated with a public dinner at the Chamber of Commerce on September 29th under the joint auspices of the Chamber of Commerce, Tuberculosis and Health Association and the County Medical Society of Monroe. Just a week ago 25,000 leaflets were distributed by the Tuberculosis and Health Association at an exhibit at the Rochester Exposition.

I have so far discussed the organization of this program, its progress and our hopes of what can be done to further it. To conclude at this point would necessarily leave out of consideration what in my opinion is the most important question with reference to this entire activity. That is, what is the value of all this work? This activity on the part of the Medical Society in the *first place* has a great value to the public because it gives to it a service which the public needs and is not now getting. It also has great importance to the community in that it signallizes the joint action of the medical profession and lay groups in a matter of importance to the public. I think it is not necessary at this time to go into the question of the value of periodic health examinations. The time allotted to this paper does not permit so doing and I shall have to assume that you all recognize its value and importance. Valuable as this type of activity may be to the public it is of even greater value to organized medicine. Too long has organized medicine stood by quietly while official and voluntary health organizations undertook the entire burden of solving medical public problems. In the solution of such problems by lay organizations the interests of the medical profession and often thereby the true and deeper interests of the public often were overlooked. A point of view foreign to the medical profession often is the motivating power in such solutions of medical problems and consequently the result is not as we would like it. As long as the medical profession holds itself aloof from medical problems in which the public is interested, just so long will the leadership which properly belongs to the medical profession naturally be assumed by others.

In recent years the Medical Society of the County of Monroe has shown an increasing interest in the public health problems of the County of Monroe and the City of Rochester. It is developing a community consciousness. The Society has demonstrated an interest, constructive in character, on the question of the County Health Unit.

The Committee on Public Relations under the chairmanship of Dr. John R. Williams is responsible for initiating a survey on the hospital needs of Rochester with the object in view of coordinating the hospital facilities to the community needs.

Under the constructive leadership of Dr. I. G.

Whipple, an organization of sixty-two physicians has been created known as the Public Health Committee. Ten standing sub-committees made up of physicians in the various fields of medical specialty have considered the public health needs and the programs of different agencies in the City and County. The County Society, through the activities of this Committee has representation on the board of directors of the voluntary health agencies, the Council of Social Agencies, the Nursing Association, etc., giving medical counsel and advice. Dr. Whipple has unstintingly given of his time to attend all sub-committee meetings and has devoted a great deal of thought to the programs of his committees.

The Committee on Child Welfare under Dr. John Aikman has assisted in the development of a child health consultation program for the rural part of Monroe County, and has taken steps in conformity with the plans of our local Health Bureau to aid in insuring the protection of the community in the threatened epidemics of measles and poliomyelitis.

The Diphtheria Prevention Committee under Dr. George S. Price has sponsored an educational program and has assisted in the immunization of 55% of the children of pre-school age in rural Monroe County.

The Social Hygiene Committee under Dr. Frederick Garlick has sponsored a carefully planned educational program recommended by the State Medical Society.

The Maternity Protection Committee under Dr. Lawrence E. McCaffery has requested the Council of Social Agencies to make a study of the maternity protection needs of the City and has sponsored a special observance of Mother's Day.

The Tuberculosis Committee under Dr. John J. Lloyd has sponsored a fact finding study made by the Tuberculosis and Health Association and has cooperated in the splendid program undertaken by Iola Sanatorium to x-ray all the school children in Monroe County outside of Rochester.

The Committee on Mental Hygiene under the chairmanship of Dr. Kirby Collier has advocated the establishment of a psychiatric ward in one of our general hospitals. This would make possible the admission of mental cases into a general hospital for a limited period of time and so often avoid the distressing ordeal of a legal commitment.

The Cancer Committee under the chairmanship of Dr. John M. Swan has furnished personnel for the maintenance of a Cancer Clinic in the headquarters of the Public Health Nursing Association, and through the Tuberculosis and Health Association has circularized the medical profession in regard to the early diagnosis of cancer.

The Cardiac Committee under Dr. Rufus B. Crain has made a survey of the cardiac cases in

the high schools of Rochester. The Committee on Health Education under the able chairmanship of Dr. William A. Sawyer has been conducting for the past year and a half a weekly radio broadcast that has proven of considerable value not only to the County of Monroe but to every place where the radio carried the weekly messages of advice on how to guard health and keep well. Of the more than 12,000 requests received for copies of these talks, a majority have come from rural residents in the territory included in the 7th District. From comments made not only by local physicians but also physicians in various parts of the State where the public listened-in we know that many individuals by following the advice given not only preserved their health but sometimes were led to life-saving measures.

In our Committee activities on behalf of periodic health examinations, we are also fulfilling a public need. The general public is being educated to ask for this service. The thinking part of the public has been asking for it for a number of years.

The life insurance companies, our large industrial plants, our public schools, our chambers of commerce and voluntary health organizations until now have been responsible almost entirely for encouraging this movement. If the medical profession does not become responsive to this need then these various lay organizations will without doubt devise some other means than that of private practice whereby this need may be fulfilled.

We have been told that the Monroe County Medical Society has a comprehensive public health program. With all due modesty, we are beginning to believe it ourselves. If in developing a similar program we can be of any assistance to other county societies we shall be pleased to make available to them our experience.

SUPPLEMENTARY NOTE

At a special meeting of the County Medical Society held September 25th the above recommendations of the Committee on Periodic Health Examination were approved. Approval was also voted for the recommended increase in dues for the year 1933, and for an assessment of \$5.00 to finance the Society until then.

An agreement was reached with the hospital and dispensary authorities which provides for the examination of the apparently well individual, and for special examinations only when they are requested by the practicing physician. It is understood that both the patient and report on the findings of the examination will be referred to the practicing physician when he so requests.

At its October meeting the County Medical Society approved an appropriation of \$2,400 for the Public Health, Post Graduate Instruction, and Periodic Health Examination Committees,

ENDOSCOPIC AIDS IN DIAGNOSIS*

By JOSEPH W. MILLER, M.D., NEW YORK, N. Y.

From the Department of Laryngology and Peroral Endoscopy, Beth Israel Hospital, New York City; service of Samuel J. Kopetzky.

PERORAL endoscopy is now playing an important part in the diagnosis and treatment of diseases of the larynx, lungs, mediastinum and esophagus. A realization of its possibilities for exact diagnosis or confirmatory observations that will bear out other clinical findings is important. It is not merely a method for the direct extraction of foreign bodies or a mysterious sleight of hand procedure. Numerous case reports will attest to its decisive value in many doubtful cases.

In a masterful review of the subject of peroral endoscopy, Andre Soulas refers to the remarkable developments in technique that have justified the practitioner in resorting without hesitation to the bronchoscopist for both the diagnosis and treatment of pulmonary disease. He refers to the diagnosis by bronchoscopy of compression stenosis of the trachea due to aneurysm, mediastinal tumors, substernal goiter, thymic hypertrophy, adenopathy, tracheal urticaria, benign and malignant tumors of the bronchi and lungs, gunnams and cancer of the adjacent portion of the esophagus.

In children indirect examination of the larynx is impossible and one must resort to direct laryngoscopy and no child is too sick for such an examination. A correct diagnosis here is imperative and vital.

Diseases of the larynx may be the causes of hoarseness or respiratory difficulty or dysphagia—chronic inflammation, tumors, various types of muscular pareses or paralysis, or foreign bodies may be the underlying irritant. Hysteria, in the form of motor or sensory neurosis may simulate disease. Obscure pains in the larynx may result from ulcerations, tuberculous or otherwise. Respiratory difficulties may be caused by neoplasms malignant or benign, or in acute cases a diphtheritic membrane or edema. Direct laryngoscopy is now the accepted method for removal of diphtheritic membranes.

Neoplasms of the larynx may be benign or malignant. The malignant may be intrinsic or extrinsic and infiltrating. Under direct laryngoscopy the extent of the lesion may be more accurately observed and biopsy easily accomplished. Hysteria, a frequent cause of hoarseness, particularly in adolescent girls and neurotic women is best examined by direct laryngoscopy to exclude with certainty any pathology in the larynx and it often also serves as a therapeutic measure. The various forms of muscular pareses are due to either muscular changes resulting from abuse or misuse of the voice or chronic inflammation

usually the result of chronic suppuration in the nasal accessory sinuses. The true paralyses are due to injury or pressure on the recurrent laryngeal nerve. The cause may be in the mediastinum, or an hypertrophied thyroid, enlarged lymphnodes along the course of the nerves or trauma after thyroidectomy.

In the summer of 1929 I had occasion to observe two cases of laryngeal diphtheria that were admitted to the hospital with an entirely different diagnosis. Severe dyspnea in both infants prompted me to examine the larynx directly. False membranes were found and removed by suction, the children injected with anti-toxin and then removed to the Willard Parker Hospital.

The lungs may be the seat of various diseases that give rise to coughing, dyspnea, asthmatic attacks or pains in the chest. The bronchi are subject to chronic inflammations, tumors, foreign bodies, strictures, dilatations, retractions, occlusions, varicosities and ulcerations which have a common symptomatology. General clinical examination may not yield a definite diagnosis and so bronchoscopy easily proves its value. In diseases of the lung parenchyma itself evidence may be found in the bronchi, in the character of the secretions or as changes in the form or shape of the lumina carina and secondary bifurcations.

Bronchiectasis is very satisfactorily demonstrated after lipiodol injection into the tracheo-bronchial tree through the bronchoscope. The Roentgen picture will then show characteristic dilatations of the bronchioles. Especially is this method valuable in the left chest where the cardiac shadow may obstruct or hide from view the bronchial dilatations in an ordinary chest plate.

Many cases of asthma are erroneously treated as such and one often finds with the aid of bronchoscopy lesions in the tracheo-bronchial passages such as polypi, strictures, tenacious secretions, a non opaque foreign body or a bronchogenic tumor. All these conditions may give symptoms of asthma and true asthmatic attacks. It might be well for every physician to bear in mind Dr. Chevalier Jackson's wise and timely warning that "all is not asthma that wheezes."

Pneumonias, particularly in children which run a bizarre course may result from the presence of a foreign body. Bronchoscopy is the only method that will settle this definitely, and removal of the foreign body will give a brilliant result.

Such a case came to my observation recently. A boy, four years of age was admitted with the diagnosis of pneumonia and treated for this condition for five weeks. The X-Ray films of his chest revealed changes suggestive of pneumonia.

* Read before the Eastern Medical Society at Hotel Brevort, New York City, on March 13, 1931.

In only two of the numerous plates did the Radiologist report a suspicion of a foreign body. That this made no impression on the medical attending is evident from the fact that he did not request a bronchoscopy. The request, however, was made by the bronchoscopic department through my associate Dr. M. L. Harris, on information I obtained from a friend of the family that the child "swallowed" a piece of tin foil just before he took sick with pneumonia. Ten days later we were requested to perform bronchoscopy. This was carried out promptly without anesthesia either general or local and a metallic foreign body was sighted at the bottom of the left main bronchus and removed. This turned out to be a rolled-up piece of aluminum foil which the boy removed from a piece of chocolate. The Roentgenologist then informed us that aluminum does not throw a shadow to the X-Rays. He should, therefore, be congratulated in this case for his fine work and interpretation.

The esophagus is the channel through which all our nutritives must pass and it is a frequent seat of disease. Foreign bodies, dilatations and diverticula, spasms and peptic ulcers, tumors and scars following previous injuries may give rise to pain and difficult swallowing and disturbances in nutrition. Clinically they may give rise to similar symptoms; but the etiology being different, intelligent treatment demands an exact diagnosis. Here esophagoscopy is invaluable.

Foreign bodies in the esophagus may come in every shape or form that man has taken into his mouth. These may cause partial or complete obstruction most likely in the crico-pharyngeus region and, if not relieved will cause ulceration, abscess formation and perforation into the neck or mediastinum. Usually there is a history and a Roentgen picture may frequently help in making the diagnosis, but the esophagoscope is absolute not only in establishing a correct diagnosis but in determining the exact location, size, shape and character of the invader. Removal, of course, must be done through the esophagoscope.

Tumors, benign or malignant can be demonstrated by esophagoscopy and the diagnosis substantiated by biopsy. Spasm of the esophagus often simulates obstruction by neoplasms and here direct observation is important. Ulcers too can simulate tumors clinically, and particularly peptic ulcers in the lower esophagus. Esophageal strictures due to scars, resulting from chemical burns are easily demonstrated with esophagoscopy and,

at the same time this is the safest way to start dilatation under direct vision.

The importance of endoscopy as an aid in diagnosis of esophageal disease is best illustrated by the following case. A white adult male 49 years of age was admitted to the Beth Israel Hospital on the service of Dr. Kopetzky on July 23rd 1929 with a diagnosis of carcinoma of the esophagus. His history briefly is as follows:—Two and one-half years before admission first noticed dull pain over sternum at level of 5th rib. Vomited solid food. Gradually pain and vomiting became more severe. One year before admission began to lose weight and soon began to vomit liquids too. He lost sixty pounds in one year reducing from 200 to 140. The pain was dull and did not radiate and there was a progressive loss of strength. He was operated 14 weeks prior to admission at another hospital for gastrostomy so that he could be fed through a gastric fistula. Three weeks later he was sent to the Memorial Hospital for the express purpose of receiving deep Roentgen therapy. To the Beth Israel Hospital he was merely sent in to end his last few weeks on earth in comfort among congenial people of his own choosing.

The X-Ray report before esophagoscopy reads as follows:—There is a complete obstruction at the lower end of the esophagus. There is a dilatation of the esophagus above the obstruction. There is a new growth at the lower end of the esophagus.

Esophagoscopy on July 25th 1929 revealed a cardiospasm or as Jackson calls it, preventriculosis, of the lower end of the esophagus just below the diaphragmatic constriction. No sign of a tumor nor other pathology was encountered. When this was called to the attention of the roentgenologist, the X-Ray report following the esophagoscopy read as follows—Examination of the esophagus shows a marked dilatation of the esophagus and a point of narrowing at the cardia. The appearance being suggestive of a cardiospasm. There is no new growth of the esophagus.

Retrograde dilatation was promptly instituted followed by dilatation from above with the Plummer Hydrostatic Cardiospasm Dilator. Soon liquids made their way down the esophagus and after a few dilatations solid food made its way down into the stomach. The gastric fistula was made to heal. He then began to gain weight and strength rapidly and made an uneventful recovery.

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For list of officers of County Medical Societies, see January 15th issue, advertising page xxx.

Annual meeting, Hotel Statler, Buffalo, N. Y., May 23-25, 1932

HOUSE OF DELEGATES

The special meeting of the House of Delegates of the Medical Society of the State of New York was held in the Hotel Ten Eyck, Albany, on Thursday, January 14, 1932, as announced in the Journal of December fifteenth and January first. The object of the meeting was to discuss the general attitude of the medical profession toward Governor Roosevelt's Health Commission whose studies and suggestions were printed in the Jour-

nal of October first, 1931. The Joint Committee appointed to consider the Commission's recommendations, made a formal presentation of its report which had already been printed in the Journal of January first. The discussions on the floor of the House were concise and pointed, and the result was the adoption of the entire report. The minutes of the House of Delegates will be printed in the Journal of February fifteenth.

MEDICINE AND GEOLOGY

A list of one hundred American physicians, who were also geologists of note, is contained in an article entitled "The Relation of Physicians to Early American Geology," by Dr. William Browning of Brooklyn, in the *Annals of Medical History*, New Series, Vol. 3, No. 5, September, 1931. The list begins with Dr. William Baylies, who was born in 1743, and wrote on the geology of Martha's Vineyard; and ends with Dr. Robert Bell, who was born in 1841, and was chief of the Canadian Geological Survey. The list was compiled principally from the names of geologists contained in standard encyclopedias; and Dr. Browning reaches the remarkable conclusion that physicians constituted about fifty per cent of the American workers in geology when that science was in its stage of development.

Dr. Browning gives some natural reasons that physicians should be pioneers in geology. They constituted almost the only group of Americans who were trained observers and had a background of scientific education. They were constantly travelling over the extensive areas of their practice, and they were the recognized authorities to whom the people looked for explanations of strange objects or phenomena. Then, too, physicians were often attached to gangs of surveyors and road builders, and had abundant opportunities for making discoveries. When geology emerged from the stage of observations into that of scientific coordination with other sciences such as chemistry, physics, botany, and zoology, many physicians gave up their medical practices and became professional geologists, largely in governmental positions.

The thirteenth physician on Dr. Browning's list of geologists was Dr. John Steele, who was born in Massachusetts in 1780, practiced medicine in Saratoga County, and served as president of the Medical Society of the State of New York during the years 1834 and 1835. He wrote on the geology of Saratoga County, and doubtless obtained his facts from observations made during his medical visits.

A search of the record of Dr. Steele in the first book of the Transactions of the Medical Society of the State of New York disclosed the name of Dr. John Stearns, who also practiced medicine in Saratoga County, and was elected the first secretary of the Medical Society of the State of New York and served for seven years. He was made a permanent member of the State Society in 1814, only two being so honored each year. He was elected president of the State Society in 1817 and served four terms.

The record of the connection of Dr. Stearns with geology begins in February, 1808, when he with six other physicians "Reported a topographical and geological description of their sev-

eral counties together with the diseases prevalent in the same," in accordance with a provision of the by-laws adopted at the organization meeting of the Society on the first Tuesday in February, 1807. The records show that reports from the following counties were given during the first six years of the existence of the State Society:

Montgomery, by Dr. Alexander Sheldon.
Orange, by Dr. David R. Arnell.
Dutchess, by Dr. William Wheeler.
Saratoga, by Dr. John Stearns.
Jefferson, by Dr. Hugh Anderson.
Clinton, by Dr. Horatio Powell.
Westchester, by Dr. Lyman Cook.
Essex, by Dr. Alexander Morse.
Ontario, by Dr. Renbey Hart.
Chenango, by Dr. Henry Mitchell.

The records of the meeting of February 5, 1811, show the following entry:

"The Prize Medal for the best Dissertation on the Topography, Geology, Mineralogy, and Medical History of any County in the State of New York was adjudged to Doct. Stearns of Saratoga." This was one of three medals which had been authorized at the annual meeting in February, 1808, the first after the organization meeting a year previously. The second medal was offered for the next best dissertation, or survey, of the same subject, and the third medal was for "The best dissertation on the causes and best method of preventing and of curing the typhus mitior or low, nervous fever, which prevails in the different counties of the State."

The presidential address of Dr. Stearns on February 2, 1819, at the end of his second year in office, was largely on the subject of geology and illustrates the embryonic state of the science in that day, when the book of Genesis was accepted as the literal explanation of Noah's flood as well as the Creation. After mentioning the geological work of Dr. Mitchell and of M'Clure, he describes the work of Cuvier and says:

"It may be interesting to remark the coincidence of the discoveries of this indefatigable geologist, and the improved theory of this science, with the Mosaic history of the creation and deluge.

"The important discoveries of Cuvier, afford strong facts to prove that the earth had experienced some extensive revolutions long before it was inhabited by man, and that the last great convulsion perfectly corresponded in time with the account of the deluge. This evidence was chiefly deduced from the vertical position of certain strata, the fossil remains of animals, and the entire bodies of the rhinoceros and elephant being found so far beneath the surface, as to require the lapse of four thousand years to cover them to

that depth. While Cuvier adduces the latter fact as evidence of the suddenness of the convulsion, Kirwan cites it to prove that the deluge was caused by the vast waters of the Southern Ocean bursting upon the north and thus overwhelming the world. His reasons are, that the rhinoceros, an inhabitant of warm climates, was found in the frozen regions of Siberia two hundred miles from the sea, surrounded by marine exuviae of tropical origin, and thence concludes that he was driven by the immense force of the flood from his native clime, and deposited near those mountains of the north, which opposed a barrier to this impetuous torrent. In confirmation of this hypothesis, he minutely traces the impressions which this course of the waters would necessarily produce upon the surface of the earth. He thus accounts for the conical shape of the two continents, and of all islands with their apex to the south, which were most exposed to the ravages of this eruption, exhibiting excavations on one side, and corresponding projections on the other, according to the flux and reflux of this vast current. To the same cause he imputes the barren deserts of Africa, and the fertility of that mountainous section of country which arrested its progress towards the north.

"Whether this grand precipitation was miraculously completed in the definite period of a single day, or whether it was left to the slow operation of a natural process, and by the first day of creation, as on other occasions was therefore intended a figurative representation of one thousand years, are questions which we are unable to solve."

After a page or two of conjectures of extreme interest, Dr Stearns comments on the relation of geology to infectious diseases and says:

"Although it is a common opinion that epidemic diseases originate from some peculiar change in the atmosphere, few have ever suspected, and none actually investigated, the cause of

those changes beneath the surface of the earth. Physicians have generally been satisfied with ascribing epidemic diseases to the vicissitudes of weather, to contagion, or to infectious miasmata, arising from the decomposition of animal or vegetable substances. But facts are at variance with the former, and the latter are too limited in their operation to extend their influence over a whole continent. Mr Webster (who wrote a book on epidemiology, as well as a dictionary) has, with great industry and perseverance, drawn from history such a compilation of facts as to induce a belief that the real source of many epidemic diseases must be traced to the interior of the earth. That subterranean fires are continually decomposing the materials of that region and occasionally ejecting their gaseous results into the atmosphere, are facts corroborated by history, and by every volcanic eruption upon the surface. To this source we must impute the emission of a dense vapor which sometimes overspreads the horizon with darkness producing those dark days which philosophers have been unable to explain. The conjoined influence of the celestial bodies, in aiding this effect, and also in the production of earthquakes and volcanoes, must be admitted by all who adopt the Newtonian theory of tides. Whether this influence is exerted through the medium of gravitation or electricity, is still enveloped in the arcana of nature. But is a historical fact, that such phenomena are succeeded by epidemic pestilential diseases, and probably produced by the deleterious gas which accompanies such eruptions. This may be the origin of those epidemics which, from the plague of Athens to the yellow fever of New York have been the subject of controversy in all ages."

It is probable that Dr Stearns was the source of inspiration of his professional colleague, Dr Steele, who achieved the recognition of encyclopedists in the field of geology.

LOOKING BACKWARD

This Journal Twenty-Five Years Ago

Executive Officers The Medical Society of the State of New York makes a distinction between its officers and its paid executives. The earliest mention of this distinction seems to have been made by Dr Joseph D Bryant the first President of the Annuitant State Society, who referred to the subject in his exaugural address delivered on January 29, 1907. This reference was printed in this Journal of February, 1907.

The editorial policy of a journal of mutual constituent ownership like this of ours, should be guided by the composite wisdom of an impar-

tial committee chosen for the purpose, rather than by the notions of the editor himself, as in the instance of personal proprietorship. Prompted by this belief, the President declined to appoint on the Publication Committee the Editor of the Journal. In my opinion the salaried agents of the Society ought not for apparently obvious reasons, to be entitled to membership in the executive bodies which regulate their compensation or determine their policies of action. Other and wiser means of conference than this can easily be determined."



MEDICAL PROGRESS



Resuscitation from Asphyxia and Treatment of Secondary Pneumonia by Inhalation of CO₂.—Yandell Henderson, writing in the *British Medical Journal*, October 17, 1931, ii, 3693, says it is not enough to resuscitate a man from drowning, asphyxia from carbon monoxide gas, or other accident, and after surgical anesthesia, if he is to die a few days later from secondary pneumonia. The pneumonia may be prevented by the method which he describes. When a mixture of oxygen and carbon dioxide is administered after a short but intense asphyxia the effects are truly extraordinary. After longer but less intense asphyxias, resuscitation is not so rapid, but the subsequent development of pneumonia is prevented. It has always been supposed that there must be an overpowering excess of carbon dioxide in the blood in cases of asphyxia. Experience now demonstrates that it is not excess of carbon dioxide, but deficiency of oxygen, that induces depression of the respiratory center. The inactive center promptly becomes active again if the amount of carbon dioxide supplied to it is sufficient. When the normal 5 percent carbon dioxide is insufficient to stimulate, an increase to 7, 10, or even higher percentages of carbon dioxide may be needed. The inhalation of a mixture of oxygen and carbon dioxide is initiated under prone-pressure artificial respiration.

This form of inhalation is not only applicable to asphyxias due to drowning, carbon monoxide poisoning and other accidents, but is fast replacing the old barbarous and often ineffective methods of resuscitation of the newborn. As much carbon dioxide may be used as is necessary, usually 7 per cent with oxygen. A large part of the neo-natal mortality is a consequence of continuing atelectasis, which favors the development of pneumonia in undilated areas of the lungs. Combining this fact with other evidence, Henderson suggests that the lungs of every new-born child should be fully dilated by inhalation of carbon dioxide in the first few days of life. In the operating room it has been noted, that patients who receive this inhalation after operations remain free from postoperative pneumonia. Respiration is closely associated with the tonus of the muscles, especially those of the thorax. Depressed breathing and low tonus permit collapse of part or the whole of a lung. Then, if infection is present pneumonia develops. If respiration and muscle tonus are stimulated by inhalation of carbon dioxide the lungs will be kept open and development of pneumonia will be prevented.

Appendicitis at an Advanced Age.—On the basis of a study of 31 cases, R. Patry and W. Heer say that appendicitis in persons of advanced age exhibits a considerably higher mortality than at an earlier period of life. Nearly two-thirds of the cases were recurrences. The diagnosis is frequently made more difficult by the fact that the clinical picture is veiled. Operation often presents technical difficulties, and in addition the surgeon has to take into account the waning powers of resistance of the aging organism. In advanced cases operation must be carried out without delay, but may be postponed in cases that tend to come to a standstill or promise complete recovery. The impression is given that the aging organism reacts less to the attack than that of a youthful person. The bodily temperature nearly always remains within subfebrile limits. The general condition requires special attention, since we have to reckon with adiposity, hypertonia, emphysema and chronic catarrhs of the respiratory organs, with myocardial affections, cirrhotic processes, diabetes, and increased tendency to embolism. Local symptoms, sensitivity, and tension of the abdominal wall are frequently less in evidence than in youthful subjects. This is due to the decreased reaction of the aging organism and in some cases to adiposity. The tendency of the disease to run a milder course makes the diagnosis more difficult in many cases. The differential diagnosis also presents greater difficulty, since in the later years of life other ailments, such as pancreatitis, cholecystitis, perforation of the stomach, and other acute affections of the abdominal cavity run concurrently with appendicitis. Relatively frequent is a masked appendicitis, simulating a strangulated hernia. All the 31 patients were operated on. In 19 there were found adhesions of the appendix and its environs. In nearly two-thirds of these there were signs of an earlier inflammatory illness, revealing that this attack was a recurrence, just as the history had indicated. Nine were cases of perforation, and 14 of gangrenous appendicitis. Points of importance are the making of an early diagnosis, the determination of the precise indications for operative intervention, and the making of a large incision. Good supervision makes for a rapid and safe operation.—*Schweizerische medizinische Wochenschrift*, September 12, 1931.

Animal Parasites and Appendicitis.—Assertions made by certain authors to the effect that parasitic worms may cause a true appendicitis led Vittorio Vanni to make a systematic examination of 200 appendices that had been surgically re-

moved, with a view to getting some idea of the frequency of worms in this organ. Only 7 of these appendices were found to contain parasites or eggs of parasites, as follows: Adult *Oxyuris vermicularis*, 7 times (35 per cent of cases), *Trichocephalus trichiurus*, eggs only, in 1 case (0.5 per cent); *Ascaris lumbricoides*, eggs only, in 1 case (0.5 per cent), *Entamoeba dysenteriae*, in 1 case (0.5 per cent). *Oxyuris* is the parasite which, in addition to its greater frequency in the appendix, has the property of becoming localized in the mucous membrane, in the form both of eggs and of adult worms. It does not cause the anatomic changes of classical appendicitis, but produces hemorrhages and constant local infiltration of eosinophile elements. This local eosinophilia must be regarded as a phenomenon of local anaphylaxis, representing an energetic reaction of the tissue against the toxic action of the parasite. No inflammatory changes of the lymphatic follicles (atrophic or hypertrophic folliculitis) were observed, nor any abscesses with a tendency to perforate, such as are seen in true appendicitis. Microscopically the follicles remained normal, with no indication of leucocyte infiltration, but deep within the mucosa there were signs of more or less hemorrhage. At some points in this tissue there were roundish empty spaces which appeared like the mould of the parasite. The entire picture was such as to suggest that the condition resulting from its infestation might more properly be called oxyuriasis of the appendix than appendicitis from oxyuris. In cases of appendicitis where no emergent conditions exist it would seem advisable that an examination of the feces be made before proceeding to operation, since there are cases in which anthelmintic treatment might accomplish the disappearance of all the symptoms. — *Riforma medica*, September 21, 1931.

Chronic Foci of Infection in the Oral Cavity—H. Passler expresses the view that there is no need of assuming a special peculiarity in the tonsillar tissue by virtue of which it is predisposed to the development of chronic foci of infection. Any such disposition that the tonsil may have is due naturally to its anatomic architecture and to that of its immediate surroundings, not to the nature of the tissue. Not the true tonsillar tissue, but the ramified hollow spaces of the crypts and of the paratonsillar cavities furnish the permanent residence for masses of bacteria. Owing to the narrow and somewhat tortuous passages leading from these spaces toward the free oral cavity, which is particularly well provided with defenses against microorganisms, nearly every inflammatory swelling of the tonsil parenchyma results in a tight closing up of these exits which may remain closed or at any rate become still narrower after the infection has passed its acute stages. The shutting off of the crypts

from the oral cavity and its saprophytic flora deprives the former of the benefit of these natural defenses. In addition the hollow spaces of the recesses of the tonsil offer the optimal bodily temperature for the growth of pathogenic microorganisms, besides furnishing a favorable nutritive material in the secretions of the injured neighboring tissues. Thus it is the location of the tonsillar and paratonsillar cavities that makes them incapable of availing themselves of the nearby defenses, since the carriers of these defenses—that is, the living blood and living tissue cells, are not present in these cavities, to which Passler accordingly gives the name of “dead spaces.” It is in these dead spaces that foci of chronic infection become formed, walled off from the free oral cavity, and hence capable of causing from time to time reactions in the surrounding tissues and the transportation of microorganisms to other parts of the body far removed from the source of infection. Other similar dead spaces are found at the apices of the roots of the teeth and in the openings in the paradentium which become pockets for infection, resulting in alveolar pyorrhea. All these result not only in the fostering of infection but in the resorption of various foreign substances. Not only are toxins present, but we have to deal with proteins and their decomposition products from dead bacteria and tissue elements, with resultant changes in reactivity and with allergic and hyperergic reactions, which probably play an important rôle in the pathogenesis of secondary diseases.—*Munchener medizinische Wochenschrift*, September 25 and October 2, 1931.

Treatment of Sprained Ankles—In dealing with sprained ankles W. E. Tucker lays down as the first rule that all sprains except very mild ones should be examined roentgenologically. His second rule requires rest for all damaged structures. If the sprain is of moderate degree, the ankle should be firmly strapped, and walking allowed if not painful. Massage and radiant heat should be applied over the strapping, and active movements, without producing pain, should be allowed from the beginning. The strapping is removed on the fourth day, if there is absence of pain on passive movement to its full extent. The ankle is then supported by an elastic ankle or crêpe bandage until it feels to the patient completely recovered. Foot exercises should be advised to prevent recurrence and also to guard against a painful flat foot. If the sprain is severe, the patient should be confined to bed for a week, if possible. Firm pressure bandages should be applied over lint soaked in some evaporating lotion (liquor hamamelis 1 in 6, or lead and opium lotion). The next day the ankle is massaged gently, heat is applied, and active movements without producing pain, are encouraged.

This treatment is continued at least once daily. If available, diathermy through the ankle and surging faradism to the muscle will help to absorb deep-seated effusion quicker than any other form of treatment. At the end of a week the patient may be allowed up with the foot supported by strapping, a firm bandage or an elastic bandage. Massage and physiotherapy are continued until full range of active movements is obtained without pain. In severe sprains with fracture the treatment is the same, except that the patient is confined to bed for ten days. If he cannot remain in bed, he is advised not to place the foot on the ground, but to walk with a crutch. The massage and physiotherapy treatment should be continued. For chronic sprained ankle, if it is seen within the first month, massage, movements, and physiotherapy undoubtedly constitute the best treatment, with the ankle supported in the correct position. If seen after the first month, the foot should be manipulated through its full range of movements under an anesthetic in order to break down adhesions, following this with massage and physiotherapy. Where the ankle is continually twisting the best way to strengthen the muscles is by applying surging faradism and carrying out appropriate exercises.—*The Lancet*, October 17, 1931, ccxxi, 5642.

Posthemorrhagic Blindness.—Occasionally, says L. Genet, great loss of blood is followed by disturbances of vision which may even end in blindness due to atrophy of the optic nerve. It is curious to observe that as a rule these effects do not immediately follow the single extensive hemorrhage but are more frequently produced by a series of repeated hemorrhages which leave the subject anemic. The hemorrhages most frequently observed in this connection have been gastroenteric or uterine, whereas traumatic hemorrhages seldom provoke blindness in this way. It is customary for such visual troubles to appear between the 3rd and the 16th day after the hemorrhage, though in some cases they are observed during or immediately after its occurrence; rarely are they seen later than the 21st day. In some 50 per cent of the cases they disappear without sequels, but when optic atrophy supervenes it generally goes on progressively until the sight is definitely lost, and permanent blindness remains. Those lesions which lead to optic atrophy have their seat in the layer of nerve fibers of the retina and in the ganglial cells. While ischemia is the most important cause of these atrophies, it is probable that other causes of a toxic or infectious nature, or phenomena of colloidoclastic shock, enter into the etiology. The unfavorable general condition of the patient, malnutrition and the like, also no doubt plays a rôle. The pathogenesis remains obscure, for these cases are rare, and their severity seems not to bear any definite

relation to the intensity of the hemorrhage. It is possible that an earlier infection of the organism with syphilis or tuberculosis, an alteration of the blood or vessels in individuals affected with lesions of the alimentary canal, or an alcoholic taint may have a predisposing influence. The prognosis is unfavorable, but there is still room for hope of cure after 2 or 3 days of total blindness. The most difficult cases are those where the visual disturbances appear between the 2nd and 10th day, whereas those in which functional troubles are observed within a few hours of the hemorrhage seldom lead to optic atrophy. Treatment consists first of all in hemostasis, but vasoconstrictor substances are strictly contraindicated. When hemorrhage has been controlled, recourse should be had to vasodilator medication and measures directed toward overcoming acute anemia. In the phase of partial atrophy, general hygienic methods have their place, with special reference to ocular hygiene.—*Journal de médecine de Lyon*, October 5, 1931.

A New Treatment for Acute Bursitis.—While treating a patient for boils, who also had symptoms of a mildly inflamed sub-acromial bursa, T. K. Richards administered intramuscular injections of iron-arsenic compounds along with other forms of therapy. After each injection the patient volunteered the information that his bursa felt better. Shortly after this the condition of the bursa became more acute and it was decided to try the iron-arsenic preparations intravenously. After five injections of iron cacodylate, the acute symptoms had disappeared and there was no restriction of the shoulder motions. The results were so striking that the author has tried the treatment in approximately seventy cases of acute bursitis, three of which he describes in detail. In many cases of acute bursitis uncomplicated by a focus of infection elsewhere in the body, there has been an immediate lessening of the acute symptoms within three or four hours following the first injection. The majority of the patients have returned to their normal activities, with complete absence of symptoms and no restriction of motions, from ten to twenty-one days after the first intravenous injection. Iron-arsenite and iron cacodylate were both employed, but as the iron-arsenite was more frequently accompanied by immediate severe reactions, its use was abandoned in favor of the iron cacodylate. The general procedure consisted in giving not more than 3 c.c., or 3/5 of a grain, of iron cacodylate intravenously on the first visit. On the third or fourth day the injection was repeated, using 5 c.c., or 1 grain. This was repeated every third or fourth day until all symptoms had disappeared. The number of doses required to obtain this result varied somewhat. The injection should be made slowly, and great caution should

be used to avoid injecting any of the drug into the tissues about the vein. There is no x-ray evidence which indicates that there is any hastening of the absorption of the lime deposit in the bursa. However, by making motions painless it will prevent the formation of periarticular adhesions and thus avoid distressing complications. —*New England Journal of Medicine*, October 22, 1931, ccv, 17.

The Influence of Sympathetic Nerves on Voluntary Muscles.—Leon Asher, writing in the *Schweizerische medizinische Wochenschrift* of September 5, 1931, states that he and his co-workers have succeeded in showing that under normal conditions impulses coming down the sympathetic nerves have an influence on the efficiency of voluntary muscles. By using frogs without forebrain but otherwise normal, and registering the normal contractions of the extremities, it was demonstrated that on the side where a few days before the sympathetic had been cut, contractions lost their intensity much sooner. When the action currents of the normal side and of the side deprived of its sympathetic stimulation were registered by means of the same preparation, it was observed that after a time the diminution of these currents on the side without the sympathetic appeared more promptly and was more pronounced. The value of these experiments lies in the demonstration that in activity emanating from the central nervous system, impulses reach voluntary muscles not only by way of the cerebrospinal nerves but also by way of the sympathetic. The experiments of these workers clearly demonstrate an influence of the sympathetic on the activity of voluntary muscles when fatigued. Only if Boeke's view that sympathetic nerve fibers enter into the contractile substance itself is correct, is it permissible to conclude that the sympathetic impulses have a direct influence upon the muscle fiber itself. But if on the other hand Hinsey and Wilkinson are right in denying that any sympathetic fibers enter the muscle, the explanation must be sought in another direction. As there remains only the possibility of sympathetic fibers running to the blood-vessels, a test might be made of the idea that sympathetic stimulation produces from the cells of the blood-vessels a substance which acts only upon fatigued muscles. Such a view is supported by the fact that adrenalin acts in this way and that the sympathetic stimulation has rather a long latency. Asher has tested this idea by perfusing the hind limbs of the frog and comparing the action upon the frog's heart of the perfused fluid from periods with and without sympathetic stimulation. In his experiments the effect of the

fluid from the period of sympathetic stimulation was identical with that of adrenalin. Further experiments are in progress to determine whether sympathetic stimulation acts by way of some hormone upon fatigued muscles, or in some other way.

Endocrine Disturbances in Essential Coxa Vara of Adolescence.—A. Beau says that the action of endocrine secretions upon the phenomena of bony growth is indisputable. The glands chiefly concerned appear to be the thyroid, genital, and pituitary, with the thyroid probably taking first place. The thyroid secretion seems indispensable to the life of cartilage. The genital glands, becoming active at puberty, have the opposite effect, causing the multiplication of cartilage first to diminish, then to come to a stop. In castrated animals, the absence of gonadal secretion results in prolonged multiplication of epiphyseal cartilage. But nothing is absolute in endocrinology, and the derangement of a single gland may set up a disturbance of the entire endocrine apparatus. These purely theoretical ideas find startling confirmation in clinical observation. In order of frequency, the clinical pictures most commonly met in coxa vara of adolescence are the adiposogenital syndrome, the hypothyroid syndromes, cretinism, hypophyseal dwarfism, and various pluriglandular syndromes. A large number of authors have pointed out the coincidence of coxa vara with the adiposogenital syndrome. In all the cases published, radiograms confirmed the coxa vara deformation in connection with the typical general habitus of this syndrome. In many it is expressly stated that an application of opotherapy gave excellent results both locally and generally. Besides these frank cases there are *formes frustes*, in which coxa vara is associated with what may be only slight indications of endocrine disturbance, such as acrocyanosis, tachycardia, adiposity, mild goitre, and slight exophthalmia. Only a systematic examination accompanied by the various exploratory tests and pharmacodynamic reactions can give satisfactory information in cases of this kind. It remains to be demonstrated how the cartilage, affected by nutritional disturbances, gives rise to the particular deformity known as coxa vara, but it seems logical to believe that mechanical factors of body static are here at work. The weight of the body, usually greater than normal because of adiposity, falls upon the nucleus of the head of the femur, whose point of union with the neck (the epiphyseal cartilage) is diseased, so that a slipping toward the base of this nucleus can be easily understood.—*Revue française d'Endocrinologie*, June, 1931.



LEGAL



"COURTS AND DOCTORS"

By LORENZ J. BROSNAN, ESQ.

Counsel, Medical Society of the State of New York

A scholarly, interesting and instructive work setting forth the legal rights and duties of the physician in the field of the civil and the criminal law is now available. The title of the book is, "Courts and Doctors." The author is Lloyd Paul Stryker of the New York Bar. The book is published by The Macmillan Company of New York and its price is \$2.00.

Mr. Stryker needs no introduction to the members of your Society. During his tenure of office as your general counsel, he merited and enjoyed your respect, confidence and admiration. The publication of this volume has been eagerly awaited by the medical profession of this State. It fills a long-felt want. In the preface to the book written by Dr. Charles Gordon Heyd, President-Elect of the Medical Society of the State of New York, the history leading to the publication of this work is set forth as follows:

"Mr. Stryker was for many years general counsel for the Medical Society of the State of New York, and during that period had personal charge of the legal policy of the Society and the defense of its members who were sued for malpractice. Before resigning as general counsel of the Society, he was requested by its Executive Committee to put in book form the results of his experiences and his researches in the law of this subject. It was felt that his unusual knowledge and experience in this field should be preserved in permanent form, and that a book by him would constitute an authoritative discussion of the legal problems of the medical profession. Mr. Stryker is exceptionally qualified to write this book by reason of his long experience as trial counsel and his handling for many years of medico-legal problems, both in the trial and appellate courts, as well as before committees of the legislature, and he has thus been able to bring together in this volume the material with which his personal contact with doctors and the courts has made him most familiar."

Unlike many books on legal subjects, the present work is not a mere compilation of cases dealing with the subject under consideration. It is a practical guide for the active practitioner. It is written by a man who not only knows the law of malpractice, but who has applied its principles in actual practice in the trial of numerous malpractice cases. This book is the result not only of exhaustive research but of practical experience as well. The author has not confined himself to

merely defining the legal rights and duties that flow from the relation of patient and physician. In Chapter XII entitled, "Suggestions on Avoiding Being Sued," Mr. Stryker gives advice to the medical profession which every practicing physician would do well to read and apply in his individual practice.

As we have already said, "Courts and Doctors" covers both the civil and the criminal law. The book is divided into seven parts, the first six of which have reference to the doctor in his relation to the civil law. The last part deals exclusively with the doctor and the criminal law. Mr. Stryker begins his book with a chapter devoted to the legal definition of the practice of medicine. Here the author defines, analyzes and explains the definition of the practice of medicine as it now exists in the State of New York. From this point he takes up to a chapter headed, "Doctor and Patient—The Nature of the Relationship." Here Mr. Stryker gives the medical profession some sound, sensible and practical advice on the necessity for tact and character in the practice of medicine. On the importance of tact Mr. Stryker in part has this to say:

"I never kept accurate statistics on the subject, but I always felt that not a few of the controversies between doctors and their patients coming to my notice, might have been prevented by a greater display of tact by the physician. Tact has been defined as a 'fine sense of how to avoid giving offense.' It has likewise been described as 'fineness of discernment as to action or conduct.' Others have spoken of it as an 'intuitive sense of what is true, right or proper.' A fine sense of anything presupposes a sense well developed,—an alert and a trained mind. A sense of how to avoid giving offense could only come from a consideration of the rights, the sensibilities, even the prejudices of others. An intuitive sense of what is true, right and proper can spring only from a generous character and sound ethical development."

"Tact is a priceless asset for any professional man, it is indispensable to the physician. The ills, deformities, physical and mental states of people form the subject-matter of his life's work. He encounters all kinds of conditions of men and women, appreciative as well as critical, intelligent as well as ignorant, reasonable as well as unreasonable, fair as well as mean, generous as well as selfish. From the most unpromising of these, he

may fashion warm friendships, or sometimes bitter enmities. How he will fare with his patients (granting, of course, reasonable competency) will largely depend upon his sense of tact or on his lack of it."

The author then takes up the legal duty of the physician to his patient, and the reciprocal duty of the patient to his physician. These chapters contain reference to the leading cases on the subject both here and in other States. The author then discusses under a separate chapter the very interesting and important subject of confidential communications. The statute of New York State relating to this subject-matter is set forth, together with a large number of cases defining and explaining the operation of the statute.

The necessary elements in a malpractice case are clearly and succinctly stated, and the author tells us exactly what the plaintiff must prove in order to make out a case. In this connection there is a very illuminating discussion of the necessity of expert testimony as applied to malpractice cases. The author's conclusions after reviewing the legal authorities are worthy of quotation:

"First, in the overwhelming majority of malpractice cases a plaintiff cannot make out his case without expert testimony. The necessity for it is the rule, the dispensing with it the exception.

"Second, a bad result does not import negligence,—the rule of *res ipsa loquitur* does not apply—and thereby obviate the necessity for expert testimony, except in the instances enumerated in rules four and five.

"Third, in every case in which the point at issue involves a question requiring for its correct solution scientific or expert knowledge, expert testimony must be adduced before a jury can be permitted to consider it. Any question involving in any way the propriety of the treatment however obvious the question may appear to the layman, requires expert testimony for its solution.

"Fourth, there are border line cases, but the mere leaving of a foreign body does not import negligence, so as to dispense with expert testimony. Usually in such case a plaintiff makes out a *prima facie* case by merely establishing the presence of the foreign body. This, however, may be fully met by the defendant through establishing by expert testimony that the retention of the foreign body did not result from the defendant's departure from approved methods. Thus in surgical sponge cases where the surgeon was justified in relying on the nurses' count and had executed a reasonable search himself, in broken needle cases where the proper treatment was used, but it is shown that with the best of care and skill needles break, in x-ray cases where the plaintiff is not shown to be a non-idiosyncratic or where the rays were necessary to combat the disease and could do so only through the destruction of

intermediate tissues,—in these and similar cases if such expert testimony is adduced by the defendant and is not broken down or rebutted by the plaintiff, there is no case for a jury to consider.

"Fifth, where a physician's failure to use due care is so obvious that by no stretch of the imagination could a scientific question of any kind be said to be involved, such for example, as where a surgeon undertaking to remove a tumor from his patient's scalp lets his knife slip and cuts off his patient's ear,—expert testimony is not needed."

We find an excellent chapter which treats of the physician's responsibility for the acts of nurses, internes and other physicians who are working in hospitals. In this chapter Mr Stryker illustrates very clearly, through the reported cases, that the law does progress and that the courts in the making of their decisions take cognizance of existing conditions in the practice of medicine. As Mr Stryker has well said:

"As civilization becomes more complex there is naturally a tendency towards division of labor. In business, in trade and in the profession some men are found adapted to one particular branch of work, others to another. Thus, in medicine there are internists, diagnosticians, dietitians, cardiologists, pediatricians, roentgenologists, otolaryngologists, genito-urinary surgeons, traumatic surgeons, general surgeons, specialists of one kind or another in other parts or functions of the body, as well as general practitioners. Now, the most competent man is usually the one most in demand. Some surgeons go from one operation to another as long as their strength holds out. In any department of endeavor it is an economic waste for one who can do what few others can accomplish, to spend his time in doing what hundreds of others can do as well as he, and thereby preclude himself from doing what the many are incapable of accomplishing. The courts have applied these principles to the surgeon and have held that he is not responsible for the after-care performed by internes or nurses not in his employ, unless he has expressly agreed to undertake that work."

The author very properly calls the attention of the medical profession, under a separate chapter entitled, "Assault—Operations Without Consent," to the fact that (in the language of our Court of Appeals) "Every human being has a right to determine what shall be done with his own body, and a surgeon who performs an operation without his patient's consent commits an assault for which he is liable in damages. This is true except in cases of emergency where the patient is unconscious and where it is necessary to operate before consent can be obtained." A number of adjudicated cases amplifying this principle are cited and discussed.

Several chapters are given over to a discussion

of the Statute of Limitations as applied to malpractice actions. Perhaps the most important case to which reference is made by the author under this heading relates to a case very recently decided by the Court of Appeals in which it was held that the Statute of Limitations on an act of malpractice begins to run in favor of the physician or surgeon from the date of the alleged negligent act rather than from the time of the consequential injury.

From this point Mr. Stryker discusses at great length the general subject of expert testimony. Some of the headings under this topic are: "What Expert Testimony Is"; "What Constitutes an Expert?"; "The Hypothetical Question"; "The Use of Medical Text Books"; and "The Duty of a Physician to Give Expert Testimony." The author points out very clearly, illustrating his point with actual cases in court, the weakness of the rule with respect to so-called experts in this State. Upon this topic Mr. Stryker has this to say:

"The fact that one essaying the role of expert witness need not have special knowledge or experience covering the particular subject about which he is asked to give opinion evidence seems, as we have said, generally to be held. Yet such a rule, in my opinion, is an exceedingly unjust one. It permits a man to criticize and condemn the work of another physician without having sufficient knowledge or experience to enable him to make a just criticism or condemnation. It allows a physician of long years of indefatigable labor and arduous devotion to a specialized field, to be assailed and injured by an incompetent tyro. It is an encouragement to a certain class of lawyers and to the 'professional testifiers' among the medical profession. It permits a plaintiff with an unjust case to supply a necessary link in a chain of proof and thus to make out a *prima facie* case where no real honest *prima facie* case exists. The venal and incompetent expert,—the pseudo expert rather—is the cause and the justification for a large share of the public criticism which of late years has been leveled at expert testimony in general."

The book contains a very practical chapter under the heading, "The Work of Testifying." Here the author lays down twelve rules for the guidance of the medical witness. These rules have been formulated as a result of the author's practical experience in court.

Part VII of the book, embodying Chapters XXIV to XXX, have reference to the doctor and the criminal law. Here the author takes up, among other topics, the subjects of "Assault"; "Abortion"; "Contraception"; "Narcotics"; and "Prescription of Liquor." Attention is called to some statutes which we feel are not well known; for example, the statute in this State which declares that "a physician or surgeon, or person

practicing as such, who, being in a state of intoxication, without a design to effect death, administers a poisonous drug or medicine, or does any other act as a physician or surgeon, to another person, which produces the death of the latter, is guilty of manslaughter in the second degree." This offense is punishable by a term not exceeding fifteen years, or by a fine of not more than one thousand dollars, or by both. Where a physician while intoxicated does any act to another person 'by which the life of the latter is endangered or his health seriously affected,' he is guilty of a misdemeanor punishable by imprisonment in a penitentiary or county jail for not more than one year or by a fine of not more than five hundred dollars." Another instance cited is that of a New York statute which provides that "a physician who knowingly gives a false certificate, or makes a false representation, for the purpose of enabling or assisting a person, to be discharged, excused or exempted from service, as a trial juror in the city and county of New York, or in the county of Kings is guilty of a misdemeanor." Mr. Stryker points out the inconsistency of having this statute apply only to the counties of New York and Kings.

Mr. Stryker concludes his book with a reference to Dr. Oliver Wendell Holmes, and sets forth in detail some of Dr. Holmes' words of wisdom to the medical profession.

The arrangement of the book is excellent. There is a complete alphabetical list of cases cited, and especially to be commended is the mechanical arrangement of the references. This has been done in such a way as not to interfere with an easy reading of the book, and yet the references are full and complete. The work is in all respects accurate. Mr. Stryker has given to the medical profession the adjudicated cases not only in this State but has also included many of the leading cases in every State in the Union.

Not alone the medical profession, but the courts as well, are indebted to Mr. Stryker for this splendid book. It is reasonable to assume that it will assist the courts of this State to a better understanding of the proper principles of law to be applied to actions of malpractice. It can and should be read with interest and profit by every practicing physician. It has a very important place in his library, since there are numerous occasions in his professional life when it will be necessary for him to consult it. As has been truly said by Dr. Charles Gordon Heyd in the preface to the book, "The book should be not only owned, but read by every doctor as a means of informing himself as to his inherent rights and privileges, and the conditions under which he might invite a suit; and finally, for the sane advice whereby a physician may, in a measure, protect and fortify himself against shameless attacks upon his professional conduct, art and skill."



NEWS NOTES



COMMITTEE ON MEDICAL ECONOMICS

The following report of the sub committee on Public Service and Public Health of the Standing Committee on Medical Economics was received by the Committee on December 15 1931 and its publication in the Journal was requested

Your Sub committee on Public Service and Public Health has given some little consideration to the matter assigned to it, and wishes at this time to present the following findings for consideration, debate, and correlation

The Medical Society of the State of New York is an organization of duly licensed doctors of medicine This organization has among other purposes, that of "guarding and fostering the material interests of its members and protecting them against imposition, and enlightening and directing public opinion in regard to the great problems of medicine"

The organization is one, primarily, of individual practitioners, doctors of medicine maintaining a private medical practice Its members, in a very great majority, render service to the public in an individualistic manner They maintain offices and equipment for this purpose at their own expense They offer a service for the prevention of illness the maintenance of health, and the alleviation and cure of disease This service is available to the general public, and is, of course, utilized by the general public, with the understanding that the physician rendering the service is entitled to a reasonable remuneration from the person to whom the service is rendered

To this particular plan of medical service, a plan to which the great majority of medical men are devoting their lives and talents the term "Private practice" has been given It is the oldest plan of medical practice, and is, obviously, thoroughly tested by time It is a plan concerning the worth of which the general medical profession, and the organized medical profession of the State of New York are thoroughly convinced

So convinced are the medical men of the worth and efficacy of the rendering of medical service through private practice and the impossibility or at least the unlikelihood of the appearance of any plan that could take its place in a satisfactory way, that in the past they have not paid sufficient attention to developments both within and without their profession which bid fair to evolve into a plan that will take the place of the private practice of medicine

Such developments are coming from many sources A small minority of the medical

profession itself is apparently dissatisfied with private practice as at present constituted and is advancing plans for its complete change or modification Various social welfare groups are greatly concerned with medical service and medical practice, and its apparent unavailability to a portion of the general public This latter group, in the minds of your sub committee, is greatly confused as to this particular matter Its members show a great tendency to fail to differentiate between cause and effect, they blame, frequently, inadequate medical service for the tragedy of poverty and destitution, instead of blaming, attacking and attempting to remedy the real underlying cause

Your sub-committee feels, however, that the greatest development at the present time, bidding fair to take the place of private practice, is the development, evolution and ever-increasing amplitude of the thing called "Public health"

The term "Public health" and its practice is difficult to define and delimit to the satisfaction of all In the minds and words of its proponents it is becoming increasingly evident that public health includes all medical effort and service, both preventive and curative The medical and quasi-medical care of the child, the guidance of the adolescent the treatment of the unfortunate devotee of Venus the correction of defects, both physical and mental, education and training in dietetics, prevention and treatment of the diseases of middle age and old age—all these, and many other more obvious and appropriate matters, are included according to the more enthusiastic agencies of public health, in the scope of public health

In the minds of your sub committee public health is, and should continue to be, much more rigidly delimited Public health is, in its essence, the promotion by the public at large, through designated agents and agencies of health for the public at large, but not for the individual as an individual Based upon this definition, public health should have but one concern, and that is the protection of the public's environment Such environmental protection has two subdivisions These are (a) sanitation (b) communicable disease control

Sanitation is without argument the task of public health. The control of water and food supplies, to the end that they be clean, wholesome, and free from disease-producing micro-organisms, is a work, which, being for the public at large, should be done by the public at large. It is obviously impossible for an individual to protect his own water supply, or milk supply, forced as he is by law or the exigencies of modern communal life to partake of the common supply. It is obviously impossible for him to protect himself against the bites of disease-bearing insects and the like by destroying their breeding places, when their breeding places are situated on land over which he has no ownership or control.

Likewise, communicable diseases must of necessity be a matter for public concern. The presence of a disease which can be communicated from person to person forces upon the public at large the prevention of such communication. A case of scarlet fever is not an individualistic matter. Its presence, due to its ready communicability through contagion, renders it a threat to the entire public. The suffering of the disease, the probability of personal sequelæ, and the possibility of personal death, are individualistic matters, to be coped with as such; but the element of contagion, the danger of transference of the disease through direct or indirect contact, is a matter for the public to prevent, through the agency of a quarantine by its public health authorities.

These are the prime duties of public health: sanitation and communicable disease control through quarantine. However, due to the development of bacteriological knowledge, to the control of communicable disease through *quarantine* there must be added its control through *immunization*. The protection of an individual against a communicable disease through immunization is an individualistic matter to the person immunized, but it gains also a **public** interest, because the individual so immunized, not being likely to contract the disease, will not communicate it to the public at large. It is greatly to the advantage of the public to immunize its members against smallpox, for example, since quarantine can be imposed only after the recognition of the disease, while contagion may take place in the preliminary period before the disease has frankly manifested itself.

Although the matter of immunization as a function of public health has been debated, one cannot deny the right and even the duty of the public to offer to its members immunologic protection against disease, because by such protection it is protecting itself. Further, it is the right and duty of the public to *compel*

such immunization at times. And also it is the right and duty of the public, in view of the benefit itself derives from the procedure, to provide the immunization at its own expense, and not the expense of the person immunized.

An important part of the above two main functions of public health is public health education. It is right and reasonable that the public should consider it as its duty to inform its members as to the known facts regarding sanitation and communicable diseases, because in so doing it convinces its members of the reasonableness of its rules and demands, and thus achieves cooperation.

In the eyes of your sub-committee these are the functions of public health. As thus delimited, public health is reasonable, and highly essential to the public weal. But public health, as at present practiced, is not thus bound. It is not *public health*, but *private health*, and its practice is encroaching day by day upon the field of private medical practice.

Your sub-committee, in its studies, finds that official health departments, state, county, and local, together with affiliated and unaffiliated, unofficial health organizations, engage in activities far removed from a properly defined public health. Thus, in addition to sanitation and communicable disease control, we find them in unrelated fields, working and continually expanding, with their expansion often at the expense of more intensive work in the two divisions rightly theirs. We find, often, health departments putting great effort into pre-natal care, a matter entirely individualistic (unless we regard the unborn child as the ward of the State) while at the same time very little attention is paid to obvious sanitary lapses in the environment of the women receiving the pre-natal care. It is disturbing to note the time and effort given by health department leaders to the strictly individual problem of the increase of heart disease, with the installation of heart clinics, and the issuing of large amounts of publicity, and find at the same time in the same locality no rigidly conducted fecal examinations of food handlers for the organisms of enteric disease. To put the matter plainly, public health at the present time is taking on new jobs before it has satisfactorily completed the old. It is becoming a jack of all trades, and the master of none.

Your sub-committee lists the following new or impending public health activities, and wishes to point out that none of them deals, to any but the slightest extent, with environment.

1. According to leaders in public health, food, clothing, occupation, sleep, posture, and personnel adjustment are all matters of public health.

2 The entire subject of tuberculosis has been taken over by public health. Diagnosis and treatment, in addition to isolation, etc., are now the duties of health departments.

3 Mental disease, both diagnosis and treatment, together with such general medical and surgical care as is needed, is now the function of the State.

4 Physical defects crippling, and the like, are becoming the task of public health.

5 The care of the pregnant woman and the new-born child is being claimed more and more by public health as its duty.

6 The medical and surgical care of the school child is now a public health matter almost entirely.

7 Tuberculosis clinics supported by public funds, are branching further into the diagnosis and treatment of other forms of respiratory disease.

8 Heart clinics are now a part of some health departments, dealing with the diagnosis and sometimes the treatment of cardiovascular diseases.

The above examples are sufficient to show that public health, no longer content with the

task of the control of environment, a task which to date it has not half completed, is reaching out and obtaining control of the individual.

Your sub committee submits this preliminary study, and begs for more time for its work. In the meantime it makes the tentative suggestion that the Committee on Medical Economics of the Medical Society of the State of New York take it upon itself to watch at all times this increasing control by public health of the individual as opposed to the environment. Such control of the individual as has already been obtained by public health may be difficult to shake loose, but any increase in that control must at all times and in all places be opposed to the last by an enlightened medical profession, alive to the public welfare and its own.

J P GAREN,
JOSEPH C O'GORMAN,
*Sub Committee on
Public Service and Public Health*

December 15, 1931

COMMITTEE ON PERIODIC HEALTH EXAMINATIONS

Weekly broadcasts on Thursday mornings at 11:30 over the Columbia Chain, under the direction of the Committee on Periodic Health Examinations of the Medical Society of the State of New York were given in January from Washington, under the direction of the Surgeon General of the United States Public Health Service, Hugh S. Cumming, M.D.

The speakers and sponsors were as follows:

January 7th Estella F. Warner, M.D., introduced by Mrs. Hugh S. Cumming, Member, Board of Public Welfare, District of Columbia.

January 14th, Louise Taylor Jones, M.D., introduced by Miss Catherine McCail, National Director of Education of American Association of University Women.

January 21st, Estella F. Warner, M.D., introduced by Mrs. John F. Sippel, National President, Federation of Women's Clubs.

January 28th, Estella F. Warner, M.D., introduced by Miss Belle Sherwin, National League of Women Voters.

The February program is under the direction of Doctors Walter A. Calihan and Marion C. Potter, of Rochester, for Monroe County.

The March broadcast will be under the direction of Doctor Nelson G. Russell, of Buffalo, for Erie County.

C. WARD CRAMPTON, M.D.
*Chairman, Committee on Periodic
Health Examinations*

COMMITTEE ON PHYSICAL THERAPY

The interest and active work in physical therapy in the County Societies has shown gratifying progress during the first half of the current fiscal year. The following Counties have committees on physical therapy: Bronx, Erie, Kings, Montgomery, New York, Niagara, Onondaga, Otsego, Rockland, Steuben, Ulster, Washington.

Lecture courses on physical therapy are being

given under the auspices of the Committee on Public Health and Medical Education and with the cooperation of this committee in the Counties of Onondaga, Bronx and New York, courses in the near future are being planned for the Counties of Sullivan and Rockland.

Meetings with illustrated talks on physical therapy were held or are scheduled to be held in

the counties of Broome, Chenango, Otsego, Rockland, Saratoga, Schoharie and Ulster.

The number of county medical societies in which active interest is taken is thus considerably greater than in previous years. With the excep-

The teaching of physical therapy in medical colleges and post-graduate schools has likewise made satisfactory progress. There is no need in New York State any more for any of the commercialized "courses" on physical therapy given

SURVEY OF PHYSICAL THERAPY INSTRUCTION IN MEDICAL COLLEGES OF NEW YORK STATE—1932

	UNDERGRADUATE TEACHING	GRADUATE TEACHING	SPECIAL
Columbia University College of Physicians & Surgeons	3rd yr. students—8 lectures and demonstrations 4th yr. students — optional clinical work	Under advisement	3 months resident service at Presbyterian Hospital
Cornell University Medical College	Casual clinical instruction; therapeutic courses in medicine and surgery	None	
New York University University & Bellevue Hospital Medical College	None	None	1 yr. course for (non-medical) physical therapists at Hospital Ruptured & Crippled in New York
New York Homeopathic Medical College	3rd yr. students—11 lectures 4th yr. practical course two mornings a week	None	
Long Island College of Medicine	None	None	
New York Post-Graduate Medical School of Columbia	—	Casual instruction in courses of orthopedic and traumatic surgery	
New York Polyclinic Medical School	—	2 months course in theory and practice	2 months service of internes in physical therapy department
Syracuse University College of Medicine	Senior class in second semester, weekly lecture and demonstrations	Physicians admitted to observe clinical work	
Union University Albany Medical College	Casual instruction in general therapeutic courses and in conjunction with general medicine		
University of Buffalo School of Medicine	All undergraduates receive lectures and demonstrations	Subject included in program of Annual Post-Graduate Course	
University of Rochester School of Medicine	Senior Class—3 hrs. a week for 4 weeks (Demonstrations)	Physicians admitted to observe clinical work	

tion of two, all of the larger county societies have organized committees to safeguard the interests of public health and those of the medical profession in regards to physical therapy, as part of the practice of medicine. During the remainder of the fiscal year an effort will be made to stimulate the inactive societies.

by manufacturing concerns or self-appointed "lecturers" with the all-too evident tendency of sales promotion. A tabulation of physical therapy instruction in medical colleges of the State is herewith appended.

RICHARD KOVACS, *Chairman.*
January 15, 1932.

COMMITTEE ON LEGISLATION

To County Society Legislative Chairmen—Enclosed you will find the following bills:

Senate Int. No. 11—Dr. Love; the bill which he carried last year "in relation to mixing babies."

Senate Int. No. 71—Mr. Hastings reintroduced his medicinal liquor bill of last year.

Senate Int. No. 79—Mr. Mastick reintroduced the bill which he had last year, amending the Workmen's Compensation Law in relation to occupational diseases arising out of employment. The justice of this amendment is obvious, but the physicians must remember that many instances are likely to arise in which the establishment of a disease or disabling condition will be exceedingly difficult and on such occasions the entire burden of proof will rest with the physician. An excerpt from a report on the operation of health insurance in England is directly to this point: "Doctors have, no doubt, in the past proceeded on

the assumption that in cases in which there were no definite physical signs, the patient's account of his subjective symptoms might in general be accepted in the absence of any indication to the contrary." Fraudulent claims of the insured have become so evident that the Minister of Health has found it necessary "to remind practitioners that the statutory test of title to these benefits is that the insured person has been rendered incapable of work by some specific disease or bodily or mental disablement, and that strict regard must be had to this criterion in considering all cases coming before them."

Assembly Int. No. 116—Mr. Doyle and the physician for whom he is introducing this bill had a conference with the Legislative Chairman during the summer and the present bill is the outcome of that conference. It seems wise that this amendment should be enacted.

HARRY ARANOW, *Chairman*.

ONEIDA COUNTY

The annual meeting of the Oneida County Medical Society was held on January 12, 1932, in the Hotel Utica, Utica, N. Y.

Dr. T. H. Farrell presented the report of the Committee on Public Relations. It showed that addresses on public health had been given before many organizations which welcomed the interest and advice of physicians.

In the County Hospital there have been treated some patients who should have been cared for by doctors in their home towns. The report described how authorization for such treatment may be obtained, and also the rates.

Dr. W. C. Jensen, Superintendent of the Oneida County Tuberculosis Sanatorium, reported on an investigation by Dr. S. A. Mahady for the detection of incipient tuberculosis among children in Utica who had been living in homes where there were active cases of tuberculosis. Dr. Mahady obtained information from the city records, and the children were tested at Broadacres. Of 347 examined, 227, or 70 per cent, gave positive results. There were 220 x-rayed. In New York Mills, 166 children were found underweight, and 28, or 16 per cent, reacted.

Dr. F. M. Miller, Jr., medical economics committee, reported a tentative fee bill which has been approved by about thirty counties in this state for doctors' services in compensation insurance cases. By this plan an injured person may have his own doctor take care of him and cases can be settled by arbitration rather than by law suit.

Mr. W. B. Edwards, County Welfare Commissioner, appeared before the Society by invita-

tion and explained the working of the system of relief for sickness and for old age.

Dr. H. J. Ball, District State Health Officer and Chairman of the Public Health Committee reported on the diminution of communicable diseases in Oneida County, and stated that four county public health nurses were now at the service of physicians.

The officers elected were: President, Dr. E. M. Griffith; Vice-President, Dr. B. P. Allen; Secretary, Dr. William Hale, Jr.; Treasurer, Dr. H. D. MacFarland; Librarian, Dr. T. Wood Clarke.

Censors—Drs. W. B. Roemer, B. L. Rockwell, R. H. Hutchings, E. E. Porter, M. D. Graham.

Delegates to House of Delegates—Dr. Andrew Sloan; alternate, Dr. H. F. Hubbard.

President Griffith appointed these committees:

Legislative—Drs. G. M. Fisher, H. D. MacFarland, W. B. Roemer, F. M. Miller, Jr.

Public Health—Drs. Halsey J. Ball, H. H. Shaw, A. P. Clark, H. H. Williams, L. H. Eames, Karl Sanford, A. C. Kline.

Milk Commission—Drs. H. H. Shaw, E. E. Powers, A. G. Davies.

Public Relations—Drs. T. H. Farrell, J. L. Golly, A. M. Johnstone, R. D. Helmer, C. R. Bartlett.

Industrial—Dr. Vaughan W. Dutton, C. E. Davis.

Medical Economics—Drs. F. M. Miller, Jr., T. Wood Clarke, H. N. Squier, H. J. Teller, John Gromann.

The retiring president, Dr. Hutchings, read an able and instructive paper on the progress made in this state in psychiatry since 1825, and incidentally he sketched what had been done in this county by this society in 1836 by Dr. Charles B.

Coventry and Dr. John McCall, Utica, in securing an appropriation for the first hospital at Utica a mile and a half west of the city.

WILLIAM HALE, JR., *Secretary*.

KINGS COUNTY

Scientific Program: The scientific program of the stated meeting of the Medical Society of the County of Kings, on Tuesday, December 15, 1931, was as follows:

1. Address: "Neuropsychiatric Problems in Medicine," Lloyd H. Ziegler, M.D., Albany, Professor of Neurology and Psychiatry, Albany Medical College.

2. Address: "Medical and Other Conditions in Soviet Russia," Lewellys F. Barker, M.D., LL.D., F.A.C.P., Baltimore, Emeritus Professor of Medicine, Johns Hopkins University School of Medicine.

Officers: At the stated meeting on Tuesday, December 15, 1931, the following were elected officers for 1932:

For President, William Linder.

President-Elect, John J. Masterson.

Vice-President, J. Sturdivant Read.

Secretary, James Steele.

Associate Secretary, Joseph Raphael.

Treasurer, John L. Bauer.

Associate Treasurer, August L. Harris.

Directing Librarian, Jaques C. Rushmore.

Associate Directing Librarian and Curator, Edwin P. Maynard, Jr.

Trustees for 5 years, Walter D. Ludlum, Frank L. Babbott, Jr., William Browning.

Censors for 2 years, Milton G. Wasch, Henry M. Moses, Irving Gray.

Delegates to the Medical Society of the State of New York for two years 1932-1933, John L. Bauer, John E. Jennings, Joseph Raphael, O. Paul Humpstone, Thomas M. Brennan, Walter D. Ludlum, Harvey B. Matthews, Robert F. Barber, Siegfried Block, Gordon M. Gibson, Benjamin Rabbiner.

Radio: The Council of the Medical Society of the County of Kings instructed the Public Health Committee to establish a sub-committee on Radio Broadcasting, for the County of Kings. This committee is planning fifty-two weekly broadcasts over a Brooklyn station, WBBC, on Mondays, at four fifteen in the afternoon. This committee consists of Dr. Alfred E. Shipley, Dr. Frank D. Jennings, Dr. Alec N. Thomson, Dr. Samuel Zwerling, Dr. William S. Hubbard. The committee has elaborated rules in conformity with the principles of Popular Medical Publicity, printed in the State Journal, Dec. 1, 1931.

These weekly talks began on December 21st, with a talk on Pre-Natal Care of the Child, by Dr. William C. Meagher, and will be continued by other speakers, carrying the child through early adolescence, with emphasis on communicable diseases.

The talk on Dec. 28th will be given by Dr. Joseph C. G. Regan, on Smallpox. That on Jan. 4, 1932, will also be given by Dr. Regan, on Diphtheria.

Libraries: Another rare and interesting work for our collection of incunabula has come to us in a lot of books recently presented. It is a copy of Candidus, [Petrus]. De genitura hominis. It is an undated book, published in Auguste [Augsburg], by Johannem Froschauer. (Hain No. 4320.) There is a notation on the flyleaf that this is the third edition of this curious work and that it was printed between 1496 and 1499.

We have only been able to trace three other copies of this same edition in libraries throughout the world, one in England and two in this country. Only one of these copies is in a medical library. In one instance the date is believed to be 1498 and in another about 1493.

The text is in Latin and the entire book consists of only eleven printed leaves. Nothing can be found relating to the author.

This now makes twenty-six works in our collection of medical books printed during the period of the infancy of printing from about 1450 to 1500.

Electric Light Rates: As a result of conferences with the electric light companies conducted for the Co-ordinating Committee by the Committee on Medical Economics of Kings County, the companies will continue to classify physicians under the residential rate, unless the office from which the physician conducts his professional work is separated from his residence.

This readjustment will, of necessity, take some time. The medical profession is requested to co-operate with the electric light companies in this readjustment.

In case of any misunderstanding, the physician who is a member of the County Medical Society will state his individual case in writing and forward it to the County Medical Society for transmission to the proper electric light company.

Medical Clinics: The medical profession of Brooklyn is cordially invited to attend the regular weekly medical clinics held every Tuesday from 12:00 to 1:00 in the wards of the Kings County Hospital. Abstracts of cases, discussion of diagnosis in difficult cases, and interesting autopsy material, are presented. Here is an opportunity for one hour of clinical medicine in one of our largest city institutions.

Medico-Social Service: The problem of the unmarried mother comes before the Information Service of the County Society from time to time. The Bulletin is informed that one of our members has suggested that a notice of the work being done in this connection should be brought to the attention of the Society through publication.

In the course of a year such organizations as The Church Mission of Help, The Jewish Social Service Bureau and the Catholic Charities of Brooklyn take care of a considerable number of individuals falling under the following classes:

1. The unmarried mother and her baby. 2. The girl needing care to prevent delinquency. 3. The delinquent girl on probation to the Women's Court. 4. The girl committed to Bedford Reformatory for Women who also remains under care during the two-year parole period.

The following types of service are also rendered:

Prenatal and maternity home care for the un-

married mother; physical examination, surgical and medical care; psychiatric examination and treatment. Finding of sympathetic homes for girls and babies; recreational opportunities. Assistance in understanding family relationships, and in making personal adjustments. Expert vocational guidance with training and assistance in securing employment for which the girl is best fitted. Help in the formation and strengthening of her church affiliations.

The Church Mission of Help performs this service for all Protestant girls on Long Island. It is located at 124 DeKalb Avenue—NEvins 8-5863.

The Jewish Social Service Bureau of 285 Schermerhorn Street, Brooklyn—TRiangle 5-5951—renders this type of service to Jewish young women.

The Catholic Charities of Brooklyn (Health Division), at 283 Hicks Street, Brooklyn—MAin 4-3773—cares for young women of the Catholic faith.

SARATOGA COUNTY

The annual meeting of the Saratoga County Medical Society was held in the Y.M.C.A. auditorium, Saratoga Springs, N. Y., on October 31, 1931, with Dr. William H. Ordway, the President, in the Chair.

Dr. MacElroy reported verbally for the Committee on Public Health and Education saying that already an index of nine hundred crippled children had been made.

Dr. MacGovern reported verbally for the Public Relations Committee. It was moved by Dr. King that the Public Relations Committee and the Public Health Committee be combined in order to draw up plans and draft resolutions to be considered by the society before their presentation to the County Board of Supervisors.

Dr. Towne reported verbally for the Milk Supervision Committee.

Drs. Post and Cornthwaite reported activities in the development of the Hyde Franklyn Spring in Ballston Spa to the extent of \$100,000 for commercial purposes.

Dr. T. E. Bullard reported for the By-Law and Fee List Committee and read the report which

had previously been typewritten and placed in the hands of everyone present at the meeting.

Dr. King reported verbally for the Balneological Committee.

Dr. McElroy said that the Welfare Law would reach a large class of patients who are continually in debt to physicians. He read sections of the law stating that it was mandatory for the Board of Supervisors to provide medical care for the indigent sick, and felt that something should be done to get a list of such patients in the county.

The President appointed the following Physiotherapy Committee: Dr. H. L. Loop, Chairman; Drs. G. S. Towne, and G. S. Pesquera.

Dr. Loop moved that the President appoint a committee to draft resolutions to be forwarded to the Board of Regents of the University of the State of New York through Regent Grant C. Madill, M.D., concerning the investigation of the merits of the various cults who are applying for licenses to practise in New York State. This was seconded by Dr. Towne and carried.

Dr. Leon M. Herbert was elected to membership.

HARRY L. LOOP, *Secretary*.

DUTCHESS-PUTNAM

The annual meeting of the Dutchess-Putnam Medical Society was held Wednesday, January 13th, 1932, at the Hudson River State Hospital, Poughkeepsie, N. Y., and was called to order by the Vice-President, Dr. William A. Krieger, at 8:50 P.M.

The following officers were elected for 1932: President, Dr. William A. Krieger, Poughkeepsie, N. Y.; Vice-President, Dr. S. E. Appel, Dover Plains, N. Y.; Secretary-Treasurer, Dr. H. P. Carpenter, Poughkeepsie, N. Y.; Associate Secretary, Dr. E. Gordon MacKenzie, Millbrook.

N. Y.; Delegate (1932-33-34), Dr. William A. Krieger, Poughkeepsie, N. Y.; Alternate Delegate, Dr. J. N. Boyce (1932-33-34), Poughkeepsie, N. Y.; Censors, Dr. A. L. Peckham, Poughkeepsie, N. Y.; Dr. A. W. Thomson, Poughkeepsie, N. Y.; Dr. S. L. Smith, Poughkeepsie, N. Y.; Counselor, G. V. L. Spratt, Poughkeepsie, N. Y.

The reports of the Public Health, Public Relations, and Legislative Committees were held over until the February meeting.

The Secretary and Treasurer's report was read, accepted and ordered placed on file.

SECRETARY'S REPORT

Membership, January 1, 1931.....	121
Members Reinstated	4
Gains by Election.....	7
Members Died	1
Members Transferred	3
Members Resigned	1
Membership, Dec. 31, 1931.....	127
Members Automatically Dropped Jan. 1, 1932	15
Membership January 1, 1932.....	112

TREASURER'S REPORT

Receipts

Balance from 1930	\$1,060.83
Current, Back and 1932 Dues.....	1,762.00
Luncheons and Dinner.....	72.00
Emblems	12.00
Library Fund	72.75
	<hr/>
	\$2,979.58

Expenses

State Treasurer	\$1,290.00
Stationery and Printing	77.70

Stamps, Typing and Telegrams.....	45.95
Secretary	150.00
Cigars and Cigarettes.....	50.97
Flowers	15.00
Luncheons and Dinner to State Officers	463.26
Guests	4.05
Legislative Committee and Delegates	
Expenses	204.28
	<hr/>
	\$2,301.21

Bank Balance, January 1, 1932..	\$597.37
Cash and Checks on Hand.....	77.00
	<hr/>
Balance	\$674.37

Doctor Folsom welcomed the Society and then he presided over the Scientific Program.

SCIENTIFIC PROGRAM

I. Wilson's Disease—A review of literature and report of two cases—Charles E. Niles, M.D.

II. Correction of Physical Defects by Surgical Means as a part of the Treatment of the Mentally Sick—Robert W. Andrews, M.D., F.A.C.S.

The meeting adjourned at 11:00 P.M. for refreshments.

Present: Drs. Sadlier, Sobel, Gordon MacKenzie, Rogers, Grover, Folsom, Kelleher, Stoller, Poucher, Gosse, Wolff, DeNatile, Niles, Malvin, Andrews, West, Borst, C. E. Lane, Tabor, Appel, Rivenburgh, Thomson, Brown, Ross, Davison, Voorhees, Harin, Leonidoff, Mathers, G. E. Lane, Williams, Baier, Deyo, Huddard, Freeman, Breed, Wolfson, Conger, Benson, C. J. McCambridge, Mahoney, LeSoine, W. J. Thompson, Dingman, Richard Boyce, Groom, Peckham, J. N. Boyce, Carpenter, Krieger. 50.

H. P. CARPENTER, *Secretary*.

RENSSELAER COUNTY

A large number of doctors were present at the regular meeting of the Medical Society of the County of Rensselaer, held in the Health Center on January 12th, 1932. President J. B. Burke was in the chair, and Dr. C. J. Handron acted as secretary. The name of Dr. Chester Swett of Pawling Ave. Sanitarium was proposed for membership. Dr. J. H. Flynn presented an enlarged photograph of the late Dr. Herman Gordineer to the society.

Dr. E. F. Connally, past president, presented a paper on "Welch Baccillus Infection" which was discussed by Dr. C. F. Kivlin.

Dr. William H. Park of New York City stated that he believed that the whole world would soon come to use diphtheria toxoid as an immunizing agent for the prevention of diphtheria instead of diphtheria toxin antitoxin.

He also spoke of the use of the Dick test for scarlet fever, and of the use of the anti-streptococcus serum for the treatment of scarlet fever. Lantern slides were shown illustrating by statistical aid the value of each.

He discussed the use of human convalescent serum for the treatment of infantile paralysis and said that he believed that it was of no use unless it was given before the paralysis had set in. Its value exceeds that of horse serum, but is not yet good enough to warrant general use.

Dr. Park's illustrations were made possible by the use of the lantern given to the society a few years ago by Mr. I. L. Kaufmann of Troy.

The meeting adjourned at 10 o'clock for refreshments and a social hour.

WM. B. D. VAN AUKEN, *Reporter*.



THE DAILY PRESS



AN OLD CURE FOR RHEUMATISM

Mr. and Mrs.—

It's Never Known to Fail



From the New York Herald Tribune, January 4, 1932

FIERY FLYING SERPENTS OF THE BIBLE

A report from the meeting of the American Association for the Advancement of Science in New Orleans that Dr. Richard P. Strong, of Harvard Medical School, had solved the problem of the control of filariasis, has led the editor of the New York *Herald-Tribune* of January 6 to comment on the possible identity of that disease with the plague of fiery serpents described in the Bible in the twenty-first chapter of Numbers. The editors think that an actual flying serpent is the more logical explanation of the cause of the plague. The editor comments as follows:

"Isaiah mentions the southland 'whence come the young and the old lion, the viper and the fiery flying serpent.' Herodotus, also referring to Arabia, which probably was Isaiah's 'southland,' tells how he saw 'the backbones and ribs of serpents in such numbers as it is impossible to describe' at the Egyptian end of the desert pass through which these flying reptiles were said to flock to invade Egypt and where they were repulsed each year, the priests declared, by flocks of the sacred ibis. What is still more significant is the Greek traveler's description of the winged serpent as 'shaped like the water snake. Its wings are not feathered but resemble very closely those

of the bat.' Putting aside for the moment the high degree of credibility which modern researches grant to Herodotus when he is describing what he himself had seen, it is remarkable, to say the least, that the Greek describes his serpent wings in almost precisely the terms a modern geologist would use for the only kinds of flying reptiles known to have existed, the long-extinct pterodactyls.

"Modern commentary on these passages can go no farther than Pausanias went eighteen centuries ago, when he merely wondered what Herodotus had seen and whether he was a liar. Certainly the earlier traveler saw something, for it was not his wont to set down hearsay without naming it. Perhaps some dried and shrunken relic of a pterodactyl was among the treasures of the Egyptian priests who were Herodotus's instructors, just as similar fragments of reptiles almost as old are now in modern museums. Or possibly some kind of flying reptile, pterodactyl or other, actually survived until Egyptian times and did fly outward from Arabia at intervals to afflict Isaiah's contemporaries. It would be a matter of no small interest to find the pass where Herodotus says he saw the serpent bones."

MEDICAL LANGUAGE

What newspaper men think of medical terminology is indicated by the following editorial in the New York *Herald Tribune* of January 4.

"The reclassification of the diseases and ailments of the human body according to cause and

organ affected, with a strongly pronounced preference for English nomenclature, undertaken by the National Conference on Nomenclature of Diseases recently held at the New York Academy of Medicine, is a project which can scarcely fail to com-

mend itself alike to medical authorities and the public, whose health is in their keeping. The list, which is to be printed by the United States Public Health Service within the next two months, will constitute an entirely new catalogue of diagnostic titles, according to Dr. H. Burton Logie, executive secretary of the conference, in which 'English terms in good English usage are to be favored.'

"Long shrouded in a complex Latinate jargon, the practice of what has frequently enough been simple therapeutic or surgical technique has for ages assumed all the forbidding aspects of a profound art and mystery. It is probable that in the new list numerous Latin and Greek terms will continue in use in the diagnosis of eye and skin diseases, but here they are, from long-accustomed

usage, familiar, and in most other cases English terms will be preferred. In general a simplicity of language will obtain, and it is hard to believe that such a practice can be anything but reassuringly healthful in its tendencies and result.

"As with the modern psychologists, who, rather than say a person is 'shy,' assert that he is the victim of 'an uncompensated inferiority complex,' so for centuries physicians and surgeons have oppressed the ailing with portentous diagnoses couched in ominous polysyllables. In a time when, as a result of better health education, medicine and its practice are better appreciated and understood by laymen than ever before, a clarifying simplicity of medical terminology is a project which should find wide public favor."

MANUFACTURED WEATHER

It is often said that man has no power over the weather; but in reality he maintains the weather of his home and workshop at the constant balminess of May or September. He controls the temperature and lighting of his rooms, and the movement of the air currents in his house. He has less control over the humidity of the air, although this, too, is being investigated according to the following editorial in the *New York Times* of January fifth.

"The business of conditioning indoor air to make it comfortable and healthful is still comparatively new. Its success in large public halls makes it seem desirable for home use. The manufacture of a cheap unit for small houses is planned by several companies. Optimistic officials see a \$5,000,000,000 market opening up for this new industry.

"The equipment will be designed to filter, wash,

humidify and circulate air through the rooms of a small cottage or bungalow. As an auxiliary to the heating system, it will send air into the room through pipes with outlets under radiators. One unit recently developed takes up only nine square feet of floor space—it is less than four feet long, about two feet wide and four feet high. Control of the system is said to be 'virtually automatic.'

"In hot Summer weather a small refrigeration unit may be added to lower the water temperature for effectively cooling the air. Summer and winter the windows are kept closed, since the system both cleanses and circulates the air.

"With 'push-button' weather on tap at home, a sizzling hot, sultry day will be a fine time for staying in near the family air-refrigerator, just as now a wintry day of snow and sleet is ideal for keeping close to the cozy fireside—though it may be only an electric glow."

PROFITS FROM BEGGING

The *New York Times* of January 14 comments editorially on the experiences of three reporters in London, as follows:

"The common notion that begging is an easy trade receives a heavy blow from the recent experiment of three reporters for *The London Morning Post*. During the holiday season, when hearts and purses are supposed to open freely, they went into business for a day as pavement artists, organ-grinder, and hawker of penny balloons and monkeys on strings.

"Their takings were very small, a total for the three of \$3.20, with a deduction of some 60 cents to be made on the account of the balloon man,

who gave good change for a bad half-crown. The organ-grinder received little appreciation and netted only 10 cents. The pavement artist fared best, taking in \$1.04. But to get that he had to spend \$5 to hire a 'pitch'—the preserve of an experienced street artist—\$1.25 to rent a bedraggled dog as assistant, and 10 cents for biscuits to feed him.

"If the woebegone dog had been exploited with skill, and if receptive markets for hurdy-gurdy music and cheap toys had been found, the experiment might have proved more profitable. For success, even in begging, a man needs training, experience and a natural bent for his profession."



BOOK REVIEWS



CLINICAL DIETETICS: A Text-Book for Physicians, Students and Dietitians. By HARRY GAUSS, M.S., M.D. Octavo of 490 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, \$8.00.

It is not often that a book on dietetics can have attributed to it any element of fascination; interesting it will be always, but because of the great mass of detailed information it must give, it too frequently resolves itself into a compilation of tables, food values, and diets, with sufficient framework of science to support them. But it is decidedly otherwise with this book of Doctor Gauss. He begins with the food of *Pithecanthropus erectus*, the Pre-cooking Period carries the history of man and his food down through the Cooking Period, the Food Culture Period, when man began to raise animals and plants for food, and ends with the Rational Age of dietetics, which he begins at no earlier date than the twentieth century. It is a very telling stroke to pass from the speculations of what must have been the diet of the ape-man of Java to a consideration of the respiration calorimeter, and all of the scientific work which is bound up with that laboratory machine.

And it is equally pleasing to find the face of Doctor Graves looking out from one of the pages of the chapter on fever, he, who wrote as his epitaph, "He Fed Fevers"; or that of Lavoisier, and William Beaumont, who discovered by observation that the stomach would empty itself of boiled pig's feet in one hour while it took five and one-half hours to rid itself of hard-boiled eggs. These bits of the beginnings of the science make easy going of the later discoveries, and provide a background for the modern charts, lists, chemical formulae, etc. These include x-ray pictures illustrating the various disturbances of the gastro-intestinal tract, and photographs of the different types of bodily habitus with the position of the abdominal organs indicated on the surface, all of which the author insists are fundamental in considering a diet for any individual. No chart or table of importance in the subject that has ever been offered is omitted; yet the book reads easily and one is amazed at the number and magic of the author who thus presents an involved and difficult subject, with a simplicity, directness, and ease; gaining much the same effect that books which are written solely for the laity accomplished. It is essentially scientific, comprehensive, scholarly and fine. It is the "compleat" book on dietetics.

L. C. JOHNSON.

Mrs. Dose, The Doctor's Wife. By JOYCE DENNY. 12mo of 154 pages, illustrated. New York, D. Appleton & Company, 1931. Boards, \$1.50.

Here is a book intended to provoke smiles, dedicated to doctors and doctors' wives "with respect and admiration." The author tells us that the characters are all imaginary. This is as it should be because the reader without a profound appreciation of satirical humor of the English variety and a knowledge of English settings might believe the tales and thus add one more volume to the vast amount of slander that has been heaped upon the medical profession—now adding the wives.

One doctor's wife did not smile as she read it, thought it exaggerated, not a parallel to the life of any doctor's wife she knew and objected to the idea that in order to be a successful doctor's wife a girl had to be a snob and a bluff.

Many readers of such a book will enjoy and believe in the ridicule heaped upon doctors and their wives—and not object as did our American friend, wife and defender. The illustrations illustrate uniquely. A. N. T.

GOULD'S MEDICAL DICTIONARY containing the words and phrases generally used in medicine and the allied sciences, with their definition, pronunciation and derivation. By GEORGE M. GOULD, A.M., M.D. Third edition, revised and enlarged, based on recent medical literature. Edited by R. J. E. SCOTT, M.A., B.C.L. Quarto of 1538 pages, illustrated. Philadelphia, P. Blakiston's Son & Company, Inc., 1931. Fabrikoid, Plain, \$7.00; with Thumb Index, \$7.50.

This 1931 edition of Dr. Gould's dictionary contains many new and commendable features which presage its early appearance on the reference shelves of physicians and laboratory workers. It has been recalled that the demand for the second edition of this unusually comprehensive text was so insistent as to exhaust the previous edition five months before the revised text could be completed.

In the present revised edition, four entirely new reference tables have been added, bringing the total up to one hundred and seventy-four. Of great utility will be the most recently published (1929) International Table of the Causes of Death, which is included. As well as hundreds of new words and modernized definitions of old words, there are included, also, three entirely new tables of pathogenic bacteria, metazoa and protozoa, giving both the old and the new classifications.

Those familiar with the previous editions will recall the reference utility of the physician's dosage tables with important incompatibilities, the veterinary dose table, the weights and measures tables, and the diet table indicating the food value of average servings.

Dr. Gould's advocacy of simplified spelling whenever it is authoritative and his system for simplifying pronunciation will be appreciated by all who must labor with scientific terminology.

The reviewer considers the new 1931 text indispensable in every medical scientist's reference equipment. If in a dearth of dictionaries the reviewer could possess but one, that one would be Gould's. FREDERIC DAMRAU.

FRACTURES OF THE JAWS. By ROBERT H. IVY, M.D., D.D.S., and LAWRENCE CURTIS, A.B., M.D. Octavo of 180 pages, illustrated. Philadelphia, Lea & Febiger, 1931. Cloth, \$4.50.

Ivy and Curtis in this book deal with a subject of keen interest to the general surgeon, oral surgeon, and dentist. Heretofore it has been necessary to wade through a mass of ancient methods and long laboratory procedures, which were sure to discourage the reader.

The presentation of the subject matter is logical and clear and well indexed. Commencing with the Anatomical conditions they take us through fractured jaws in general, with an excellent chapter on fractures of the mandible. Here we find the authors relegating the Barton or figure-of-eight type of bandage as a means of immobilizing a fractured mandible to the limbo it should have been assigned to years ago.

The methods described they have found most useful in the treatment of fractures of the mandible are simple and will find ready use in the hands of the general surgeon and dentist.

The chapters on Roentgenographic Technique by Dr. Ennis and Dietary management of fractures of the jaw by Dr. Scogin abound in practical information.

This book fills a long vacant need in Dental literature and certainly should be read by the general surgeon to whose service fractured jaws are ever assigned.

LAWRENCE J. DUNN.



OUR NEIGHBORS



ENFORCEMENT OF MEDICAL LAW IN IOWA

How the Iowa authorities enforced the law against quacks and illegal practitioners is told in the following leading editorial in the Journal of the Iowa State Medical Society for November, 1931.

"Second only to the high quality of professional services rendered their patients by its members, the Iowa State Medical Society has probably made its greatest contribution to the health and welfare of Iowans through close cooperation with the authorities in the effort to curb quackery. Despite the cry of 'persecution' invariably raised by the apprehended quacks, the state society and its members have responded loyally to the need for protecting the public from untrained and irregular practitioners who continually seek to enter the professions of the healing arts.

"Enforcement of the practice acts is in the hands of

- "1. The various county attorneys.
- "2. The Department of Health through its Law Enforcement Division, and
- "3. The attorney general's office.

"These enforcement activities cover each and all of 'certain professions affecting the public health' as governed by Chapter VIII of the Iowa code and include: medicine and surgery, osteopathy, chiropractic, nursing, dentistry, optometry, pharmacy, podiatry and embalming. Enforcement of these laws began in earnest in 1929 with the appointment of a member of the attorney general's staff as special counsel for the Department of Health and the creation of the Law Enforcement Division in the department. The duty of the law enforcement officer, who began work July 1, 1929, is to secure evidence of violation of any and all of the nine practice acts, and so numerous were the complaints and violations that it was necessary to add a second officer this year. The assistant attorney general assists the county attorneys in the preparation of cases and if necessary heads the prosecution.

"Remarkable results have been achieved in the first two years. While divers persons have been stopped from various violations of each of the practice acts, yet the majority have been illegally practicing medicine, because it is the most desirable field and the most difficult to attain. Hence, of approximately 150 persons who have been stopped from illegal practice

in the past two years, nearly 100 were violating the medical practice act. A few of the more interesting practice cases which are typical of the whole group, are given below.

"It has seemed to many laymen, as well as to members of the medical profession, highly inconsistent that a cult which was founded upon opposition to drug therapy and whose schools do not afford such instruction, should be violating the laws of the state by prescribing or prescribing and furnishing medicine, which is by the code forbidden to any but a licensed doctor of medicine. That such is the case as far as numerous osteopaths are concerned is a matter of common knowledge. Considerable interest was therefore attached to three cases recently instituted against osteopaths who were charged with violating the medical practice act. The first was that of Rollo Hook, D. O., of Logan, in Harrison county, retiring member of the board of osteopathic examiners. Last July suit was brought to enjoin him permanently from the practice of medicine; the case was not contested and a permanent injunction was granted. In September cases were brought against two other osteopaths, W. H. McPheeters of Des Moines and E. B. Groves of Waterloo, on the grounds that in using the injection treatment for hemorrhoids and varicose veins they were practicing internal curative medicine as well as prescribing and furnishing. Neither of these cases has come to trial, but there are indications that both of them will be contested.

"Thus far there have been no cases against chiropractors for the practice of medicine, although in one or two instances a call from the enforcement officer who pointed out the limitations of their licenses, resulted in a discontinuance of such practices. Indeed, not only do most chiropractors seem opposed to any departure from the tenets of their cult, but several of these practitioners have themselves requested that a test case be brought to determine whether or not they may use light therapy and electrotherapy under the law.

"With Norman Baker at their head, a considerable number of smooth-talking, plausible gentry have been operating a fairly lucrative racket in Iowa for some time past. Baker having been permanently enjoined by the Supreme Court of Iowa from further operation of his cancer institute, has leased the institu-

(Continued on page 172—Adv. xiv)

ANALGESIC and ANTIPYRETIC ACTION of the CHEMICAL TOLYSIN

ACUTE RHEUMATIC FEVER

Case No.	Name	Age	Sex	Clinical diagnosis	Tolysin giving complete relief			Gastric symptoms	Albuminuria	
					Gm.	Gm.	Days		Before treatment	After treatment
1	A. C.	40	M.	Acute rheumatic fever	16	26	7	None	0	0
2	J. F.	14	M.	Relapse, acute rheumatic fever	6.5 ¹	6.5 ¹	3	None	0	0
3	S. M.	49	M.	Acute rheumatic fever	16	38	5	None	0	0
4	N. D.	28	M.	Acute rheumatic fever	12	54	7	None	++	Trace
5	H. B.	35	M.	Acute rheumatic fever	14	50	8	None	Faint trace	0
6	E. B.	24	M.	Subacute rheumatic fever	10	13	4	None	0	0
7	A. S.	17	F.	Acute rheumatic fever	10	21	7	None	0	0
8	R. S.	23	M.	Acute rheumatic fever	16	24	6	None	Faint trace	0
9	J. M.	24	M.	Acute rheumatic fever	40 ¹	40	10	None	Faint trace	0
10	H. C.	38	M.	Acute rheumatic fever	16	24	6	None	0	Faint trace
11	L. F.	18	F.	Acute rheumatic fever	14 ²	18	6	None	Faint trace	0
12	W. W.	37	M.	Acute rheumatic fever	16 ³	60	14	None	Faint trace	0
"	"	"	"	Relapse ⁴	16 ⁴	24	8	None	0	0

¹ Sodium salicylate, 3 grams per diem for six weeks, had given partial relief.

² Sodium salicylate, 4 grams per diem for eight days, had given partial relief.

³ Every symptom relieved except one slightly painful shoulder.

⁴ Preceded by eleven-day interval of sodium salicylate treatment (48 grams in all).

⁵ Occurred during salicylate treatment.

THIS table summarizes twelve cases of acute rheumatic fever treated with full doses of the chemical Tolysin (ethyl ester of paramethylphenylcinchoninic acid). The routine dosage determined upon was 2 gm. every two hours for three doses, followed by 1 gm. every four hours (four or five times a day) though some unimportant variations in dosage and interval were made in a few of the cases.*

These cases evidence some of the advantages of this chemical (Tolysin) over the salicylates, particularly in the relatively large dosages permitted and the rapidity of symptomatic relief.

Tolysin gives the physician greater freedom from the handicap of complications and from the limitations of the salicylates.

Over the past decade it has demonstrated a marked superiority over the salicylates in the treatment of acute and chronic rheumatism and arthritis. Physicians are invited to receive complete chemical and clinical data.

* A. J. M. S., Vol. CLXY, pp. 708-717 (reprint on request).

In prescribing, maximum effectiveness is attained from Tolysin by proper dosage, as follows: 2 or 3 five grain tablets as an initial dose with a glass of water, repeating in such quantities as to produce a total daily dosage of 12 to 20 tablets. After 60 tablets, allow a rest period of several days to one week. For chronic arthritic cases and use in children, suitable reductions may be made. Give water freely with each dose.

The chemical Tolysin is one of a group developed by The Calco Chemical Company, Inc. (unit of American Cyanamid Company) — an acknowledged leader in the construction and production of organic chemical compounds and particularly the ethyl ester of paramethylphenylcinchoninic acid. Published reports of clinical and chemical research of its Pharmaceutical Division are desirable additions to the physician's library. Write:



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(Continued from page 170)

on, which is now operated under lease by a licensed M.D., but with an apparent decrease the number of patients."

"One afternoon late this summer, a rather distinguished looking gentleman appeared at the door of a Sac City resident whose wife was suffering from a chronic ailment, introduced himself as from Des Moines and explained that the other gentleman, who was out of the car, was Dr. Charles Mayo of Rochester. It seems that 'Dr. Mayo' had heard of the woman's affliction and might be prevailed upon to take the case. The upshot of it was that the two gentlemen left later in the afternoon, with a cashier's check for eight hundred dollars, which the Sac City resident could charge only to experience. Reports that these two gentlemen are continuing to operate in Iowa have come to the State Department of Health and every effort is being made to locate them."

"In Mason City an organization known as the 'International Goiter Institute' had been operating for some time with one or more laymen actively engaged in managing its affairs. This institute has closed its doors without legal action upon the advice of the Law Enforcement Division of the State Department of Health.

"J. I. Class Health Institutes have recently sprung up in several Iowa cities and the one in Cedar Rapids was chosen as a test case with the prospect that it may go to the Supreme Court for final adjudication. A class health institute makes principal use of various kinds of 'fumes,' but is not above electrotherapy, light therapy, and so forth. As these institutes are operated by laymen, they present a very definite legal problem in medical practice.

"It was discovered last year that Iowa was harboring a new cult—naprapathy; in fact, the enforcement officer assigned to the job found that one of them had been practicing in Cedar Rapids for some twenty-five years without any type of license; that he was an officer of the National Naprothatic Association and that a brother practitioner in Burlington was also an officer of the same organization. Injunction suits were started against each in the district courts. The Linn county case resulted in an adverse decision and an appeal has been made to the Supreme Court. The Burlington case is to come to trial in Des Moines county shortly.

"Not only has it been necessary to stop various types of unlicensed practitioners from practicing medicine, but numerous physicians

(Continued on page 174—Adv. xvi)

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(Continued from page 172—Adv. xiv)

having licenses to practice medicine have come to the unfavorable attention of the department. In several instances it has been found that men fully qualified to secure licenses, by reciprocity or otherwise, had merely failed to do so; and these defects and oversights have been remedied.

"One case worthy of note is that of M. C. Graham, Des Moines, who was indicted for manslaughter and for practicing osteopathy without a license by the Polk county grand jury October 23 of this year. The indictments were occasioned by the death, from a ruptured appendix, of a nine-year-old girl whom Graham had allegedly been treating by osteopathy. No rule of law has ever been laid down in Iowa as to what responsibility rests with a person (either licensed or unlicensed to practice one of the healing arts) who shows wanton disregard for human life either through ignorance or carelessness and it is hoped a ruling of the Supreme Court may be secured in the above case which will definitely establish what the law expects of all those engaged in one of the healing arts and the duties required under the law.

"A general problem which is common to all of the nine groups included in Chapter VIII

is that of the corporate practice of a profession. At least one important case has already gone to the Iowa Supreme Court, in which it was found that the Bailey Dental Company, being a corporation, could not practice dentistry, regardless of the number of licensed dentists employed and the fact that they only were treating patients. The attorney general has ruled that this decision is applicable to every profession and every type of corporation so that even an incorporated county medical society may not legally enter into a contract with a board of supervisors. The International Goiter Institute, mentioned above, and various other corporations, have recently either dissolved or gone out of business as a result of the Bailey Dental Company decision.

"Iowa also has faith healers. The principal one to have come to the attention of the law enforcement officers was that of Peter Quigley of Decatur county. Quigley has been enjoined by the district court from the practice of medicine and it is interesting to note that his friends and supporters went so far as to have introduced in the last legislature a bill to legalize the practice of faith healing.

"While no question of law enforcement is here involved, yet a discussion of quackery in

(Continued on page 176—Adv. xviii)

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- b—Complete utilization makes small doses effective. It is painless when injected $\frac{1}{2}$ to 2 inches intragluteally. 10 to 15 injections constitute a course and are given weekly or semi-weekly.
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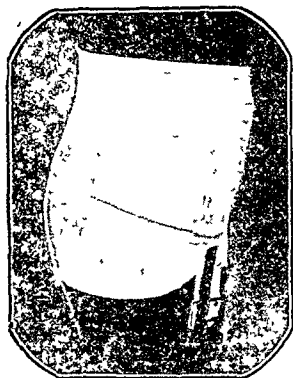


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(Continued from page 174—Adv. xvi)

Iowa would not be complete without reference to the organized opposition to public health and scientific medicine to be found in many quarters of the state. It is both unfortunate and significant that the Farmers Union in its state meeting should have gone on record as opposed to the county health unit, as well as the cattle testing law. Without discussing the pros and cons of the latter proposition, the adoption of such a resolution is evidence of an illiberal attitude. The Farmers Protective Association, which seems to exist primarily for opposition to the testing of cattle for tuberculosis, has at various places lent itself to anti-pasteurization campaigns and other anti-public health activities. The Peoples' Protective Association has not been heard of so much since Baker's radio station KTNT, was taken off the air, but its sole and avowed purpose was to combat the 'Medical Trust.' The Medical Liberty League, an offspring of the American Liberty League, which was a union of patent medicines and spiritualism, has been fairly active in Iowa during the past two or three years, especially in connection with opposition to county health units, anti-quarantine programs and campaigns against immunization and vaccination.

"While it might seem at first glance that such anti-medical activities were merely propaganda movements which have their inception in the cult theories, yet the immediate effect is to tear down respect for and confidence in medicine and surgery and to prepare a fertile soil in which the quack and faker may flourish."

HARMONY IN IOWA

The recent issues of the Journal of the Iowa State Medical Society have discussed some controversial points in the management of the society affairs, particularly in three respects:

1. Annual dues increased to \$12.00, from \$7.50, the previous rate.
2. The engagement of a managing director of the society.
3. The system of electing officers of the State Society.

The December issue of the Journal contains a "President's page," in which Dr. C. G. Smith, commenting on the increased dues, says:

"Pay your society dues and retain your membership in organized medicine.

"Be honest with yourself. There is not one practicing physician who cannot afford to pay one dollar a month society dues. The criticism that has recently developed is not, in reality, on account of the raise in dues. It has come about because some members have thought that your

(Continued on page 178—Adv. xx)

COLDS, INFLUENZA - - -



A DUAL ATTACK

IN line with recent research which favors the association of alkalis with salicylates, the Wm. S. Merrell Company—pioneers in natural salicylate medication—have introduced

ALYCIN

Alycin combines Merrell's Natural Salicylates with a balanced alkali.

Alycin provides a dual attack on colds, etc.—the natural salicylates help relieve the symptoms of pain and fever without gastric upset, while the balanced alkali combats the underlying acidosis quickly and safely.

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Let us send you a full container of Alycin so that you can make a thorough clinical test.

THE WM. S. MERRELL COMPANY
CINCINNATI **U.S.A.**

(Continued from page 176—Adv. xviii)

monies have not been wisely expended, that some activities were unnecessary, and because of a more or less general feeling that the direction of all affairs was in the hands of a very few.

"The Journal has recently printed a series of editorials telling of the state society activities and expenditures. Also there have appeared resolutions passed by county societies taking exception to the present activities, expenditures, management, and so forth."

An editorial in the January issue of the Journal says:

"The year has been marked by dissension and dissatisfaction among certain members. At least three separate county societies have drawn up and endorsed resolutions unfavorable to the present program of managing society affairs and critical of our managing director. But a greater number of county societies have gone on record approving the policy of the administration and endorsing the managing director. It is unfortunate that any dissension should have developed within our ranks, since our organization is one for scientific development and professional achievement. The machinery of administering towards these ends should remain secondary to the high purpose of our organization and should never be permitted

to develop situations destructive of fraternalism and the nobler aims of our society. Differences have arisen within the component units of our society so that in certain counties factions have developed and fraternity has dissolved. In some sections meetings have been conducted in which but little of a constructive scientific nature has entered into the program. This is deplorable and if continued will defeat one of the highest aims of our organization."

A sample of the commendatory resolutions passed by county societies is that of the Boone-Story Society, in the January Journal, as follows:

"Whereas certain component county societies have seen fit to publicly attack the administration of the State Medical Society's affairs and even impugn the integrity of its officers,

"We, the Boone and Story County Medical Societies, do hereby express our entire confidence in the said officers and approval of their administration.

"Furthermore, we understand that in said administration they have done neither more nor less than carry out the explicit instructions as outlined by the House of Delegates at Marshalltown in 1930.

"Furthermore we feel that due to the exigencies

(Continued on page 179—Adv. xxi)



"Vitamins are the little things in nutrition, the metals are the little things in therapeutics."

For Stubborn Coccogenic Affections

Collosol Manganese (Crookes)

A Stable Preparation Containing Manganese 1-400

Manganese, when injected, increases the capacity of the body to neutralize many endotoxins, the tubercle bacillus, pneumococcus, streptococcus, staphylococcus, etc. (L. E. Walbum). It raises the power of the body to form antibodies (Madsen) and stimulates regeneration of the blood in nutritional anemias (Myers and Beard).

COLLOSOL MANGANESE does not precipitate on addition to blood plasma and therefore gives rise to the minimum of pain, discomfort and untoward reaction when injected intramuscularly. Numerous published reports testify to its value in the treatment of coccogenic affections, particularly furunculosis, boils, acne, etc.

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For oral use in 4 oz., 8 oz. and 16 oz. bottles

Full particulars from

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145 East 57th Street, New York City

(Continued from page 178—1st 11)

arising from the approaching session of the state legislature, the society needs more funds to carry on its activities and thus we approve the action of the House of Delegates in asking for increased dues.

'While we do not question the right of any component county society to criticize, we view with extreme displeasure the character of attack that has been made on the officers and committees of the State Medical Society.

"Therefore Be It Resolved that we express our satisfaction not only with what has been done but the hope that they may continue with equal zeal and effectiveness in the future."

The editorial writer in the January Journal expresses the following hopeful outlook.

"The various officers of the society have given largely and unstintingly of their time in assisting the component societies to a healthy scientific and organizational growth. They have sown the seeds of fellowship and fraternity and cultivated the field of scientific endeavor. It would be difficult, indeed, to form any adequate estimate of the magnitude of the donation which the officers have made in time and effort so cheerfully given. The wholeheartedness of the response for service so universally met among our officials is indicative of the enthusiasm which has been manifest in every official activity of the society throughout the year."

CHIROPRACTOR CONVICTED IN TEXAS

The October number of the *Texas State Journal of Medicine* contains the following news item:

"The *Plains News* of August 20, advises that 'A jury in Hale county court this afternoon (August 20) returned a verdict of guilty in the case of the State of Texas versus Dr. D. H. Jerrell, chiropractor, of Hale Center charged with unlawful practice of medicine. His punishment was fixed at one minute in jail and a fine of \$500.'"

"The *Plains News* of August 27 advises that 'Petit jury in county court was dismissed late in the week when Dr. J. J. Vandervoort, local chiropractor, filed a motion to quash the jury panel setting forth in his motion that the jury was disqualified, having already tried him on one charge.' The case was continued to the week of August 31 when a jury will be summoned for the trial. County Attorney Royce Oxford stated Dr. Vandervoort had been convicted on one count, receiving a sentence of one minute in jail and a fine of \$500. Dr. D. H. Jerrell, Hale Center chiropractor, had received a similar sentence on trial of his first case, with a hung jury in the second. It was continued also to the week of August 31."

Written at the request of the Executive Committee of the Medical Society of the State of New York

COURTS AND DOCTORS

BY

LLOYD PAUL STRYKER

Formerly General Counsel for the Medical Society of the State of New York

No matter how conscientiously a physician or surgeon may practice his profession, there is always a possibility that some disgruntled patient may bring suit for malpractice.

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The Alcoholic, being essentially a medical problem physicians will find valuable help in this book which records the observations of Mr. Towns in dealing with alcoholics for over thirty years. RECLAIMING THE DRINKER, includes quotations from noted physiologists, hygienists and laboratory investigators. It discusses various aspects of alcoholic insanity. It reflects a sympathetic and intelligent understanding of the physiological, the psychological and the human problems involved in the rehabilitation of the alcoholic.

CONTENTS

Why Men Drink. When is a Man Drunk?
The Mental Effects of Alcohol
Alcohol As a Deteriorator
What Animal Experimentation Proves
Is Alcohol a Food?
The Truth About Beer
Prevention of Alcoholic Insanity
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MEDICAL SCHOLARSHIPS IN KENTUCKY

The January number of the *Kentucky Medical Journal* contains an article by Dr. V. E. Simpson of Louisville, discussing the distribution of physicians in the State and the preparation for supplying doctors in the future, especially in rural districts. One suggestion is that scholarships be provided for medical students. Dr. Simpson says:

"Menifee County has one doctor for every 5,000 inhabitants, that there is but one doctor in that county and that he is 66 years old. Plainly, the citizenry of Menifee County should bestir itself if it really wants one or more additional doctors. What does Menifee County do about a County Judge or a County Attorney or a public school teacher? It does not expect Christian County to send one of its judges or attorneys or teachers over to work in Menifee. Neither may it expect one of Christian County's doctors to 'come over to Macedonia to help' even if Christian County does have one doctor to every 605 inhabitants. But there is material in a number of Menifee County homes from which a good doctor can be made.

"If no boy or girl in that county who is financially able to acquire a medical education wants to study medicine, then the county, with some help from the state, can make it possible for some boy or girl to study medicine who does want such training but is financially unable to obtain it. A suitable committee could select a candidate by competitive examination from a group of applicants possessing preliminary qualifications.

"The successful applicant should agree to return to Menifee County after graduation and practice medicine for a specified number of years; and for his agreement to practice there he is to receive his premed training in the University of Kentucky and his medical training at the University of Louisville Medical School. The cost of his premed education may be borne by the state and the actual cost of his medical education may be borne by the county. The two years spent in premed training at the State University would cost the state \$300.00 per year, a total of \$600.00. The cost of a medical education per year is approximately \$1,200.00. Thus for an outlay of approximately \$4,800.00 by the county it assures itself the service of a young doctor who knows the home people, understands their viewpoint and is in sympathy with their objectives. For the Medical School the writer can say that such a student, having satisfactorily completed his work at the State University, will be admitted to and afforded every facility by the University of Louisville Medical School for graduation."

Dr. Simpson quotes a plan of medical scholarships in Mississippi, as follows:

(Continued on page 181—Adv. xxiii)

(Continued from page 180—Adv. xxi)

"A similar plan is now in operation in the state of Mississippi though there is the expense is met by the Commonwealth Fund and not by the taxpayers of the counties concerned. Provision is made for five free scholarships each year for medical students in Tulane University Medical Department from the State of Mississippi. Recipients of these scholarships must agree to return to Mississippi and practice medicine in a rural community for a period of at least three years. This arrangement means that annually there will be 20 students in the Tulane Medical School from Mississippi on such scholarships. These scholarships are awarded by the Tulane School of Medicine from among the qualified applicants from Mississippi. There were forty such applicants in 1931. The essential difference between the Mississippi plan and the plan above proposed for counties in Kentucky is that the taxpayers of the counties in need of doctors be called upon to help defray the cost of such education, while in Mississippi the state has been fortunate to arrange with the Commonwealth Fund to finance the training and therefore the candidates are selected from the state at large and are not obliged to return to any designated county to practice."

LIAISON COMMITTEE IN TENNESSEE

The December issue of the Journal of the Tennessee State Medical Association contains the proceedings of the House of Delegates in which a report of the Liaison Committee is given. This Committee is like that on Public Relations of the New York State Society. Its appointment and powers have been vague, but now the Committee has found itself, and is functioning actively. The proceedings say:

"In the record of the proceedings of the House of Delegates of the State Medical Association at the meeting held in Nashville in April, 1928, and published in the April number of the State Journal, may be found the following in the report of the Committee on Public Health:

"Your Committee further finds there is no official means of approach between the health agencies of the State and the State Medical Society. The president, vice-presidents, secretary, nor even the councillors have authority to speak for the organized profession, and in view of this condition we would therefore recommend that the House of Delegates create a liaison committee composed of three representative men, one from each grand division of the State, clothed with the authority to counsel with the health agencies and speak with authority for the State Medical Association upon any subject of public health and preven-

(Continued on page 182—Adv. xxiv)



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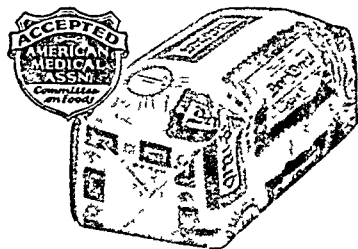
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(Continued from page 181—Adv. xxiii)

tive medicine which alike concern the public health agencies and the profession as a whole, especially policies and practice in the State's endeavor to control contagious and communicable diseases, to the end that there may be maintained a mutual understanding and a cooperation between the two in handling the questions which are getting so much attention from the people as a whole.'

"It was moved that the report be adopted which motion was seconded and carried. Thus the Liaison Committee of the Association came into being.

"Your Committee is of the opinion that an actively functioning Liaison Committee, composed of members with vision and with an understanding of the rapidly changing conditions of the practice of medicine—economic, social and scientific—can be of very great service to the profession as well as to the health agencies of the state. Insofar as the present Committee is concerned, the only matters brought to its attention were those originating in the State Department of Health. Either through apathy, or ignorance of the existence of a Liaison Committee, nothing has been called to the attention of the Committee by the profession at large. Your Committee will offer for your consideration an amendment to the By-Laws which will include the method of appointing this committee, enlarging its membership, determining the length of office of its members and defining its duties.

"Under date of October 6, 1930, the Secretary of the Association notified us of our appointment as members of the Liaison Committee. The personnel of this Committee, together with that of the other Committees, was published in the State Journal in the November, 1930, issue.

"The only matter coming to the attention of the Committee was that of the method of, or standard for, the selection as 'designated physicians' for the care of crippled children. The facts developed were these: At the regular session of the Legislature in 1929, \$25,000.00 was appropriated to the State Department of Institutions for the care of crippled children: Dr. E. L. Bishop, Commissioner of Health, was charged with the duty of selecting proper institutions for hospitalizing these individuals and the appointment of physicians to care for them, as well as to use his field force to seek out the crippled children and have them come at a specified time and at a designated place for examination by the 'designated physician.' The method employed by Dr. Bishop in selecting the 'designated physicians' was to use the latest edition of the directory of the American Medical Association and every physician found

(Continued on page 183—Adv. xxv)

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This long renowned naturally alkaline mineral water assists in neutralizing excess acid and in regularizing functions of the digestive tract.

Bottled at the Spring in Vichy, France, under Government supervision, it meets the great need of the physician for constancy of composition.

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(Continued from page 182—Adv xxiv)

listed in the directory in the state as an Orthopedist was so designated. It developed that two physicians, commonly known and listed as general surgeons (one from East and one from West Tennessee) applied for appointment as 'designated physicians' to care for these crippled children. The Committee ruled that only those who were known as Orthopedic Surgeons should receive an appointment."

MEDICAL FEES IN WYOMING

The Wyoming section of the October number of *Colorado Medicine* contains the following suggestion for the reduction of medical fees:

"Politicians and labor leaders, to hold their jobs, advocate no cut in wages in order to maintain the present high standard of American living. Deep in our hearts we all know this is an erroneous statement. The union brick layer who received \$14.00 per day, a year or five years ago, can live under the present prices for all necessities of life just as well on \$8.00 or \$10.00 per day when he can purchase flour at \$1.25 per fifty

pounds, whereas a short time ago he paid \$3.00 for the same. The same applies to all classes of commodities such as groceries and clothing, and to most other expenses. It is true that some things have not come down in price, but they will have to do so before any permanent prosperity can be universal. Under the above world conditions it seems no more than just that the fees for medical services be cut by thirty-three and one-third per cent.

"Your editor realizes that such a proposition is not and will not be a popular thing to advocate. The wrath of some members of our profession will fall upon his head, but the justice of such a move cannot be denied if we honestly consider economic conditions existing today. That a flat cut of one-third is much better than secret cuts which are at present going on all through the medical profession is self-evident. The idea of a voluntary reduction of all fees by the medical profession may not be pleasing to consider, but we believe such a move is the only way to meet conditions of today. It seems more fair for all to reduce our prices than to cut them secretly behind each others' backs.

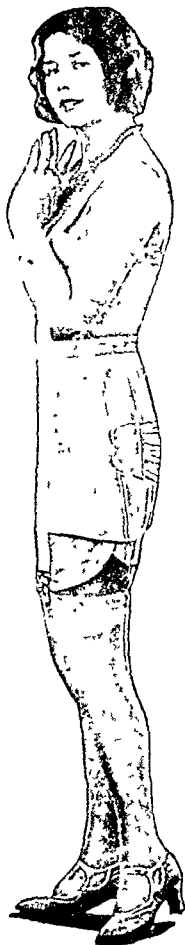
(Continued on page 184—Adv. xxvi)

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(Continued from page 183—Adv. xxv)

"In order to have a free discussion of this question, your editor would be pleased to receive for publication any articles pro and con."

COUNTY SOCIETY IN DISEASE PREVENTION IN IOWA

The January number of the Journal of Iowa State Medical Society contains the following description of the work of the Clay County Medical Society in disease prevention:

"The Clay County Medical Society has become officially interested in the promotion of the health in Clay county, supporting a compulsory campaign for the immunization of school children against diphtheria and smallpox. A like attitude of sponsorship has been assumed by other county societies with eminently satisfactory results.

"Attention is directed to the Clay County Society's action, since we believe that this establishes a satisfactory form for the conduct of such a project. We are glad, indeed, to add our word of endorsement to the official action of the Clay County Medical Society and other medical societies now sponsoring this work in health promotion, believing as we do that the comparatively large number of cases of diphtheria and smallpox in a state as enlightened as Iowa is disgraceful.

"The text of the resolutions adopted by the Clay County Society is as follows:

"At the annual meeting of the Clay County Medical Society a resolution was adopted recognizing the need for closer cooperation between the reputable medical profession and the boards of education and the school directors of Clay County in matters pertaining to the health and welfare of those who attend the public schools and authorizing the appointment, by the president, of a committee of six who were instructed to arrange for meetings with the county superintendent of schools, boards of education and school directors of the county, and to discuss with them matters of common interest and report back the results of their conferences at a special meeting of the society for such action as the society may deem proper.

"Your committee recommends:

"1. A county-wide campaign urging that protective treatments against diphtheria and smallpox be administered to all children between the ages of six months and sixteen years.

"2. That parents or guardians of children be fully advised of the desirability and safety of such preventive treatment by their family physicians and by the distribution of literature prepared by the State Board of Health.

"3. That public school teachers, parent-teachers associations, women's clubs, welfare associations, American Legion auxiliaries, ministers, the press

(Continued on page 185—Adv. xxvii)

(Continued from page 184—Ad. cont.)

and all others informed and interested be hereby asked to cooperate with the medical profession in disseminating knowledge that smallpox and diphtheria are preventable diseases

"4 That the immunization be given at the office of the family physician at home or school as seems most desirable and practical to parents and physicians and on dates agreeable to both, between January 10th and a date yet to be determined

"5 Your committee expresses its firm belief that with proper cooperation, all pre-school and school children of City county can be fully protected against diphtheria and smallpox by September 1, 1932"

WOMAN'S AUXILIARY IN COLORADO

The editors of *Colorado Medicine* writing in the November issue, make the following appeal to carry the Journal home to other wives

"It is a frequent comment among the members of our Woman's Auxiliary that they 'never see a *Colorado Medicine*'. Some of the members of this Society may not have noticed that this journal carries a section for the physicians' wives. In it are to be found articles upon national as well as local Auxiliary affairs. They are worthy of the attention

of the doctors—and most certainly of their wives

"We are depending upon the support of the wives of the physicians throughout the country to augment our efforts in educating the public in preventive medicine, the health examination and the proper direction of health legislation. They are capable of inspiring confidence where we may fail, they may convey messages to lay organizations which our ethics and humility, unfortunately, preclude. It is for our profession that they have organized and are working. Their value to our cause is unlimited, it will be largely in proportion to the aid and encouragement they receive at the hands of their physician husbands. It is known that a number of physicians are unsympathetic with the Auxiliary and its work. May they allow themselves to recognize the potentialities of this organization and endeavor better to inform themselves of its capabilities

It is hoped that each issue of *Colorado Medicine* will be placed in the hands of the wives of our Society members before each month has passed. There is material in the Auxiliary's section which will be of interest, other sections will further enhance their understanding of the work of the profession"

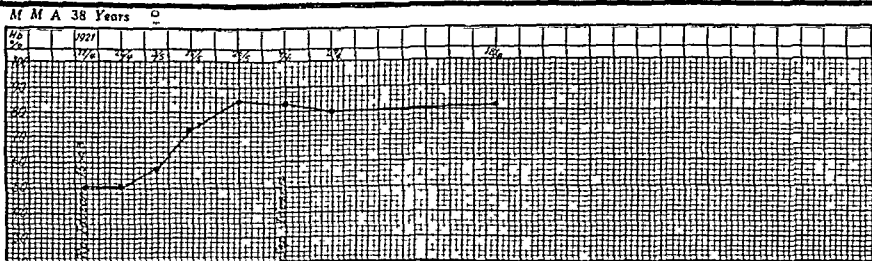
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The following Parke-Davis campaign, started with the January 9th issue, page 69, of the *Saturday Evening Post*.

* * * * *

In these days when many advertisers are trading on the prestige of the medical profession in order to sell their wares, the advertising being done by Parke, Davis & Company in lay journals comes as a welcome relief.

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door of the quack or charlatan. This is a most commendable effort.

Ethics forbid the profession to "speak its piece" in public but a friend of the profession can talk out in meeting and that is precisely what Parke, Davis & Company is doing.

It is seldom indeed that an advertiser has taken up the cudgels so directly, or has taken the medical profession's publicity problem under its wing in such an unselfish way. The unselfishness can be gauged by the fact that the advertisements are devoted wholly to the "see your doctor" theme, and contain no reference to their sponsor other than a modest signature.

Medical men who writhe at certain food, drug and proprietary advertisements will, we think, be interested in following the Parke-Davis campaign. See page viii.—*Adv.*

A MODERN PROBLEM

Is it an overstatement to say that one of the most important problems of modern medicine is the study of the prevalence and treatment of acidosis (hypoalkalinity) and hyperacidity?

Though not classed as diseases in themselves, they constitute serious symptoms which complicate a large percentage of the diseases encountered in everyday practice.

Hence the reason for the frequent references in current literature to the importance of restoring the normal pH—a chemical symbol used to express the hydrogen ion concentration as found, for instance, in the blood and body fluids.

Under normal conditions of health, diet and metabolism, Nature tends to preserve an acid-base balance in the body.

Where poisonous products of incomplete metabolism, such as acetone bodies,

oxybutyric acid, etc., accumulate in the system, or, where the demands upon the alkali reserve are excessive, a state of acidosis exists which undermines the resistance of the patient.

Acidosis is associated with the following well known conditions—diabetes, toxemias and vomiting of pregnancy, diarrheas of children, cyclic vomiting, dermatoses, rheumatism, infective fevers (influenza, pneumonia and the common cold), nephritis, alcoholism, shock, burns, etc. Therefore an important phase of treatment should include the building up of the alkali reserve.

The prevalence of the symptom of gastric hyperacidity is too well known to be reemphasized. It leads to indigestion of the type so often described as a sour stomach, with eructations and heartburn, and is believed to lead to gastric ulcer and other far-reaching complications.

There are strong objections to the administration of massive doses of soda or other single alkalies in acidosis or hyperacidity because alkalization and not neutralization should be the objective.

When single alkalis are used, the therapeutic dosage has to be constantly increased and there is a danger of setting up an alkalosis, with tetany.

More rational and safe is complete alkalization by the use of a balanced formula which seeks to combat acidosis and hyperacidity by building up the alkali reserve.

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BiSoDol is being ethically introduced to the profession. It is carried in stock by all pharmacists. It is palatable and easy to take. The usual dose is 1 teaspoonful in water after meals. See page ix.—*Adv.*

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A FEW PROBLEMS OF THE MODERN DOCTOR

By EDWARD H. CARY, M.D., DALLAS, TEXAS

An address by the President-elect of the American Medical Association before the Kings County Medical Society, at Brooklyn, N. Y., October 20, 1931.

I COME to you with the deepest appreciation of the courtesy shown the President-Elect of the American Medical Association, your humble servant, who has the distinction of having been selected by you to this office.

I consider it my duty and privilege in the next two years to carry the fine sentiment of friendship of the headquarters to the rank and file of the membership of the American Medical Association.

When invited to speak to you, the choice of subject was left to me: First, I thought of presenting a scientific paper—then I realized that I could not select a topic in my field which could possibly interest this large, and may I say, varied group.

So I hope, for a time, you will turn from the distinctly scientific aspect of medicine.

I, of course, recognize the appeal one can always make to an audience when the ideals of a great profession are placed in review, glorifying both the men who have always espoused them, and the traditions and virtues dear to us all.

I realize that the term "Materialist" may be attached to the name of anyone who discusses the practical phases of professional life. On my own behalf, may I be permitted to offer the record of the past thirty years of devotion to the furtherance of scientific truths and ideals.

When this great organization of ours, the American Medical Association, was democratized, and each state could through duly elected delegates, express the will of the units which make up the whole, the machinery was at hand to develop on this continent the ideals of the noblest of all professions.

Medical education was at a low ebb, so educational improvement became the great motif that ran through years of constructive planning until our standards and practices equal and in many instances, surpass those of other enlightened countries.

From within the Medical Profession came sup-

pression of the evil of widespread commercialized medical colleges, of which many were bad, although it may be said that some of them were good on account of the devotion of their great clinical teachers. We freely admit that this educational uplift was aided through widespread publicity by the Carnegie Foundation. We, as a profession, at that time, commanded no such avenues of publicity.

It was a reform engineered and made effective by the medical profession encouraged by enlightened public opinion.

There were many great doctors, particularly famous surgeons, in spite of the low standards.

Since our medical schools have reached the requirements set by our Council on Medical Education, the graduates are more uniformly equipped to meet the demands upon them in the practice of medicine.

There has grown to be a widespread conviction that medical men are now rather uniformly taught the medical sciences and have similar clinical experiences.

Personality, keen mental perception, philosophical attitude, interest in patient, and that so-called rare quality, known as "horse-sense"—these and other human values are not necessarily created in the medical school.

There will always be the normal human difference. Yet I must call your attention to the fact that the executive officers of every class "A" medical school now have the privilege of choosing from a large group, the men who are to make up the freshman class, and since migration of students is not encouraged, those who weather the storm, and see the rainbow through the Sophomore year, stick. Their quality too is established under longer surveillance.

I also call your attention to the fact that students are sought routinely and naturally among the applicants, for their educational and moral values, without particular thought or interest in the material side of their professional career.

It all in time, tends to produce in practice, a levelling of talents at work, with returns fairly equalized.

The individual hundred thousand income, these educated young men have heard about, is rapidly disappearing—so is the seven hundred and fifty dollar yearly stipend. There is now an approximate monetary level confronting the modern educated physician, although this is influenced by ability, industry and personality.

The Science of Medicine is, in spite of this general improvement of its devotees, always ahead of the Art of Medicine, an excellent reason for the existence of this great organization of ours, which through your membership provides the means and facilities for carrying into the office and home, through its publications, invaluable supplemental information.

There is also, through our associational contacts, an assimilation of proven facts, and further trial of reasonable clinical conclusions which are heard and later utilized in a professional way. All of which emphasizes the Art of Medicine.

The education of physicians, the process of keeping them educated, is in a way "Big Business," and however objectionable this term once seemed to us, we are now able in our profession to perceive material values and remain idealists—as the successors to the Victorian Period can mention the leg of one's body without offense to the proprieties.

Of course, the danger to our profession is that universal danger, slight though it may be, when repression is removed, the unmoral rebound disgustingly.

I have sometimes suspected that the older practitioners whose virtues have been recounted in song and phrase (God Bless Them), realized their deficiencies, and were governed accordingly. Tradition too played a part, and these fine men often made no financial demands, they simply accepted what came. This custom involved even those who gave tremendously of their knowledge and skill. Even unto this day, people in many places are trying to follow the old custom—the dear old custom—of commanding their doctor with the thought that some day they would get another, if they were disappointed in the utter altruism of this splendid servant of the people.

This old custom, likely Spanish as well as American, has lost favor with that influx into the profession of the newly and more expensively educated men. They seem to feel that they have something for sale which has required time, money and labor to acquire. They too, want to provide for their families. Have they changed their code? Have they ceased to want to care for the indigent? I can say decidedly "NO." But it is fair to state that the profession is beginning to see in the *public*, a joint partner in altruism. Therefore we should insist that for the conserva-

tion of the doctor's and the patient's time, and in the interest of the best scientific service, all inclusive conveniences should be more uniformly provided for the treatment of the sick, whether in city or hamlet.

With this as a working basis, the profession will further insist upon a line of demarcation. On one side voluntary charity, and on the other, a fee commensurate with service performed and the ability of the patient to pay.

As to charity, the members of our profession consider it a great privilege to care for the worthy poor. They properly ask for a correct environment with modern facilities for the conservation of their valuable time.

In Iowa there are fifteen County Medical Societies, handling on a general contract basis, the sick poor of the county. This plan has been in operation over a period varying from one to twenty-seven years. Professional and public opinion now justify the assumption of this obligation by the public, the medical men being paid for the care of all indigents.

Again, we should become joint partners of the Public for the relief of the so-called badly treated and outraged Middle Class, whose interest has filled so many Journals. They must be considered. This Middle Class is made up of persons with varied resources. They want the best medical service at reduced cost. They have many obligations, likely interesting families; they are quite respectable in the community. Unfortunately their income is often not equal to all the demands; then comes illness, and the danger of being submerged financially, if any unusual hospitalization or surgical procedure is required.

Certainly there should be no difference in the quality of diagnosis to anyone—poor, middle class or rich. We recognize that the greater percentage of simple illnesses terminate favorably, which is an aid to the irregular doctor. This offers an equal opportunity for praise, regardless of the merit of the diagnosis.

We, for the moment, are not interested in these numerous incidental ailments. But if we, the better educated physicians, see that the diseases of the really sick are correctly diagnosed; that we accurately interpret the illnesses of the ambulatory, yet potentially sick, and that we make a minimum number of mistakes in our interpretation of disease, then that vast number of those not so sick, will more likely remain in the hands of the regular physician. Hence, it is all-important that we plan to provide for this numerous middle class.

An intelligent self interest on our part suggests that we see that it is done. One of the reasons why it is not done is that many persons unable to pay very much seek cheap medical advice. In the long run, they find the cheap advice the most expensive; but that does not lessen the responsibility

of the able doctors of the community. We should so develop the interest of the membership of the County Societies that the efficiency of the profession is made available for diagnosis regardless of class. The time is probably at hand when organized medical units of the A.M.A. should actively participate in the social service programs of our communities. In fact, we should lead the way.

This cooperation of the profession should contemplate that the laboratory and hospital facilities in County and City Hospitals offer part pay opportunities provided by the public, on a reduced basis for the benefit of that part of the public which is in distress, and for the particular benefit of the people whose budget justifies this cooperative service and whose self-respect makes them abhor charity.

The County Society must be the place where the members can determine for themselves the wisdom of more frequently combining their knowledge for the benefit of all classes, whether rich or poor, without having to do so in free dispensaries. These members can develop a plan; they can be more accurate, they can utilize private laboratories wherever they exist, if the laboratory men are willing to cooperate with the profession in this diagnostic work.

If for any reason this arrangement can NOT be made, then the public should supply such facilities.

The County Society can well afford to give thought to any method which encourages individuals to honestly try to do their part.

Patients in large cities who go to hospitals or dispensaries for charity should be registered so that medical shopping or duplication of effort of all kinds will be prevented. The need for charity should be established.

To advert to the modern medical man—he should know his limitations and be honest enough to admit it. In doing so, he must learn the art of cooperation, and the value of consultations with his fellow practitioners. Cooperation is essential and more enduring where the professional contacts are established without actual partnership and where the frailties of human nature are not strained. Self interest binds one to the patient who remains in hand—but intelligent cooperative consultation as may be needed, holds the patient on account of actual service rendered.

Now it is quite evident that right here, individualism in the practice of medicine falls down. Let us assume that cooperation is largely needed in diagnosis. Since a correct diagnosis is most important, then every doctor should wisely use the best men for that purpose. To do this at the home of the patient seems impractical and too expensive, for it takes more time to make the necessary examination. So the patient whose condition requires a careful analysis must be where the

physicians can easily cooperate, whether this be at a general hospital, or the place provided within the building where the doctors have their offices and where they often jointly own expensive equipment. Here conservation of time and use of laboratory facilities, x-ray etc., make it possible for an early conclusion to be reached at a minimum expenditure. This can be in one fee, consistent with the ability of the patient to pay—the patient to remain in the hands of his individual physician.

It is easy for us to understand that the most expensive medical service that can be rendered to any man or woman is an incorrect diagnosis. Inasmuch as a certain percentage of every man's practice requires the most careful analysis to determine the cause of trouble, then we must stimulate this methodical, cooperative effort on the part of the profession to see to it that patients arr thoroughly studied, and that the method of doing so is to the mutual advantage of the consultants. The patients, yes even the people at large, should know that the fee for such services will not be burdensome.

I am discussing the present day doctor, well educated, who has remained an individualist, for out of the 140,000, there are less than two per cent practicing group medicine.

Correct medical service then, is based upon correct diagnosis. If this were accomplished there would be less complaint and fewer reasons for support of the irregulars. Every County Society, regardless of size, should consider this relation of the profession to its clientele.

Billings has said that "A painstaking practitioner is able, in a great majority of cases, to make an accurate diagnosis without expensive equipment." The plea is made to stimulate more individual effort, to discourage leaning upon laboratories and hospitals, as well as the over-use of specialists. This is fine to preach to timid practitioners, if there be any who have no opinion—and who await laboratory findings to formulate one—but is it not more likely from your own observation that doctors err on the other side, taking the path of least resistance, often jumping to conclusions, or delaying a complete study? FOR THIS DOCTOR is without a plan of cooperation which to him seems practical. The patient is treated expectantly as long as he remains sufficiently impressed, and is correspondingly in his care.

I am suggesting to the members of the profession that they sensibly supply to each other the missing link of knowledge, so worked out, that it is in no way harmful to practitioners, nor too expensive to their patients, and which is in the long run, to the interest of the medical profession as a whole. The term "Practitioner" should suggest to you the medical man best equipped and needed in a given case.

A former President of the A.M.A. advocated that the County Medical Society should organize to conduct a group clinic. His argument was based upon the fundamental grounds that the practice of medicine is a natural monopoly and that if we do not supply to the people competent medical service at a cost within their means, the State will eventually do so. Not differing with Dr. Harris as to the fundamental obligation of the profession, I have always thought that the County Medical Societies, as such, would be unable to proceed successfully along the lines suggested regarding group clinics.

I claim that doctors as individuals, need to combine their talents as needed, to meet conditions as presented. In smaller counties — the County-City Hospital should be the environment for developing medical diagnostic and even curative work—larger cities offer more numerous foci of professional activities—the public and private hospitals are being used, but not routinely as they should be.

Then there have been numerous medical buildings in the larger cities, placed at the service of the profession, where the greatest opportunity is now presented to develop this cooperative spirit of helpfulness toward a correct diagnosis. Help is not always needed . . . it may only be necessary to call one or two more highly trained men in other specialties, the patient always remaining in the hands of his doctor. The so-called high cost of medical service will disappear when we more or less universally adopt cooperative methods, which I could easily explain.

To pursue this thought of efficiency, we are often confronted with embarrassing expenditures, due to unwise counsel at a time when sentiment is regnant.

The modern doctor is confronted with a unique psychology which he unwittingly helped to create.

While I yield to no one in my admiration for the many marvelous women who have gone into the great profession of nursing, it is true that in hospitals and homes, but largely in hospitals, that the man who can often least afford it, is employing special nurses. There has been an over emphasis in what might happen if the patient were without such constant care. There has certainly been an over emphasis upon the social importance of having one's wife as well cared for as the "Joneses."

It would seem that the medical profession could very well afford to hand to the patient who contemplates hospitalization a frank statement containing valuable information as to the important things needed while in the hospital. This card could carry suggestions which would practically eliminate that combination of circumstances surrounding patients in hospitals which creates a feeling on the part of the patient and his family, that special care is imperative. The doctor

should be the sole judge as to when this frequently necessary expense is needed.

In the same way, medical men should be wise enough to know when to use laboratories of all kinds. While I do not in any sense decry their value, that which is not necessary often becomes a very great burden.

What I am trying to say is, that within the profession we must practice discretion in the methods we pursue; we must see to it that our patients are protected from unnecessary expense and have them satisfied, if it is within our power to do so. I am sure you realize that the rich appreciate a considerate attitude on our part, and gladly pay when this is apparent.

Another problem of the modern doctor — **GROUP HOSPITALIZATION** is being utilized in many hospitals throughout the country. When properly organized and safeguarded, it is not a menace to the profession. Groups are chosen on an actuarial basis, both as to the cost to the individuals and numbers of persons sought for hospitalization. Baylor limits the number of members to less than five thousand, spread in all groups to make the law of averages safely apply.

Hospital service is all that is sold. The medical staff is in no way involved. Patients belonging to groups have full liberty of choice as to the physician treating them in the hospital. They must meet **ONE** requirement, and that is that the doctor be a member of the County Medical Society.

Long time commitments to a fixed rate are avoided. One of the best by-products is, that coming to the hospital with the bill already provided for, educates patients to be "hospital-minded." The hospital expense is not an item to embarrass the doctor in collecting his fee.

For lack of time I will not go further into detail. As group hospitalization is conducted at Baylor, it is to the interest of both the patient and the doctor. The hospital has kept more beds busy with the same overhead.

On the other hand, there are hospitals utilizing the group hospitalization idea to the detriment of the profession as a whole. In many cities such service includes, first; medical, surgical, and hospital care; second; dental service, third; home medical attention.

This proffered service is the basis of many attempts on the part of hospitals, enterprising lay-managed organizations and small groups in the medical profession to organize and control medical practice.

Banks and other enterprises have been solicited, and this has led to definite resistance on the part of the general profession. The County Society can control this situation.

The present economic status is an incentive for the members of our profession to lose sight of the common good when working in groups, the ten-

dency is to take advantage of any opportunity to enlarge their service.

While the Judicial Council of the A.M.A. has had various kinds of contract practice presented to it for a ruling, it realizes the difficulties in so defining contract practice that controversy can be avoided among medical men, who otherwise are perfectly ethical in their relation to the profession and public.

The term "contract practice" as applied to medicine may mean the carrying out of an agreement under many circumstances necessary, and consequently, ethical.

"It formulates, however, definite conditions which absolutely establish a contract as being unfair or unethical. Certainly when compensation received is inadequate as based on the usual fees paid for the same kind of service by the same class of people in the community, when the compensation is so low as to make it impossible to render competent service; when there is underbidding by physicians in order to secure the contract; and when a reasonable degree of free choice of the physician is denied those cared for; contract practice is unfair, unscientific and harmful both to the public and to the medical profession."

If the members of the profession do not hold firmly during this depression, we may expect to see less harmony and more withdrawals from our organization, because of the discord which will be engendered.

County Societies everywhere should watch such tendencies and they should immediately institute proceedings to stop the practices which in the long run, lead to inefficient medical service as well as chaotic conditions in our profession.

State medicine is not far around the corner when people find that doctors hold themselves so cheaply.

Another problem of the modern doctor: To the next Congress of the United States, we should turn our attention, for another pressing issue which confronts the profession is the paternalistic demand upon the State and upon the national government.

This will have little effect as it relates to us if we have wisely used our knowledge and considerably conducted our economic relations with the people.

You will find increasing interest in the Shoulders' Resolution introduced in and passed by the House of Delegates of the A.M.A. at the Philadelphia meeting last June.

This is a constructive effort to spread the benefits of Federal Aid to the Veterans of the World War with non-service connected disabilities. This Resolution petitions the Congress of the United States and the American Legion to abandon the policy of rendering hospital and medical benefits to the Veterans of the World War with non-serv-

ice-connected disabilities, and substitute therefor a plan of disability insurance which provides cash payments during the period of total disability with liberal hospital benefit to cover expenses for a veteran during period of hospitalization for any disability.

If the government pursues its present policy it is estimated that there will be an expenditure of two hundred and twenty-nine million dollars per year for the cost of two items alone, besides others contemplated, many of large import.

These two items are hospital maintenance and professional staff. To contrast the far reaching suggested insurance benefits to the non-service disabled, their hospital expense and family protection would be only ninety-two millions per year at its height. With this arrangement the medical profession will be sought for its service as now, the patient using the home physician.

Our profession, and the hospitals of the land, are vitally interested in preserving their relations with this large group of citizens who should remain independent and free to choose their own physicians and hospitals.

Though it is true there would be temporary employment for staff officers where government hospitals were built, the tendency to state medicine would be greatly encouraged, and react destructively on the present system of individualism in the practice of medicine.

To quote Shoulders, "This insurance plan of benefits to veterans is offered in the interest of all; it is in the interest of veterans primarily; it is in the interest of equality of benefits between veterans; it is in the interest of economy in governmental expenditures; it is in the interest of democracy in medicine—that system which has brought to the people of the United States, the highest type of medical service to be had on earth."

It is hoped that the American Legion will adopt this plan as theirs, inasmuch as it is to their interest, and while we recognize this fact, it is also to the interest of every medical man in this country to preserve the present system of practice. The present plan of the government, if carried out, will eventually wreck our hospitals. The taxpayers should become vitally interested in another plan if it is constructive, while humanitarian as well as economical.

Medical men should be able to exert a tremendous amount of influence, not only for the public good, but to avoid pernicious legislation which is harmful both to the public and the profession.

While I am sure, that we with one accord, would gladly see the proper hospitalization of every veteran who needs it, and would serve without cost, if it be necessary, any veteran, if that veteran were unable to care for himself, yet our profession should stand with every economic force, to protect the resources of our country and

ourselves from that onslaught which is being constantly made to widen the door of hospitals, not only to veterans who could justly claim hospitalization but to those whose self-respect should restrain them.

In this connection, it may not be amiss to call your attention to the readiness of the National Federation of Federal Employees now numbering six hundred thousand, exclusive of judiciary, military, navy and other personnel which is large and would bring the total up to approximately one million. This Federation is watching intently the development of the present plan of building large veteran hospitals and will soon demand for members and their families, hospitalization and professional care—all told about two to four million may be expected to ask for such increasing service.

The doctors will become divided into classes—Government Doctors and Common Doctors—taxes will be higher—medical service will become more complicated.

Strike hard against any such socialistic propaganda—against such socialistic realizations. You owe it to yourselves and the people whom you serve.

The future usefulness of our profession is vitally wrapped up in rational methods of practice. As an organization, we must stand for those principles which underlie the structure of our government, and cooperate with those intelligent forces which oppose bureaucracy, with its tendency to destroy individualism and originality in this country.

The modern doctor is the recipient of all that has come through the ages. The people are his friends to aid and protect. Great is the profession in cumulative knowledge. It must wisely and beneficently distribute the blessings it has to bestow on the people. The people should respond in good faith, for in medicine there are no overlords; none so great that he may not fall, if he turns his face from the main object—the service of humanity. . .

ERIE COUNTY AND PUBLIC RELATIONS*

By LOUISE W. BEAMIS, M.D., BUFFALO, N. Y.

A MEETING like this where we exchange ideas and present our problems is important enough to warrant a day's absence from our work. As secretaries we owe it to our individual societies to bring home the ingredients with which to make a fine functioning cooperative society, alive and alert to the needs of its members, the public, and the state.

Erie County has tried to interest the public through radio talks three times a week. These talks are given by two young physicians whose names are not announced. The material is prepared by the A.M.A. and selected by a committee of 23 representative doctors, and adapted for our local use.

WGR allows us to use the radio free of charge, and the lecturer is announced as the "Doctor of the Air." The young men receive a slight remuneration for this—paid for by the Society.

It was found more satisfactory than when individual doctors spoke on their own specialty. There is no chance for criticism, and we feel the laity are being better informed on things medical. Such publicity deals in facts to which the public is entitled. The lay press and radio are delivering information often to the detriment of the public, who becomes misinformed and is unable to judge

the uselessness of the article or fact expounded. We feel this should be combated through education by the medical societies, who should be the leaders in the practice of medicine due to education and training.

Very often misinformation is given by faddists, cults or lay organizations. It is when there is an infringement on the rights of the physician through these lay organizations, who have interested themselves in matters pertaining to public health, that the medical societies should assert their own scientific training and leadership.

May I quote from an address by Dr. Harlow Brooks, New York, in the *Journal A.M.A.* of July 2, 1927, who said in part:

"Sanitation, epidemiology and the executive features of public health work must be considered only as specialties in medicine, just as we practitioners group ourselves as neurologists, surgeons, internists, and so on. Without a basic training in the elemental medical sciences there cannot be true specialization in such work any more than the surgeon can be permitted to practice his craft without a careful training in physiology, in bacteriology and in the other essential fundamentals.

"To such men the medical profession as a whole give it sincere confidence and full cooperation. I do not know of any exceptions. We have every confidence in all those specialists in public

* Address before Conference of Secretaries of County Societies, at Albany, N. Y., on September 15, 1931.

health who are legitimately specialists. We have a quite natural suspicion of those lawyers, politicians, business men preachers and otherwise unoccupied ladies, grouped so loosely and so thoughtlessly as 'social workers,' who do not have basic training or understanding of those subjects to which we have so seriously and with single-hearted zeal devoted our whole preparation and life.

"What does the physician in family practice resent in the activities of public health?"

"He resents nurses doing the work of physicians, making diagnoses and dictating treatment which the family physician shall carry out. Do you blame him?"

"He resents the underpaid time serving employee of the department who from the wealth of his inexperience minimizes to school children the work and ridicules the respect of their family doctor."

"This is all correctible. Nurses are nurses until they have studied medicine and legally qualified themselves as practitioners of medicine. They should not be allowed to do as an agent of public medicine, work which the law does not permit them to do as private individuals."

"Employment of young physicians at meagre salaries robs the profession of the material from which it should recruit its general practitioners, now the greatest need of the profession. I often tell my internes at graduation that the worst thing that could happen to them would be to receive a salary on which they could live, from some lay institution, in which the professional experience does not reward the service, for many of them later in life would not dare to give up their salaries and start out for themselves. Some of the brightest youngsters I have ever known have been ruined by such activities. They typify the non professional controlled society. Some of them are notorious for the ruthless exploitation of the young physician."

"Public medicine cannot be divorced from private medicine, except at a loss to both. The most potent and influential teacher of public medicine is the physician in contact with his patient. No public medicine can succeed that has not the endorsement of the average physician."

"The value and influence of the average practitioners are beyond the comprehension of the

executive who is himself not conversant with the details of medical practice, or who has through lack of experience estranged himself from the profession. He is likely to develop from his ignorance of real medicine and its problems a superiority complex of particularly inexcusable type. This is the disease from which many public health workers suffer, they are the ones who criticize the average physician."

Our Society is trying to solve some of these problems and in so doing is bringing in the younger men whose economic welfare is threatened. It is a reflection on the Medical Society that it fails to protect its component parts—the physician who through years of preparation is unable to advance on account of loss of independence and self-respect through the sale of his professional services to those corporations or organizations in need of his services. This prevents initiative and leadership on his part."

I feel the County Society through its Committee on Economics could be of great service to the new recruits to the medical profession each year. He should be taught that his independence which is essential for his best work be preserved, and that the personal relationship between himself and the patient is vital to the practice of medicine and for best service. This service to the individual young graduate would be invaluable, and a real constructive work on the part of the County Society."

As Dr. Olin West has said, "That the key to the whole situation and the work that medical organizations in this country must accomplish must, after all, be accomplished through the County Medical Society. The A M A can do a lot of things, and does try to do all it can. The State Association can do a lot of things, and some of the states are trying to do all they can do, but when you get right down to bedrock, neither the A M A nor the State Association can do anything right unless the County Society does something, and does it right."

As no society is stronger than its weakest link, it is paramount that each county become an active functioning integral part of the State Society, LEADING, COOPERATING and ENCOURAGING those measures which best serve constructively the profession and the community in which that County Society is functioning."



INTRA-ABDOMINAL HEMORRHAGE OF OVARIAN ORIGIN

By PAUL C. MORTON, M.D., NEW YORK, N. Y.

From the Surgical Service of Knickerbocker Hospital, New York

INTRA-ABDOMINAL hemorrhage of ovarian origin is probably not as infrequent a condition as the literature would make one believe. Cases reported up to 1931 number 93 but the subject, when discussed with any group of surgeons of the average operative experience, always brings to light one or more cases which have not been reported. A condensed survey of these cases is given in the table below:

TOTAL CASES REPORTED TO 1931....93

Ovary Involved.	
Right	25
Left	19
Not Given	49

Type of Cyst.	
Corpus Luteum	26
Follicular	5
Not Given	62

Preoperative Diagnosis	
Appendicitis	37
Ectopic Pregnancy	17
Cystic Ovary	3
Salpingitis	3
Exploratory Lap, or not given	33

Both Novak¹ and Shaw² agree that the corpus luteum develops between the 16th day to 23rd day of the menstrual cycle, with the height of the maturity about the 19th day. Accurate menstrual histories have not been given in the majority of the cases. R. K. Wilson³ gives a series of seven cases in which this information was accurately elicited. The time of onset of the symptoms ranged from the 8th day to the 26th day of the menstrual cycle, with the average time being 16-7/10 days. All of these seven cases showed by pathological examination the presence of lutein cells. These cases, and the survey of reported cases, would suggest that the hemorrhages are much more frequent in the corpus luteum cyst than in the follicular cyst. There are a number of cases reported, however, in which the onset of symptoms was in the very first part of the menstrual cycle. These cases give no pathological report as to the character of the cyst.

None of the cases included in this report were diagnosed accurately before operation. Schumann⁴ reports three cases, and Blakely and Farr⁵ five cases in which the diagnosis of hemorrhage from the ovary was made, but conservative treatment was followed and no confirmation of the diagnosis was possible. From the information secured from the literature and data available in the case reported herewith, it is difficult to give suggestions which might lead to a preoperative diagnosis. There is possibly one exception to this

statement; the absence of a history of injury, a normal menstrual history, and the clinical picture of an unmistakable intra abdominal hemorrhage. Under these circumstances, its possibility could be reasonably suspected. In those cases where the hemorrhage is only of sufficient amount to create a peritoneal irritation or to markedly distend the corpus luteum cyst without rupture, the diagnosis has almost always been acute appendicitis. R. K. Wilson gives 9 cases of hemorrhage of the right ovary entering the Surgical Service of the London Hospital, all with a diagnosis of acute appendicitis. During the same period 10 cases were admitted to the Gynecological Service of the same hospital with hemorrhage from the right ovary in 2 cases and from the left ovary in 8 cases. It seems safe to assume, as Wilson points out, that had the diagnosis been anything other than that due to a suspected pelvic pathology, they would all have been admitted to the Surgical Service. Unfortunately, he does not give the preoperative diagnosis in these cases, but assumes that they were not diagnosed correctly.

The case reported below is given as an example of hemorrhage from the ovary simulating ectopic pregnancy.

F.B., age 29, married, was admitted to Knickerbocker Hospital at 9:40 P. M., April 13, 1927. Her complaint was abdominal pain and vomiting. Forty hours before admission there was sudden, knife-like pain in right lower quadrant, causing her to double up and, within a few minutes, to lie down. An hour later there was nausea and vomiting but the pain had almost completely disappeared. She had a fairly good night. Twelve hours before admission there was recurrence of nausea and vomiting, with progressive weakness. Seven hours before admission, the patient fainted four times within an hour.

Her menstrual history showed a normal and usual menstruation in January, 1927. On February 2nd, two days before the usual time for her menstrual period, she began to flow and ran the normal course of five days without distress. On March 26th the menstruation was normal in every respect and this was the last period before admission. There had been one pregnancy about five years before, the child having died at one month.

Examination of the patient showed her to be acutely ill, pale, apprehensive, subnormal temperature, pulse 96 with diminished volume. The abdomen was tender and rigid throughout, more marked in the right lower quadrant. Pelvic examination showed the cervix to be firm and hard, uterus not enlarged, and no abnormal masses felt. There was well marked tenderness in the right

fornix. Blood count showed hemoglobin 55%, red blood cells 2,096,000, white blood cells 22,900, Polymorphonuclears 88%, small Lymphocytes 10%, large Lymphocytes 2%. Preoperative diagnosis of right ruptured ectopic pregnancy was made and operation performed at once.

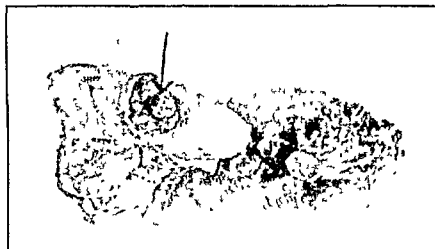


FIGURE 1

Full view of corpus luteum cyst and point of hemorrhage.

The abdomen was full of fresh blood and large clots. The left tube and ovary were normal. There was no evidence of chronic inflammatory disease. The right tube was normal. The right ovary contained a corpus luteum cyst 3 cm. in diameter, from which fresh blood was oozing, and which was covered with a blood clot. This was the only source of bleeding found. The tube and ovary were removed. The following day a transfusion of 500 c.c. of whole blood was given, and the patient made an uneventful recovery, leaving the hospital May 1, 1927, nineteen days after admission.

Pathological examination by Dr L. C. Knox showed "a fresh corpus luteum with hemorrhagic center and well formed, large, lutein cells at the periphery, this being the portion of the ovary which has perforated the serous covering. The rest of the ovary is edematous, containing numerous small follicular cysts, but also showing much normal structure"

SUMMARY

1. Intra abdominal hemorrhage of ovarian origin is not as rare a condition as has been thought.

2. The diagnosis of this condition should be suspected in cases lacking a history of injury, giving a normal menstrual history, onset of symptoms after the 16th day and before the end of the menstrual cycle, and clinical signs of intra abdominal hemorrhage.

3. The diagnosis of those cases in which hemorrhage is of sufficient amount only to give peritoneal irritation or to markedly distend the corpus luteum cyst, cannot be accurately diagnosed.

4. Incidence of pathology is probably equal in right and left ovary.

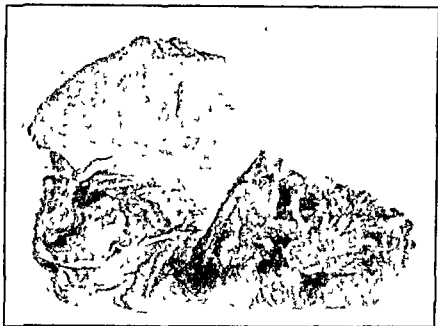


FIGURE 2

Showing lateral view of ruptured corpus luteum cyst.

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RADIUM IN TREATMENT OF INOPERABLE DISEASED TONSILS WITH A NEW METHOD OF RADON IMPLANTATION

By J. COLEMAN SCAL, M.D., F.A.C.S., NEW YORK, N. Y.

SINCE 1922 I have been employing radium in the treatment of diseased tonsils which were, for one reason or another, not amenable to operation. The cases which were so treated were those in which surgery was definitely contra-indicated. As no other method of removal of such tonsils up to now has been perfected, any improvement in the condition of the tonsils should be considered a successful result. The patients considered inoperable were those affected with cardiac, pancreatic or kidney disease as well as haemophiliacs and those suffering from tuberculosis or syphilis. Included among these are also a number who positively refuse operation because of fear and physical dread of any operation.

In this procedure, the tonsils are not removed but are reduced in size, atrophied, and the symptoms produced by disease are alleviated. In every case radiated the tonsils did shrink and become fibrous.

Over 200 cases of diseased tonsils were radiated and the success attending this method of implantation of radon seeds, should be sufficient to permit the drawing of definite conclusions in regard to this therapy.

The chief objection brought against the treatment is that, because the action of radium cannot be controlled after the containers have been implanted, injury to normal structures adjacent to the tonsils which undergo radiation is practically inevitable. Inasmuch as the entire theory of radium treatment of the tonsil is based upon the established radio-sensitivity of lymphoid tissue, which is known to be far greater than that of skin, muscle or connective tissue, this objection can be immediately refuted.

With the present method, the amount of radiation used can be gauged accurately, making it possible to measure the precise dosage the tonsil will receive.

A 3-millicurie seed of radon will radiate 4 cubic c.m. of lymphoid tissue in a little over 4 days, delivering a dosage of about 200 millicurie hours. Since the average tonsil is about 2 c.m. in diameter it will readily be seen that the tonsils only received the radiation, the action beyond the capsule being *nil*.

The platinum radon seed, which has an initial activity of about 3 millicuries, decays at the rate of 0.747 per cent of its activity each succeeding hour, so that at the end of four weeks activity has practically ceased. The highest value, therefore, is naturally during the first week following application, since the period of half-decay of radon is 3.85 days. Thus the maximum dosage for each

millicurie of contained radon amounts to 133 millicurie hours.

The caustic rays are eliminated by filtration, leaving only the therapeutic gamma radiation which acts without burning or causing other tissue destruction. Antoine Lacasagne, bio-physicist of the Currie Institute, has shown that a filter of 0.30 mm. platinum will produce no destruction, if less than 7 millicuries of radium emanation is used, then only after a period of 12 days is necrosis observed. In all cases treated by me the radon seeds were made of a 0.30 millimeter platinum filter, each seed containing from 1.5 to 3.0 millicuries of radium emanation.

It is also essential to implant the radio-active center so that every part of the tonsil mass will be subjected to an equal amount of radiation. These desired results can be brought about either by the use of needles containing radium element, or of "seeds" of either gold or glass, filled with radon (radium emanation). Far greater satisfaction, however, has been obtained by employing the removal platinum radon seed, designed by Joseph Muir of New York, which embodies all the good features of the applicators just mentioned, and in addition possesses several which are peculiar to itself.

Glass seeds without metal filtration permit passage of caustic radiation, which induces so much necrosis that the use of such applicators in the tonsil is inadvisable. Gold, while providing an excellent screen against caustic radiation, cannot be sealed as completely as can glass, so that those using gold containers are never absolutely assured against leakage, which not only makes dosage uncertain, but may do grave injury to surrounding tissue. Both glass and gold seeds must be left permanently in the throat, and this, in nervous patients especially, constitutes a very grave objection. The life of the radon contained in these tubes covers but a short period, after which they become inert. They are either surrounded by fibrous tissue or, if infected, are sloughed out. The removable platinum radon seed which I now use is about 4 millimeters long, with a content of approximately 3 mc. of radium emanation. A strong silk thread, by which it can be removed when it has served its purpose, is attached to each seed. Screenage is of 0.3 mm.—thickness of platinum—enough to eliminate practically 98.5 per cent of the caustic beta radiation. These seeds can be sterilized by boiling, being absolutely unaffected by any degree of heat, whereas gold seeds are likely to "spring a leak" if subjected to high, moist temperature.

Usually between the third and fourth week following the radium application, inspection of the

tonsil will show that it has already shrunk to a third or even a quarter of its former size. Thereafter, until six months or more have elapsed since implantation, still further reduction will be noted. The open crypts will be entirely obliterated and the focus of infection thus eliminated. If the seed has been properly placed in the center of the mass, the end results should be fully apparent between the sixth and the ninth month, at which time nothing more than a small fibrous mass behind the anterior pillars should be visible.

This process of atrophy takes place without any injury to adjacent tissue. The author has had his own tonsils radiated and at the end of two months he had them removed, surgically. Examination by Dr. Maurice Goldberg, who was the pathologist at the Beth Israel Hospital gave the following findings:

"Section of tonsils shows a considerable diminution of the lymphatic element which is replaced by fibrous tissue. A great deal of the fibrous tissue has undergone hyalinization. The chronic inflammatory process is not uniformly distributed. There is a great deal of nuclear destruction. In parts the lymph follicles have entirely disappeared, while in other parts they are rather large, poor in lymphocytes with proliferation of the genetic center.

"Some parts of the epithelial covering stain very poorly."

It will be seen that a destructive process takes place in the cell in which the cell-bodies swell and the nuclei undergo hyperchromatism and are broken up. This is followed by exudation and infiltration of the lymphocytes, with formation of granulation tissue. Thus the lymphoid tonsil disappears and what is left is transformed into a fibrous mass.

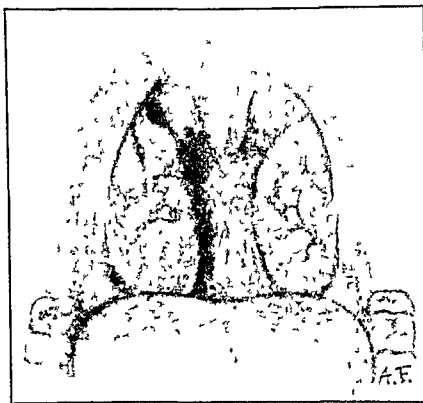


FIGURE 3

A.C. Before treatment with radium.

In many arthritic and rheumatic patients treated by this method, where the diagnosis was made by a very competent attending physician, the joint and muscle symptoms disappeared within a fortnight after radon implantation. Even when these symptoms still persisted, relief and improvement were admitted. Sore throat was eliminated in practically all cases. In a few patients who had given histories of repeated attacks of tonsillitis, often complicated by peritonsillar abscess, the result was not ideal. This partial failure I attribute to the presence of fibrosis induced by repeated inflammation, for it is upon lymphoid tissue that radium is especially effective. But even in such circumstances, the crypts, and therefore the foci of infection, were eliminated.

In about five per cent of my cases treated by this method, I was not satisfied with the end result. While the tonsils showed diminution in size and relief of symptoms, they were still enlarged and pathological in appearance.

Under such circumstances, I found it necessary to make a second implantation. When failure has occurred, I have attributed it to failure to implant directly in the center of the tonsil, so that some portion of the mass did not receive its due amount of radiation. In one or two cases where the seeds were placed superficially, they fell out and were swallowed by the patient, but no untoward results followed this accident. The author, himself, swallowed two potent radon seeds without any bad effect.

In the series of cases mentioned here, one patient developed a peritonsillar abscess two weeks after implantation. The cause could not be ascertained since the abscess cavity was not near the implanted area. This patient had very diseased tonsils and the implantation may have produced a low grade inflammation in the tonsils which resulted in the subsequent abscess formation.

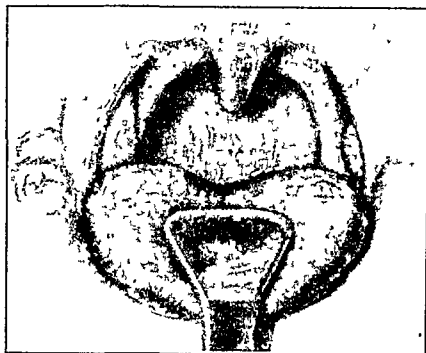


FIGURE 4

A.C. Four months after treatment with radium.

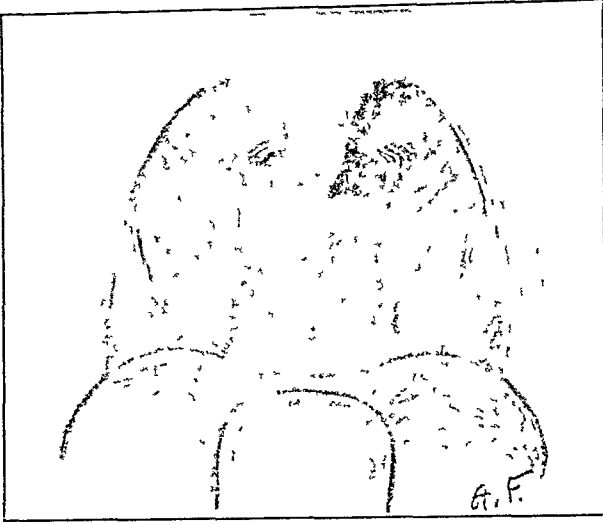


FIGURE 5

R.N. Before treatment with radium.

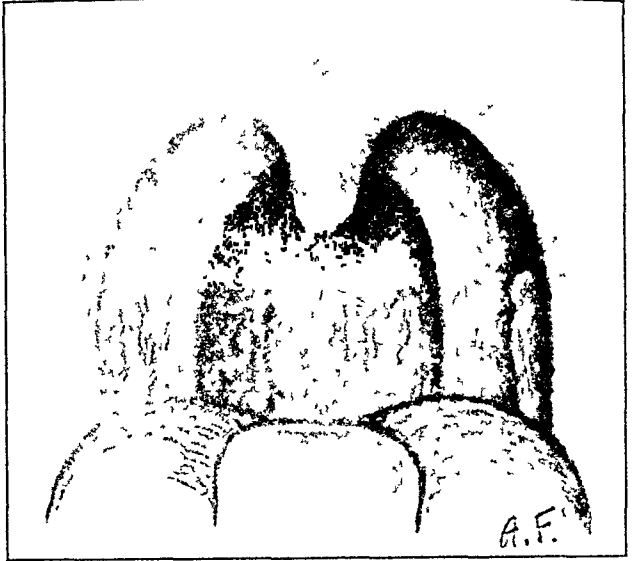


FIGURE 6

R.N. Six months after treatment with radium.

TECHNIQUE:

Dr. Muir, the designer of the seed, has recently worked out an improved method of inserting the seed in the tonsil which insures its remaining in the exact position in which it is originally placed. Instead of placing the seed in the slot as has previously been our custom, it is put into the *point* of the implanter, the thread end being thrust in first. (Fig. 7-A.) The attached thread makes a loop which protrudes from the point. The obturator is inserted and pushed home in the same manner as previously, and the seed is thrust into the tissue. (Figure 7-B.) The thread makes a loop at the back of the seed and is then brought forward along the barrel of the implanter so that when the instrument is withdrawn it protrudes from the puncture. Before placing the seed in the implanter, the thread should be cut off to a length of not more than 2.5 cm., so as not to interfere with deglutition or otherwise inconvenience the patient. (Fig. 8-A and B.) The loop at the back of the seed prevents its dislodgment by any traction which might be brought to bear upon the protruding thread-end. It also stabilizes the position of the seed so that there is no

chance of its migrating from the precise point where we placed it.

The presence of the thread in the throat does not cause the patient the slightest inconvenience; he is able to speak and swallow as under normal condition. Though a few patients have complained of sore throat, examination has never shown any inflammatory reaction, and a little local palliation suffices to make any such symptoms disappear. The seed is removed on the fifth day, which is accomplished merely by seizing the thread with forceps and drawing the seed out. The entire procedure is carried out in the office, no hospitalization of any kind being necessary.

CONCLUSIONS:

While I still recommend tonsillectomy in operable cases, over eight years' experience has con-

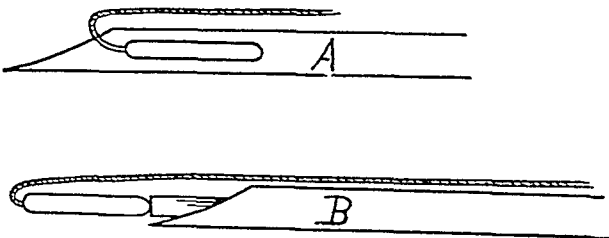


FIGURE 1

A—Radon seed placed into point of implanter, attached thread making a loop which protrudes from point.
B—Radon seed thrust into tissue by obturator, the thread making a loop at back of seed.

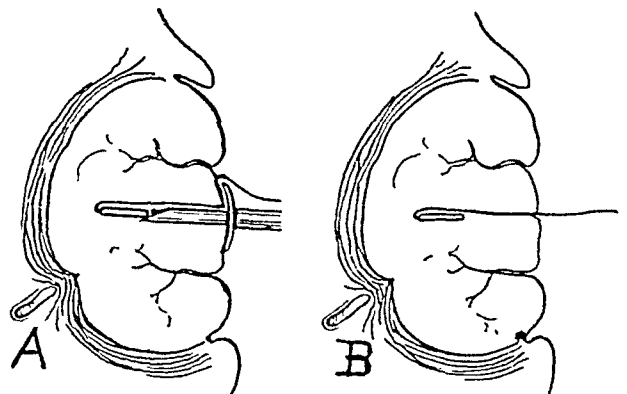


FIGURE 2

A—Radon seed in tissue with thread cut off to a length of 2.5 cm. in form of a loop, preventing dislodgement of the seed.

B—Radon seed and loop of thread in situ.

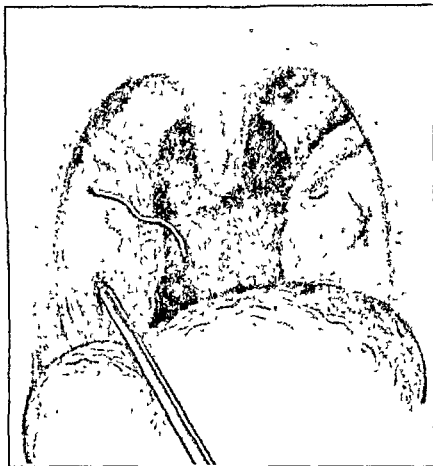


FIGURE 7
Technique of radon implantation

vinced me that in the implantation of radon seeds we have a satisfactory substitute for use in inoperable cases. Neither morbidity nor mortality attends the procedure, and the technique has been so developed that by the method here described we are able to obtain complete atrophy of the tonsils without producing any inflammatory reaction or injury to the structures surrounding the tonsils. There is no post-operative hemorrhage, no danger of lung abscess, no aspiration pneumonia, and no middle-ear involvement. The procedure is practically painless, can be performed in the office, and the patient permitted to pursue his normal mode of life without inconvenience of any description. Of the number of cases treated, twenty per cent were affected with joint symptoms, twenty-eight per cent were cardiacs, three per cent haemophiliacs, five per cent exophthalmic goitres, ten per cent diabetics, eight per cent arteriosclerosis, while the rest were treated for "fear of operation."

There being no traumatism, we do away with the presence of subsequent scarring and adhesions, so frequently seen after tonsillectomy, even when performed by a skillful operator.

In hemophiliacs the bleeding following the

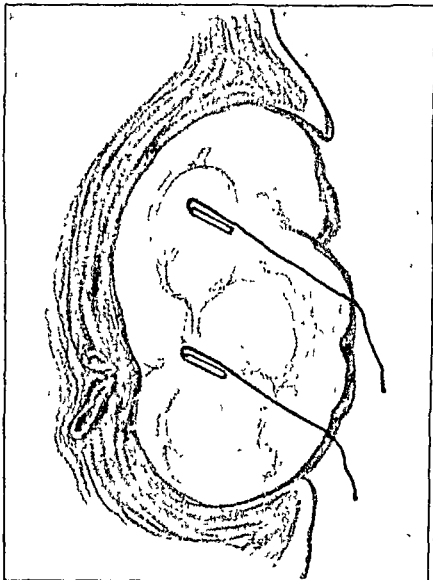


FIGURE 8
Cross-section of tonsil showing implanted seeds in situ.

needle puncture is sometimes annoying, but usually ceases after proper local treatment.

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RECORDED AND RESIDENT DEATH RATES IN NEW YORK STATE

No. III — Cancer, All Forms: 1927-1930

By J. V. DE PORTE, Ph.D., ALBANY, N. Y.

Director, Division of Vital Statistics, New York State Department of Health.

OF late years, cancer has taken a dominant place in the minds of all who are concerned with the physical welfare of mankind. Numerous efforts have been and are being made to determine the true prevalence and trend of mortality from malignant growths, but mainly because of the inadequacy of the basic information, statistics on cancer are quite unsatisfactory. Competent practitioners and specialists have stated repeatedly that a large proportion of the deaths ascribed to cancer are really due to some other cause, while at the same time a number of deaths under other rubrics are really caused by cancer. In a letter to the writer, an eminent pathologist stated that there are "no reasonably accurate figures on cancer" and that any conclusions drawn from the published quantitative data "can never be reliable and usually will be misleading."

The allocation of deaths from cancer makes but a slight difference in New York City and the Rest of State, but affects considerably the rates of Urban and Rural upstate sections. For example, the rate of the urban territory in 1930 is reduced 5 per cent while the rural death rate is increased 13 per cent. The apparent excess of mortality from cancer in urban New York gives place to a higher resident rural rate. It is important to add here that the death rate of the rural territory is, of course, directly influenced by the unfavorable age composition of its population. The Division of Vital Statistics is now analyzing the resident cancer mortality according to age. The results will be published as soon as they are available.

Cities. The resident cancer death rates of the majority of the cities are lower than the recorded rates. In 1930, in the group of cities over 25,000

Year	New York City		Rest of State		Urban		Rural	
	Recorded	Resident	Recorded	Resident	Recorded	Resident	Recorded	Resident
1927	113.3	113.3	126.2	126.2	128.4	121.5	121.1	137.1
1928	115.2	115.2	126.4	126.4	133.0	127.1	112.9	127.2
1929	114.8	115.2	130.3	129.8	133.1	126.0	122.0	139.4
1930	116.7	116.9	131.5	131.2	136.8	130.3	120.2	136.3

Death Rates per 100,000 Population

Should one, therefore, forego an analysis of mortality from cancer because of the large error contained in the figures? The answer to this question is clearly *no*. There would be no progress in medical or any other sciences if investigators, in blissful idleness, awaited the day when the entire truth became evident. A death rate is in a sense a theory which is constantly being made more accurate by the greater accumulation of knowledge. It seems entirely reasonable, while recognizing the large degree of error in cancer diagnosis, to apply to the published death rates numerical refinements which the available information makes possible. One of these is correction for residence.

When a family physician diagnoses a case of cancer he usually refers the patient to a specialist. Hence, communities with superior facilities for the treatment of cancer may, for this reason alone, show high recorded death rates. The table below shows the death rates from cancer per 100,000 population, recorded and corrected for residence, in New York City and in the urban and rural upstate territories in 1927-1930:

population, the resident rates were higher in the following five cities:

	Recorded	Resident
Yonkers	80.3	89.9
Mt. Vernon	87.0	96.7
New Rochelle	91.7	106.4
Elmira	171.4	173.6
White Plains	77.2	82.7

Rural Area of Counties. The resident cancer rates of the rural areas of most of the counties are higher than the recorded rates. In 1930 the rural resident rates were lower in only seven counties:

	Recorded	Resident
Chemung	102.8	93.8
Essex	127.7	119.7
Ontario	195.9	179.6
Orleans	123.8	118.2
Putnam	130.4	123.1
Schenectady	104.2	99.7
Westchester	234.9	104.9

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Annual meeting Hotel Stutler Buffalo N. Y. May 23-25, 1932

MEDICAL LEGISLATION

The Legislature of the State of New York is now in the middle of its session, but the most important lines of its action are not yet clearly revealed. The cultists are evidently following their usual tactics and are waiting for the closing days of the Legislature so that their opponents may not have time to refute their arguments and 'testimonials'. Workmen's Compensation bills may be expected and the proposals of the Governor's Health Commission in regard to public

health administration will probably be put into legal form. All these major bills and many minor ones are being closely watched by the Committee on Legislation of the Medical Society of the State of New York and information regarding them is transmitted promptly to the chairmen of the legislative committees of the county medical societies with the expectation that the individual members will express their opinions of them to their local legislators.

THE HOUSE OF DELEGATES

Whenever a new movement in public health is proposed, there are differences of opinion among both physicians and laymen. Physicians sometimes resent the dictation of laymen who tell them what they shall do; and on the other hand, laymen are often impatient with physicians who ask embarrassing questions regarding the probable effects of the new proposals of investigators, statisticians, and welfare workers.

The Health Commission appointed by Governor Franklin D. Roosevelt in May, 1930, made a report in the spring of 1931, which was printed in abstract in this Journal of February 15, 1931, and in full in this Journal of October 1, 1931, page 1208; and in the meantime the House of Delegates meeting on June 1, 1931, had instructed the Standing Committee on Public Relations and that on Public Health and Medical Education to act jointly in studying the findings of the Governor's Health Commission and reporting its recommendations to a special meeting of the House of Delegates. The report of the Joint Committee was printed in this Journal of January 1, 1931, page 29, and was considered by the House of Delegates at a special meeting held on January 14, 1931. A full report of the proceedings at that meeting is printed in this Journal beginning on page 213.

The general topic considered by the Governor's Health Commission was the participation of governmental bodies in health matters. After nearly a year of study by the Commission, its findings were considered by the Joint Committee of the Medical Society of the State of New York over a period of six months, during which time hearings were held in several sections of the State so that representatives of every county medical society would have the opportunity to express their opinions regarding the suggestions of the Commission. Finally, on January 14, 1931, the official representatives of the medical societies of the counties and the State, discussed the recommendations freely and without restraint.

A remarkable degree of harmony and good judgment has been shown by all the parties concerned in the investigations throughout the entire

course of the deliberations; and agreements were reached in over eighty per cent of all subjects under consideration,—a new record for agreements between the laity and the medical profession.

There were ten major subjects considered by the Joint Committee of the House of Delegates, as follows:

1. State Aid for local public health work: It was felt that the subject should be considered in the light of each individual activity as it arises.

2. County Health Departments: While their principle was approved, yet the decision was that the form, time and manner of their organization should be determined by future developments.

3. Tuberculosis Sanatoria: Most of the recommendations of the Governor's Commission have already been enacted into law.

4. Venereal Diseases: The principle of their control by public health authorities as communicable diseases was approved, but the manner of the control should be the same as that of other communicable diseases, with treatment of individuals who otherwise could not obtain treatment.

5. Cancer: A campaign for educating the people was approved.

6. Maternal and Infant Hygiene: The general principles of public health work in the protection of mothers and infants were approved.

7. School Hygiene: A working agreement between the departments of Health and that of Education was suggested.

8. Orthopedics: The general principle of State Aid to the indigent cripples was approved.

9. Public Health Nursing: Since the recommendations of the Governor's Commission were indefinite, no special action was taken.

10. Industrial Hygiene: This subject is so broad and far-reaching that special studies of it will be required.

The subject of State Aid came up toward the close of the session, and the Joint Committee was requested to consider it and report to the next regular meeting of the House of Delegates.

MOULDS IN HUMAN DISEASES

The January number of the Journal of the Medical Association of Georgia contains an article on mycology in its relation to human diseases, and lists ten diseases which are caused by moulds or fungi, and which are significant to physicians of Georgia. These ten diseases are probably as prevalent in New York State as they are in Georgia.

While they are known to doctors generally, yet if most doctors were suddenly to undergo an examination and be asked to name them they would probably hesitate over some of the more uncommon ones. The authors discussed these moulds in outline only, and in the following order:

1. The epidemophitoses of which ringworm is the most common example. Probably every doctor would put ringworm first on this list of fungus diseases.

2. Actinomycosis produces swellings in the skin, or more commonly in the lungs and sinuses of both man and cattle. The fungus is the cause of the disease called "lumpy jaw" in cattle, but the authors say that it cannot be transmitted to man. The disease in man usually affects the lungs and is mistaken for tuberculosis.

3. Blastomycosis is a yeastlike fungus. In Georgia its usual manifestation is a pustular lesion of the webs of the fingers. The authors say that it is "not uncommon."

4. Sporotrichosis is caused by a yeastlike fungus which produces an ulcer on the side of the hand and lines of vesicles along the lines of the lymphatics. This disease is fairly well known in New York.

5. The Broncomycoses form a group which generally enter the body by way of the lungs and produce conditions which are mistaken for tuberculosis. Practically the only way of recognizing the disease is by finding the fungi in the sputum.

6. Tinea Versicolor is a superficial skin disease with the formation of brown scales. Patients usually seek relief for the discoloration of the skin rather than any actual suffering.

7. Erythrasma is cited by the authors as a disease almost exactly like actinomycosis.

8. Favus produces a thick scab on the scalp. It is rather common among mice, and is among the contagions for which a search is made at quarantine.

9. Trichomycosis is a harmless condition which produces small nodules attached to the hair of the axilla, and is the usual cause of colored perspiration.

10. Sprue. Sprues constitute a group of conditions of the mouth and sometimes of the intestines. They produce lesions varying from slight milk-like patches to severe enteritis, and even death. Tropical sprue is likely to be chronic, and frequently ends in death. Milder forms of sprue are often found in the mouths of patients who may suffer only slight inconvenience, or may have a systemic infection. Observant health officers frequently run across these lesions in the mouth. These conditions deserve far more study than they are receiving. They are not common, and so they are not classified with any degree of completeness. They do not seem to be great factors in public health, and yet they are deservent of study, for no one can tell when they may become serious public health problems.

LOOKING BACKWARD

This Journal Twenty-Five Years Ago

Chain Drug Stores: This Journal of February, 1907, contains a leading article advocating the organization of a chain of drug stores by the medical profession, and says:

"Let us suppose the American Medical Association had appointed a committee to incorporate such a company under the laws of the State of Illinois, with an eventual, unlimited, capital stock, and an initial issue of \$30,000.00, par value of shares, \$10.00 each. Such an organization could be perfected, and the expense of securing the subscriptions for a first store could be paid at an expense of not more than \$2,500.00. New stock authorizations could be made from time to time to meet the requirements of the business and its development.

"The sole purpose of such a corporation would be to capitalize, establish and operate a system of co-operative stores in the interests of thousands of conscientious, honorable physicians who, for the sake of their good reputations and the welfare of their patients and public at large, feel the urgent need of some systematic plan by which they may be assured of:

"1. Having only the highest quality of drugs dispensed on their prescriptions.

"2. To prevent substitution without their knowledge or consent.

"3. To prevent the indiscriminate sale of nostrums.

"4. To prevent the sale of poisons excepting for specific purposes, as prescribed.

"5. To insure the prompt and proper filling of prescriptions.

"6. To establish a check system to obviate errors.

"7. And for the multitude of other reasons which would tend to protect the physician in his practice and reputation, and the public against dangerous mistakes, indiscriminate substitution, and other well-known abuses in the filling of prescriptions.

"The company assuming the responsibility of making proper connections with the manufacturers of high-grade drugs, physicians' supplies and instruments, whereby only first-class goods might be had at lowest possible cost, under a system guaranteeing their purity and freshness. Every article dispensed by the system of stores to bear the Association label guaranteeing its purity."

The whole article covers five pages, and sets forth the scheme in great detail, even to its probable profits.



MEDICAL PROGRESS



The Vago-Gastro-Cardiac Reflex and Its Clinical Application.—There is a group of patients, says C. Farmakidis, in the *Archives des maladies du coeur, des vaisseaux et du sang* of September, 1931, in whom the usual methods of clinical examination reveal no cardiac pathology, and yet there is a state of dyspnea after exertion that cannot be explained by the physiologic condition of the other organs, but must be related to a hypotonicity of the myocardium. This hypotonicity is brought out by eliciting what the author calls the vago-gastro-cardiac reflex, which is done as follows: With the patient lying on his back, the area of absolute dullness of the heart is marked out by means of percussion, and the exact position of the apex noted. Then the patient is asked to flex his knees and thighs in such a way as to relax all the abdominal muscles, and while he holds his mouth open the physician carries out a prolonged massage of the abdominal region corresponding to the anterior surface of the stomach. Then the area of cardiac dullness is again mapped out. In a certain number of individuals a dilatation of the left heart alone is observed, and the apex is displaced downward and outward. In other words, there has been an increase of the longitudinal diameter of the heart. The phenomenon may be very brief, and it may be slow in appearing, so that sometimes several observations and mappings must be made in order to catch the right moment. The individuals in whom this vago-gastro-cardiac reflex is positive are for the most part subjects with hyperchlorhydria and signs of vagal hypertonus. In the absence of any sign of valvular disease, the dyspnea experienced by these persons must be due to an alteration of the myocardium, a latent hypotonicity of the cardiac muscle. If this is the case, it will be proved by the effect of administration of cardiotonics, which will overcome the sense of suffocation that follows exertion attended by dilatation of the left heart, caused by the mechanical excitation brought to bear upon the abdominal region as indicated above. Roentgenograms show very clearly the increase of longitudinal diameter of the heart after excitation of this region in cases where the reflex is positive. The reflex is useful for revealing latent hypotonicity of the myocardium caused by various conditions, such as hypertension, intoxications, and a number of physical causes. Its simplicity and the ease with which it can be elicited place it at the disposal of every practising physician.

Roentgenography of Liver and Spleen.—The possibility of making the liver and spleen visible

roentgenologically offers a valuable addition to our present methods of examination, say L. Popper and Erwin Klein, since in this manner not only the size and form of these organs can be established, but also various changes within the substance of these. The contrast substance injected is a colloidal thorium dioxide solution. After proving the harmlessness of the substance in animal experimentation, Popper and Klein determined to test its value in human beings. But owing to their observation that the substance continues to give shadows of undiminished intensity in liver and spleen for months after its injection in animals, from which they concluded that little or none of it was being excreted, they proceeded with great care, and injected it only into 12 patients with cancer in a far advanced state, in whom the known radioactivity of thorium could do no harm at a late period, such as might be the case even after years in patients not already predestined to die at an early date. The injections were well tolerated in all cases and caused no secondary symptoms. The first roentgenograms were taken after 24 hours, but it was found that the shadows were at their best after 3 to 5 days had elapsed following the injection. Moderately good shadows were obtained with 36 c.c. of the thorium preparation employed, but for the maximum clearness 60 to 90 c.c. was necessary; larger amounts did not improve the results. Before taking the picture the intestine should be relieved of gas as fully as possible, since gas bubbles may project into the liver shadow and give a deceptive result. All the roentgenograms permitted an unequivocal judgment concerning the size and form of both liver and spleen. Since all were cases of carcinoma, it was only metastases that were to be taken into consideration. The results in four of the cases were confirmed at autopsy. One of these showed in the roentgenogram an extensive tumor of the right lobe of the liver, which appeared as a large filling defect. The spleen in most cases showed up as strikingly large in comparison with most of the findings that have been reported in advanced cases of carcinoma. In 2 cases that came to autopsy 60 per cent of the thorium dioxide could be recovered from liver and spleen, and in 1 case 97 per cent was still discoverable 2 months after injection. Great caution is therefore urged in the adoption of this method of exploration.—*Münchener medizinische Wochenschrift*, October 23, 1931.

Transitory Hemiplegia Due to Nicotine.—On the basis of 4 illustrative cases, F. Külbs discusses in the *Klinische Wochenschrift* of Novem-

ber 21, 1931, the connection between the abuse of tobacco and the appearance of cerebral symptoms such as headache, vertigo, and weakness of memory. In some cases it is possible that organic changes of an arteriosclerotic nature may lie at the bottom of this symptom complex, and the connection with smoking may, in older persons, be debatable. But when these phenomena are present in youthful subjects and disappear upon the enforcement of abstinence from smoking, there be can no doubt of a causal relationship. In the cases cited, which were in 3 men between the ages of 21 and 38 and 1 woman of 40, transitory manifestations of paralysis appeared, taking the form in the men of hemiplegia and disturbances of speech, and in the woman of motor aphasia. Syphilis could be excluded in all. In every case the phenomena were preceded by general disturbances of such a type that the mental and physical efficiency was considerably diminished, or headaches, paresthesias, and vertigo were present. Objectively the abuse of tobacco could be established by such symptoms as leucocytosis, increased basal metabolism, and marked nervous and vasomotor irritability. Since in all these patients there was a complete cure within a brief period after smoking was forbidden, one may well assume that tobacco had caused vasoconstrictor disturbances such as are observed in migraine. But in all cases a migrainous tendency, even of an atypical character, could be excluded. Hence it is absolutely necessary to assume the occurrence of transitory spasms. Since we know that after abuse of tobacco intermittent spasms of the coronary arteries may appear, and possibly also of the intestinal vessels, it seems justifiable to admit analogous processes in the cerebral vessels as phenomena of intoxication. We know that nicotine may have a markedly constricting effect upon the arteries, since it acts upon the vasoconstrictor nerves and the smooth musculature. It is impossible to say whether in these cases an arteriosclerosis of notable degree was present or not. The general view today is that true angina pectoris, which attacks young persons who abuse nicotine, develops on the soil of arteriosclerotic vascular changes. This point of view may, therefore, be accepted, if the threatening symptoms cease after abstinence from tobacco, and the patient maintains his efficiency for years or decades, and disappears when the toxic noxa is re-created; for spasm belongs among these disturbed.

The Etiology of Bronchiectasis. — In order to obtain a clear understanding of pulmonary pathology, Milton S. Lloyd requests the reader to keep constantly in mind the conception that each hemithorax is a closed air-tight cavity in which the lung is expanded by a negative pressure. Normally there is a definite and fairly

constant ratio between the intrabronchial and intrathoracic pressures. The constancy of this ratio depends upon the elasticity of the lung tissue and its variation depends upon the respiratory excursion. The entry of most abnormal conditions into the field upsets this relationship, and the change is reflected on all the surrounding structures—mediastinum, diaphragm, chest wall, and even the vertebral column. In considering bronchiectasis we are concerned only with those factors which cause a decrease in the volume of the lung. Such factors are chronic atelectasis and chronic inflammation. Since both of these processes transmute themselves into a fibrosis, the ultimate cause of pulmonary shrinkage in all cases may be said to be pulmonary cirrhosis. This loss of volume sets up a mechanical imbalance in the chest, which results in an outward traction on the bronchial walls and is followed by changes in the position of the surrounding structures. If various adjustments combine to satisfy the pulmonary contraction completely, further tendency to distortion, including that applied to the bronchial walls, will be relieved. But where a high degree of tension continues to exist, after the maximum possible compensatory changes have taken place, bronchiectasis will result. The degree of bronchiectasis depends upon the end balance between loss of volume on the one hand, and accommodating changes on the other. If the counteracting changes are moderate, the degree of bronchiectasis is moderate, and if the counteracting changes are grossly inadequate, the degree of dilatation is severe. Lloyd shows that it is impossible for pressure from within due to a cough or to the accumulation of excessive secretions to produce a bronchiectasis. He says he has never seen a dilated bronchus unassociated with pulmonary fibrosis and that even in the so-called congenital dilatations, the antecedent cause lies in an intrauterine pneumonia or pneumonitis which fixed the atelectatic lung *in situ* and prevented its expansion at the time of birth. He reports a series of cases and illustrates by diagrams the mechanical adjustments which may take place in the chest as a result of unilateral pulmonary shrinkage.—*New England Journal of Medicine*, December 10, 1931, ccv, 24.

The Influence of Lumbar Puncture Upon Cardiac Rhythm.—Paul Veil, writing in the *Archives des maladies du coeur, des vaisseaux, et du sang* of November, 1931, makes a report on studies he has undertaken with reference to possible modifications in the electrocardiogram during the course of a lumbar puncture. Avoiding too rapid or too slow a withdrawal of spinal fluid, he observed that it was nearly always necessary to withdraw 10 c.c. before any modification of the rhythm of the heart appeared, and that the total duration of the puncture should considerably exceed a minute. The patient was in

each case specially isolated to avoid the effect of other human contact. It was astonishing to note in some cases considerable modification, and in others none at all. The first studies were made regardless of diagnosis, but it was soon observed that the only patients in whom the rhythm was modified during puncture were those with lesions of the central nervous system. Thereafter the studies were confined to tabetics, encephalitics, hemiplegics with cerebral arteritis, subjects suffering with cerebral compression, or those who simply presented signs of radiculitis (radicular sciatica). While the alteration of rhythm is constant, it varies widely from one individual to another, even in the same disease. Sometimes there was a marked slowing down at the end of the puncture, even assuming the form of nodal bradycardia. The most frequent observation was the spontaneous appearance of flutter waves, shorter and shorter in the course of the puncture, such as some subjects exhibit upon ocular compression. Again there were simple changes of ventricular complexes, of great diagnostic value in that they were isolated and appeared only during puncture. Sometimes again there were cyclic modifications, now isolated, now associated with other rhythmic variations, with regular phases of acceleration and retardation. It would be premature to attempt at the present time to establish the diagnosis of the nature and localization of the lesion by the variety of the rhythmic troubles, or to suggest any hypothesis as to the mechanism of the trouble in a given case. Practically, all that can be said is that the existence of central nervous lesions is revealed in a constant manner by modifications of cardiac rhythm in the course of a lumbar puncture, and that these run parallel to those of the cerebrospinal fluid, as shown by cytologic examination. One might even say that they appear to be slightly more perceptible than the latter.

Recent Observations on the Pituitary Body.

—In a review of the varied activities of the pituitary body, W. Langdon Brown characterizes this gland as the leader in the endocrine orchestra. Anatomists in the past were struck with the idea that it resembled a little shrunken brain, which responded to or repeated the action of the big brain above. Modern research has shown that there is more in this idea than was supposed in the nineteenth century. Taking up each structure in the pituitary body, the *anterior lobe* contains both eosinophile and basophile cells. The growth hormone, derived from eosinophile cells, is responsible by overaction for gigantism, hemihypertrophy, and acromegaly, by underaction for dwarfism and progeria. The anterior pituitary produces two hormones from basophilic cells. Overaction of these cells produces virilism; underaction of both lobes produces Fröhlich's syndrome. The anterior lobe produces two other

hormones: The first is concerned with the reproductive function, assisting in the formation of the corpus luteum and in the rhythmical changes produced in the uterine mucosa to receive the ovum. Estrin is powerless to effect this in the absence of pituitary. The second of these hormones is concerned with the metamorphosis of such animals as go through this phase from a larval to an adult stage. The anterior lobe also contains the so-called chromophobe cells, whose function is unknown except that an adenoma composed of such cells diminishes pituitary function. The *pars intermedia* seems to belong functionally to the posterior lobe, but possesses the specific function of influencing the adrenal medulla in respect to pigmentation. The *posterior lobe* has been known for some years to be the source of pituitrin. Kamm and others have shown that it really contains two active principles, *oxytocin* or *pitocin*, which stimulates uterine contractions, and *vasopressin* or *pitressin*, which raises blood pressure, causes diuresis, and antagonizes insulin. The oxytocic effects seem to be purely chemical. The ovarian hormone will stimulate its secretion, while the luteal hormone inhibits it. In this way the corpus luteum maintains pregnancy; its destruction inevitably leads to abortion. The vasomotor effects of pitressin have been rather overshadowed by those of adrenaline, yet the pressor effect of emotion would be more likely to be produced by the gland nearer the emotional centers. There has been a tendency to ascribe diabetes insipidus not to the pituitary but to the overlying diencephalon. Since the posterior pituitary produces an anti-diuretic hormone, which will act on a denervated kidney, the logical conclusion would appear to be that, even when the diencephalon is responsible, it must act, not through a nervous, but through a chemical mechanism and this lies in the pituitary. After discussing the effect of pituitrin on carbohydrate and fat metabolism, and as a galactagogue, Brown traces the relationship of pituitary disease to some of its psychological accompaniments. It thus seems that nowhere are chemical and nervous factors so closely associated as in the pituitary-diencephalic region; primitive emotions and fundamental instincts cluster thick around it, and through it the rhythm of life is largely regulated.—*Practitioner*, December, 1931, cxxvii, 762.

Dietetic Prophylaxis and Treatment of Gallstone Disease.—The varying nature and long course of gallstone disease make it impossible, says B. Molnar, in the *Deutsche medizinische Wochenschrift* of November 20, 1931, to draw up a strict dietary regimen. The diet must perforce be adjusted to the requirements of the individual condition. Carbohydrates are harmless for the liver cells, do nothing to promote secretion and emptying of bile, but have a fattening effect, and

when consumed in large amounts may hasten the development of diabetes in persons having a tendency in that direction. Proteins irritate the liver cells, promote bile secretion, may cause colic in persons with a tendency to allergy, and they also have a constipating effect. The most injurious are the animal proteins, especially meats. Fats facilitate the emptying of the gallbladder, but may injure the liver cells, when roasted they encourage secretion of gastric juice, increase the emptying time of the stomach, and may thereby produce slow and painful gallbladder contractions, sometimes they contain cholesterol, some times they facilitate resorption of the latter, they have a very fattening effect. The many evil characteristics of fat do not militate against the good effect of the olive oil cure. Fats are ingested as a steady diet, while the oil cure lasts only a few days. The patient on a fat poor diet is allowed to take the oil cure from time to time. The best fats after oil are fresh butter and cream. Green vegetables, salads, and fruits contain hardly any protein, fat, or cholesterol, they have a good effect upon intestinal function, and are to be highly recommended. In functional disturbances of the liver, protein and fat intake should be limited, when the gallbladder is hypertonic fat should be used with great caution, when it is atonic, the cholagogue action of oil, butter, and cream should be utilized.

The Prognostic Value of the Oculocardiac Reflex in Tuberculosis—Carlo Scotti writing in the *Riforma medica* of November 23, 1931, reports the results of studies carried out during the course of a year upon 270 tuberculosis subjects, nearly all of whom were pulmonary cases. The reflex was followed up daily in the different stages of the modifications of their disease, so that it was not difficult to form a judgment as to its parallelism with the evolution of the tuberculosis. All the tests were made with the patients lying down in a state of relaxation so far as this could be obtained, and an attempt was made to remove as much as possible all influence of emotion, of menstruation, and of food, which constitute factors by no means negligible in the results. The examinations took place between 9 and 10 o'clock in the morning, with the patients fast and well rested after a night's sleep. An oculocompressor apparatus was used, but in some cases this was followed by digital compression and little difference was observed in the relative counts. In a first group of 80 individuals in whom the disease was running a mild course, the oculocardiac reflex was found present in 69, inverted in 1 and absent in 10. A second test on the same group 2 months later showed 60 positive, 3 inverted and 17 negative. The 9 individuals who had left the positive

group had all been suffering acute exacerbations of their disease, with pleurocortical or bronchopneumonic complications. Summarizing all his results, Scotti found the reflex present in 86 per cent of cases with good prognosis, inverted in 1.25 per cent, and absent in 12.50 per cent, on the first examination, the second examination revealed its presence in only 75 per cent. In severe cases with unfavorable prognosis it was present on first examination in 10 per cent, and on second examination in 11.25 per cent. He therefore concludes that the absence of the reflex gives an indication of the extent of the toxemia, and permits the making of an almost uniformly unfavorable prognosis.

Constipation and Right-Sided Ptosis—J. V. Fiddian says dyschezia is a relatively harmless disorder, due to the imperfect functioning of the rectal reflex. It is not so much a disease as an adaptation to the civilized conditions of life. The most logical method of dealing with it is by the use of the periodical simple enema, and not by deranging digestion and absorption by the use of drugs in order to fill the rectum to the threshold of stimulation. Cecal stasis is fairly prevalent and is not relatively as harmless as dyschezia. In the author's experience during a period of three years, among 975 persons with normally fixed colon no case arose requiring operation for an abdominal complaint, out of 325 persons with prolapsed colon, in the same period, there were 37 whose disabilities were sufficiently severe to lead them to consent to operation. These 37 patients were found to have prolapse of the cecum and ascending colon. The failure of many abdominal operations to relieve the symptoms for which they were undertaken has been due to failure to recognize the presence of right-sided ptosis. This condition is frequently associated with appendicitis, and when it is, failure to fix the colon may lead to relative failure of the operation to afford relief. The operation of colopexy, as devised by Waugh, seeks a normal fixation of the colon. After the appendix has been removed, an incision is made into the peritoneum in the angle between the ascending colon and the flank. A pocket is made by stripping up the peritoneum from the flank, the colon is rolled into this and made secure by sewing the peritoneal flap over it. The author has performed this operation fifty-three times without untoward complication or a fatality. It is his opinion that the large majority of abdominal disorders occur in that quarter of the population who have a congenitally ill supported colon. A timely colopexy will obviate the necessity of more serious subsequent operations.—*British Medical Journal*, December, 1931, ii 3701.



LEGAL



TERMINATION OF THE RELATIONSHIP BETWEEN PHYSICIAN AND PATIENT

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Perplexing questions often arise in the practice of medicine as to when and under what circumstances a physician may safely terminate his relationship with his patient. In a general way, it may be said that a physician or surgeon having undertaken a case, whether medical or operative, in the absence of an agreement specifically limiting the services to be rendered is under a duty to continue to treat and attend a case so long as it requires attention.

In a very recent case in one of our Western States, the court had before it the question of the termination of the relationship between patient and physician. In summarizing the responsibility of the physician who had discontinued his attendance upon a patient, the court said:

"On engaging a physician to treat his case the patient impliedly engages him to attend throughout that illness, or until his services are dispensed with. The patient places himself in the hands of the physician and thereafter relies on the judgment and knowledge of the physician rather than on his own. A part of the correct treatment of the case is the careful and proper determination by the physician of the moment when the relation shall end. When a physician takes charge of a case and is employed to attend a patient, his employment as well as the relation of physician and patient, continues until ended by the consent of the parties or revoked by the dismissal of the physician, or until his services are no longer needed. For example, when a surgeon performs an operation, not only must he use reasonable and ordinary care and skill in its performance, but also in the subsequent treatment of the case. It is his duty to give the patient such attention after the operation as the necessity of the case demands, in the absence of any special agreement limiting the service or reasonable notice to the physician. It would seem that even before it is safe to discontinue medical treatment the relation of physician and patient may be terminated by a dismissal of the physician or by an agreement between the two to end the relation, or by the withdrawal of the physician after proper notice."

In a case in this State some years ago involving the question under consideration, the court charged the jury as follows:

"When a physician engages as here to attend a patient without limitation of time he cannot cease his visits, except—first, with the consent of the patient; or, secondly, upon giving the patient

timely notice so that he may employ another doctor; or, thirdly, when the condition of the patient is such as no longer to require medical treatment; and of that condition the physician must judge at his peril. Here it is not shown that the plaintiff was no longer in need of medical attention; so that the defendant had no right to discontinue his attendance, unless either the plaintiff consented or he gave her proper notice; and, if he left her without such consent or such notice, he was guilty of grave professional negligence. The defendant swears that, at his last visit, he notified the plaintiff that he was going out of town, and indicated to her a physician who would attend her in his stead. If this statement be true, the defendant's absence is excused and you must exonerate him from this imputation of neglect."

It becomes apparent from a reading of these cases that it is not always easy for a physician to decide just when and under what circumstances he may safely leave a case. Of course, if the patient by his own acts refuses to go on with the treatment, he cannot thereafter charge the physician with responsibility. In one of our appellate courts where an attempt was made to charge a physician with responsibility for failure to discover a fracture, it was said:

"* * * if the plaintiff prevented that (the rendition of certain admittedly proper treatment) by requesting the defendant to make no other visit, on account of the expense, until he was notified, the defendant could not properly be blamed for the omission to diligently look after the case."

In the case where the doctor wishes to withdraw from the treatment of a particular patient, the courts have clearly stated that he must give reasonable notice of his intention. What is reasonable notice is a question of fact in each particular case, and it is imperative that the physician exercise great caution before taking such a step. If, by the act of the physician in this respect, the patient be deprived of proper care, grave consequences may result. As has been aptly said by one of our courts: "A physician is never justified in withdrawing from a case he has once undertaken at a critical stage when his place cannot be supplied. To withdraw means voluntarily to refuse to continue his services. If he is ever justified in so withdrawing when it is apparent that to do so must result in injury it can only be where the patient obstinately refuses to follow the treatment prescribed. It is a fact honorable to the profession

that the question never seems to have been directly presented"

An analogous question is whether a doctor, having been called to attend a case, is entitled to continue to care for the patient in the absence of express request. A case in point was decided some years ago in this State where a doctor sued the husband of a patient to recover his fee, the physician having been first called by the husband to attend the woman during an illness and having continued to attend her throughout without further express authorization from the husband. There the court enunciated the following doctrine:

"* * * when a physician is employed to attend upon a sick person his employment continues while the sickness lasts and the relation of physician and patient continues unless it is put an end to by the assent of the parties or is revoked by the express dismissal of the physician"

The question presented when a physician temporarily leaves his practice has come before the courts. The established rule seems to be that if the physician notifies his patients he is going away and suggests a competent substitute in his stead, no neglect can be charged against him. However, here again a duty of care is upon the doctor, for if his conduct misleads a patient he may incur liability for unfortunate and unforeseen results.

This is illustrated by a case decided in New York in which the doctor had undertaken to treat a fractured arm, and informed the patient that he was going away for a brief period of ten days or two weeks. He gave her instructions as to the manner of caring for the injury in the meantime, and then failed to return for five weeks. The appellate court, in affirming a judgment against the said doctor, said:

"The defendant was called in as a surgeon in connection with a physician who was first summoned, who did not consider himself competent to treat a case of this kind and as such he undoubtedly undertook the case, and in doing so assumed to give it the care and attention required. If on this twelfth day of September he told the plaintiff he would return in ten days or two weeks and gave her instructions as to the course she should follow in the meantime and he failed to return for five weeks, and if in consequence of this failure to properly treat her during that interval this injury resulted, it would seem that the jury were justified in finding that the defendant was negligent in this particular. A physician who undertakes the treatment of a patient is bound to exercise not only the skill required but also care and attention in attending his patient until he notifies the patient that his professional relations are terminated."

ALLEGED NEGLIGENCE IN USE OF TOURNIQUET

A nurse came into the office of a doctor who specialized in orthopedic surgery, complaining of a stiff finger. She gave him a history to the effect that she had cut the finger some time before when a glass tube with which she had been giving a colonic irrigation had broken. The doctor found on examination the presence of the old scar and determined that the flexor tendon had been severed and was drawn up into the palm. He suggested an operation and she entered a hospital for the purpose. The doctor had her placed under a general anaesthesia and directed the nurse in charge of the operating room to place a rubber tourniquet on the left arm above the elbow in order that he might have a bloodless field for the operation. The skin of the finger was then cut, exposing the severed tendon, the opening being made from the point of laceration up through the palm so that the incision was about five inches long. He released the tendon and the end of it was drawn down and fastened to the stationary piece of tendon that remained in the girl's finger. The doctor then closed the wound with catgut, applied a splint and directed that the tourniquet be taken from the arm. About two hours after the operation the patient told the doctor she could

not move the other fingers of her hand, and that sensation had disappeared from the forearm and fingers. He immediately provided that she should be given treatments by a physiotherapist. She remained under his care for about two weeks and during that time sensation gradually returned to her arm and it gradually became normal.

The nurse thereafter brought a law suit against the doctor charging that due to the doctor's negligence she had suffered a paralysis of the left arm which persisted for about six months, and that she had incurred great expense for treatments to the arm. The claim was that the tourniquet had been either applied to the arm too tightly or that it remained on the arm for too long a period of time, and the pressure so applied to the blood vessels, nerves and muscles had caused a paralysis.

The case was brought on for trial before a judge, but without a jury, and at the close of the testimony introduced on behalf of the plaintiff the motion of the defendant to dismiss the complaint was granted. The court decided that there had been no evidence presented that the treatment on the part of the defendant was negligent or a departure from proper practice.

CLAIMED NEGLIGENCE IN TREATMENT OF SINUS TROUBLE

A young married woman consulted a specialist in ear, nose and throat cases with respect to sinus trouble that had been bothering her for some time.

The doctor examined her and diagnosed the case as an infection of the right maxillary sinus, and after keeping her under observation for a few weeks the doctor advised operative treatment. Under a local anæsthesia he punctured the nasal antrum wall with a Coakley trocar, releasing a considerable quantity of pus. Then with a saline solution he irrigated the antrum cavity. The patient returned daily for several weeks and on each occasion the doctor washed out the antrum which continued to show signs of pus. At the end of that time he advised the patient that he did not feel that washing the sinus through the small opening was effecting a cure and advised that she permit a more extensive opening of the antrum. The patient consented and the doctor again administered a local anæsthesia. He went in through the nostril and removed the anterior end of the inferior turbinate, making a larger opening in the naso-antral wall. This relieved the situation and enabled the doctor to wash out the pus. The patient returned for treat-

ment and observation occasionally thereafter for about two months. When he last saw her the difficulty was completely cleared up.

Some time later the doctor brought suit against the patient's husband in the Municipal Court of the City of New York to recover an unpaid balance of his bill for professional services. The husband interposed a defense, first claiming that the services rendered the patient were not rendered at his request and that he was not responsible for such liabilities as his wife might so incur, and further that the services rendered to his wife were negligently and unskillfully performed, by reason of which he demanded damages in the sum of \$1,000. The husband further claimed that the negligence and unskillfulness of the doctor had caused his wife to suffer great shock to her nervous system and subjected her to spasms of hysteria and crying.

After this defense contained in the counterclaim had been interposed, counsel for the doctor conferred with the attorney who had appeared for the patient's husband and pointed out that the counterclaim was wholly without merit, as a result of which the doctor's fee was paid in full and the case discontinued.

BROKEN NEEDLE

In this case the defendant doctor had been engaged to attend a patient during the delivery of her child. The doctor at the proper time delivered her of a normal child, and all went well during delivery and there were no tears. The doctor also removed the placenta and then proceeded to give the woman a 1 c.c. injection of pituitrin subcutaneously in the right thigh. Having scrubbed the spot on the thigh, he prepared to make the injection with a sterile syringe warning the patient not to move. The patient was conscious and replied that she would not move. However, just as the doctor inserted the needle under the skin and when he was about to press on the syringe, the patient twisted and jerked, and thereupon the needle broke and remained in the thigh. The doctor immediately informed the patient that the needle had broken off and made a superficial incision with a sterile scalpel in an attempt to remove the needle, but said attempt failed.

The same evening the doctor took the patient to the office of a radiologist who took an

x-ray picture of the woman's leg which showed the shadow of the needle. Thereupon, with the radiologist operating the fluoroscope, the doctor made a further attempt to remove the needle under local anesthesia but was unsuccessful in doing so. He immediately dressed the wound and returned the patient to her home in an ambulance. The doctor thereafter attended her for several weeks, at the end of which time the wound had healed although the needle remained embedded in the thigh.

An action was subsequently instituted by the patient, claiming that due to the negligence of the defendant in causing the hypodermic needle to break and remain in the plaintiff's body she had been severely injured and had suffered great pain. The case was tried before a judge without a jury, and at the close of all the testimony the court directed a verdict in favor of the defendant doctor, thereby ruling that the mere fact of the needle break did not impose liability upon the doctor and that the plaintiff's testimony had failed to show any negligence on his part.



HOUSE OF DELEGATES



MINUTES OF SPECIAL MEETING

The Special Meeting of the House of Delegates of the Medical Society of the State of New York was held at the Ten Eyck Hotel, Albany on Thursday, January 14, 1932, at 2:15 P.M.

Dr. John A. Card, Speaker.

Dr. Daniel S. Dougherty, Secretary.

1. OBJECT OF MEETING

The Speaker: As you know you are assembled here today in Special Session under the resolution passed by the House of Delegates, June 1, 1931, to consider the report of the Joint Committee who were authorized to study the report of the Governor's Special Health Commission, that is the only business that will be transacted at this Session.

Will the Secretary please call the roll?

2. ROLL CALL

The Secretary: The Assistant Secretary will kindly call the roll.

The Assistant Secretary called the roll and the following delegates responded:

Frederic C. Conway, William P. Howard, Lyman C. Lewis, J. Lewis Amster, Frederick L. Flynn, Edward R. Cumiffe, Louis A. Friedman, Vincent S. Hayward, Jacob A. Keller, Edward C. Podvin, Frank M. Dyer, Joseph P. Garen, George W. Cottis, Earl W. Wilcox, Anton S. Schneider, C. Knight Deyo, William A. Krieger, Aaron Sobel, John D. Bonnar, Baldwin Mann, Albert A. Gartner, Mary J. Kazmierczak, Charles Leone, Edward J. Lyons, Milton G. Potter, Charles C. Trembley, Peter J. Di Natale, William M. Rapp, Norman L. Hawkins, E. Jefferson Browder, Frederic E. Elliott, Walter D. Ludlum, Harold R. Merwarth, F. Edward Jones, Lynn B. Chase, William A. MacVay, Clarence V. Costello, Floyd S. Winslow, Horace M. Hicks, Everett C. Jessup, Benjamin R. Allison, Emily D. Barringer, Edward M. Colie, Jr., C. Ward Crampton, Edward V. Denneen, John V. Donnet, TenEyck Elmendorf, B. Wallace Hamilton, David J. Kaliski, Samuel M. Kaufman, Frederick C. Keller, Samuel J. Kopetzky, George W. Kosmak, Arnold Messing, William M. Patterson, Alfred C. Prentice, Nathan Ratnoff, Morris Rosenthal, Newton T. Saxl, James W. Smith, Terry M. Townsend, Franklin Welker, Frederick J. Schnell, Richard H. Sherwood, Charles D. Quinn, Hyzer W. Jones, Thomas P. Farmer, Frederick H. Flaherty, Homer J. Knickerbocker, Floyd J. Atwell, Carl Boettiger, James R. Reuling, Jr., Albert L. Voltz, Augustus J. Hambrook, George A. Leitner, Stanley W. Sayer, George S. Towne, Dudley R. Kathan, William C. Treder, David W. Beard, Leon M. Kysor, Herbert B. Smith, Arthur T. Davis, Frank S. Child, Luther C. Payne, Morris Maslon, Walter S. Bennett, Lucius H. Smith, Harrison Betts, Merwin E. Marsland, Romeo Roberto.

The following Officers and Chairmen of Standing Committees were present:

William D. Johnson, Charles G. Heyd, William H. Ross, Charles C. Trembley, Harrison Betts, Daniel S. Dougherty, Peter Irving, Frederic E. Sonder, John A. Card, George W. Cottis, James F. Rooney, Arthur W. Booth, Harry R. Trick, Arthur J. Bedell, Thomas P. Farmer, Harry Aranow, Charles H. Goodrich, Herbert A. Smith, James E. Sadlier, Louis A. Van Kleeck, Herbert L. Odell, Augustus B. Santry, E. Carlton Foster.

The following ex-Presidents were present:

Charles Stover, James F. Rooney, Arthur W. Booth,

James E. Sadlier, Harry R. Trick, James N. Vander Veer.

The Speaker: There being a quorum present, I will declare the House in session to consider the report of the Joint Committee which has been studying the preliminary report of the Governor's Health Commission, and I desire to say at this time that the members of the Joint Committee who are not members of the House of Delegates, are accorded the privilege of the House today.

The Secretary: With the exception of voting.

The Speaker: I declare that members of the Committee are welcome to participate in the deliberations of this session but without vote.

3. REPORT OF THE JOINT COMMITTEE

Dr. Ludlum of Kings: All of us present are here because we have read this report with considerable care, and I think that we all feel that this Joint Committee has done a very large amount of very satisfactory and efficient work.

We would all use different words in expressing the same thought, but so far as I can see the recommendations and expressions of opinion are very satisfactory. And I should like to offer the following resolution:

That the report of the Joint Committee be received and that the recommendations and expressions of opinion therein contained be accepted as recommendations and expressions of opinion of the House of Delegates of the Medical Society of the State of New York.

The Secretary: I would like to call attention to the fact that there is nothing before the House, the Committee has not reported to the House.

The Speaker: I was about to rule that the motion of Dr. Ludlum was not in order, because there is no report before the House.

The Secretary: I move, therefore, that the report of this Committee be considered before the House as printed and received by the Delegates and the County Societies.

Motion seconded.

The Speaker: I am going to declare that motion out of order at the present time, and I am going to ask Dr. Farmer, the Chairman of the Joint Committee, if he will present the report.

Dr. Farmer: On behalf of the Joint Committee appointed by the House of Delegates at its meeting in Syracuse in June to study the report of the Governor's Special Health Commission and to make recommendations to the House of Delegates I submit the report as sent to the Secretary of the House of Delegates and published in the official organ of the Medical Society of the State of New York, the NEW YORK STATE JOURNAL OF MEDICINE, in the issue of January first, 1932, page 29, and move that it be received by the House of Delegates for action.

The Speaker: The report is now before you.

Dr. Ludlum: Is my motion now in order?

The Speaker: I will rule on it if you will state it.

Dr. Rooney: I rise to a point or order. My conception of this matter of receiving a report is that, receiving a report is tantamount to acceptance of that report and making it a body resolution of this House.

I therefore, ask the Chair to so rule, that the House may understand that question, and may not by voting to receive the report, place itself in a position of adopting it.

The Speaker: You did adopt it when you received it.

Dr. Rooney: A point of order, I withdraw my request

and ask unanimous consent to speak in relation to the adoption of this report.

Motion seconded.

The Speaker: The motion is made for unanimous consent to consider the adoption of the report.

As there is no objection, it is so ordered.

Dr. Rooney: The only way that this matter can be changed now is by a motion to reconsider.

The Speaker: You are right.

Dr. Rooney: And that motion to reconsider must come from someone who voted in the affirmative on the preceding motion. Not having voted I desire to call the attention of the House to the necessary procedure in order that if the House so desires to change its opinion that the proper motion may be made.

Dr. Kobetzky: I move the reconsideration of the acceptance of that report, I having voted in the affirmative.

Motion seconded.

The Speaker: The motion is before you to reconsider the acceptance of the report.

All of those in favor signify by saying aye; contrary minded, no. It seems to be and is carried. So ordered.

Dr. Rooney: I move that the House proceed to the consideration of the report.

Motion seconded.

The Speaker: The motion is made and seconded that the House proceed to the consideration of the report.

The Secretary: We have reconsidered our action. The original motion is now before us, that the report be accepted.

Dr. Rooney: I move that in place of the word "acceptance" that the words used be that "this House will proceed to the consideration of the report of the Joint Committee."

The Speaker: The motion is amended and now reads that the House shall proceed to the consideration of the report of the Joint Committee.

Are there any remarks?

All those in favor signify by saying aye; contrary minded, no.

Dr. Rooney: That is not my amendment, my amendment is that the word "accept" be deleted from the original motion and that there be substituted the words "that the House will proceed to the consideration of the report of the Joint Committee."

Dr. Farmer: I want to correct Dr. Rooney. I made the original motion and the wording was "received." So we strike out the word "received" instead of striking out the word "accepted."

The Speaker: I have had my attention called to Roberts' Rule of Order, and I wish to quote from paragraph 53 which I think will clarify the entire situation. "A very common error is after a report has been read to move that it be received, whereas the fact that it has been read shows that it has already been received by the assembly."

The Speaker: There is a motion before the House, that this report be considered by the House of Delegates.

All those in favor signify by saying aye; contrary minded, no. So ordered.

Motion as amended was carried.

Dr. Ludlum: May I ask if my motion is now in order?

The Speaker: Please repeat it, Dr. Ludlum?

Dr. Ludlum: I move you, sir, that the recommendations and expressions of opinion contained in the report of the Joint Committee be accepted as the recommendations and expressions of opinion of the Medical Society of the State of New York.

Motion seconded.

The Speaker: You have heard the motion. Are there any remarks?

Dr. Rooney: I hope that this body will not adopt such a procedure as is proposed in the motion of Dr. Ludlum. This report contains too many controversial matters upon which there may be a very great difference of

opinion and should not be disposed of by any such blanket procedure as is proposed.

I hope that the House will take up the separate sections and the separate recommendations one by one.

Dr. Bonnar: I wish to oppose that motion. Inasmuch as we are assembled here for the purpose of considering this report in detail, I take the privilege of moving as an amendment to this motion of Dr. Ludlum that we consider the report of the Joint Committee section by section.

The Speaker: That would be equivalent to a substitute motion, and I will receive it as a substitute motion and not as an amendment.

The Speaker: Dr. Bonnar, is the substance of your motion that the House consider the report section by section and adopt or reject it section by section?

Dr. Bonnar: That is the substance of my motion.

The Speaker: All of those in favor signify by saying aye; contrary minded, no. It is so ordered.

The substitute motion was carried.

The Speaker: The report is before you for consideration.

4. COUNTY HEALTH UNITS

Dr. Goodrich: The first definite recommendation of the Joint Committee is contained on page 31, the upper half of column two of its report printed in the January first Journal; and in relation to that I would offer the following resolution:

Resolved that while recognizing that the principle of County Health Units is ultimately desirable, the House of Delegates record its opinion that the mandatory provision for the same be deferred. (The vote—see Section 10.)

Resolution seconded.

The Speaker: The resolution is now before you for discussion.

Dr. Rooney: I can see no reason for this motion. Any county, under the permissive section of the present law, that desires to have a county health unit can so constitute it. The proper subject of discussion here is the question of the mandatory provision.

Are we in favor of any sort of mandatory provision now or in the future, if not why use the word "deferred?" Why not state that we are opposed to the mandatory provision, because under the present law, any county health unit if it so desires by its own action, and through its own elected boards may constitute that health unit just as has been done in Westchester County.

Now, why temporize with this thing. Why play with it? We can lose nothing by standing straight-forwardly for what we believe.

Let us be honest enough to advise the public, as we are by law required to do, that in our opinion all mandatory provisions that will lead ultimately to the complete centralization of authority in state and national government are begun in just this way.

If you want that, vote for this "deferred." If you don't want it, let us state that under the present law any county desiring a county health unit may so constitute, and that we see no reason for any mandatory provisions in the law whatsoever.

I move you, therefore, to amend Dr. Goodrich's resolution by striking out the word "deferred" and adding the word "because." May we have the resolution repeated so we may have the exact wording.

The Speaker: I will ask the Secretary to read it.

The Assistant Secretary: "Resolved that while recognizing that the principle of county health units is ultimately desirable, the House of Delegates record its opinion that the mandatory provision for the same be deferred."

5. MANDATORY ESTABLISHMENT OF COUNTY UNITS

Dr. Rooney: I move to substitute.

Resolved that the Medical Society of the State of New York, realizing that in certain instances the institution of County Health units may be desirable, has no objec-

tion to this portion of the report with the proviso however, that such be inaugurated and controlled by local government as already provided under the present Public Health Law (The vote, Section 11)

The Speaker Dr Goodrich will you second that motion

Dr Goodrich No, I want to speak in opposition to it Motion seconded

The Speaker The motion is made and seconded

Dr Goodrich My reason for presenting this resolution was merely to place before you in brief words what the committee said in its very ample report

I believe that we have had at work on this report a combination of two of the strongest and brainiest Committees that we possess in the State Society

They have met many times and in many places and have considered every angle of this question and I feel that their wisdom is much greater than mine in regard to this and am willing to support their recommendations because they know what the ground looks like They know that in all probability the county health unit will ultimately be passed as a law a mandatory law, that our refusing at this time to consider such a thing would mean that we were disposed of as an opposing element

But if we vote that it be deferred we will probably be considered If the vote is defeated, we will probably not be considered

I believe there is a very good reason why the original resolution should be passed in order to give us time to educate those who need education along this line

Dr Aranow As far as the passing of the law is concerned I don't think there is any fear any law will be passed this year that will make anything mandatory that involves extensive expense

The point I want to bring up here is this Whether we accept Dr Goodrich's resolution or the amendment we are not giving it consideration We are simply passing one resolution or another

I would like to hear arguments for and against concerning argument why we should or why we should not accept the report

The Speaker Is there any further discussion on the substitute motion?

Dr Knickerbocker Conditions vary in different parts of the state That you must concede What may be fine for Westchester may be absolutely impossible for Ontario Until it can be definitely proven that a county health unit is the proper thing to have it should not be made mandatory

We are getting too much mandatory legislation in general We people of the State feel that we are having our constitutional rights constantly undermined and taken from us by mandatory legislation at our expense

For instance, the night before last our County Medical Society took this matter up and deferred action on it because we felt that it was not urgent and that we wanted time to have more study We felt that the two cities in our county the population of the county a mandatory law and they would go on and administer their public health work as they have always as home rule It may cost a little more to do that but we at least have the satisfaction of doing it ourselves and paying the bills

The people in the county outside of these two cities have foisted upon them or would have foisted upon them by this legislation should it pass, an expensive far flung inefficient administration which at the present time is very well taken care of by the local people This proposition is not universally applicable and is against the interests of any county desiring to maintain its own government and home rule

Dr Bonnar The word 'mandatory' is I think obnoxious to every citizen We are a nation of liberals We expect to preserve that relationship to our citizens Liberty liberty is the basis upon which the Govern-

ment of this country is founded, and to have mandatory legislation imposed upon us is highly obnoxious and censurable

Now, to make this mandatory would require legislative procedure.

Dr Goodrich The original resolution says the mandatory feature shall be deferred, and the substitute resolution says that it shall be disapproved, am I correct?

The Speaker You are

Dr Goodrich So no motion is in favor of it under the conditions and the discussion against it is unnecessary

The Speaker I shall have to rule that Dr Bonnar is in order because the Report does say that they believe that it should be mandatory Continue Dr Bonnar

Dr Bonnar What I said before is that mandatory is obnoxious to a liberty-loving people The liberty to do what we want to do, with what we have to do it with is of course fundamental and to take away the foundation is to allow the superstructure to fall

Now, what is wrong in essence my friends can never be made right in substance What is wrong in principle can never be made right in practice And therefore 'mandatory' means to command to obey Home rule is an established virtue in our form of government and mandatory is not established but it is being fostered to gain certain rights certain powers, certain authorities which in their very essence are obnoxious

I hope that this sentiment will prevail because it is the American form of Government from the bottom, from the people, not from some person above, who would control us

The whole object of this procedure is to gain power at the expense of liberty Therefore, I am opposed to it

Dr Davis I think I could point out, the reason for mandatory You have to have a health department now, according to law and to have it in every town village and city in the State

Dr Aranow May I have the floor again?

The Speaker Yes, sir

Dr Aranow I want to speak not so much as a Delegate but as the Chairman of the State Legislative Committee

I am sure the Governor and his Committee meant well when they tried to study out the problem, and while this Society may be opposed to the mandatory provision, I would like to word it in a way that will not hurt the feelings of the men who earnestly made an effort to change or do things for the betterment of the State of New York And if the Speaker would be kind enough to read Dr Goodrich's original motion again, I will try to substitute a motion

The Speaker There is a substitute motion before you now

Dr Aranow I want to see whether I can make a substitute motion that will be more acceptable without hurting the feelings of the people who tried to do this work

The Speaker You want the original motion read for your information is that right?

Dr Aranow Yes, sir

The Speaker The Secretary will please read the resolution of Dr Goodrich

Assistant Secretary Resolved that while recognizing that the principle of the county health unit is ultimately desirable the House of Delegates record its opinion that the mandatory provision for the same be deferred

Dr Aranow I will accept the first part of the motion which is practically an approval of the principle and substitute for the last phrase the words, "that the House of Delegates is opposed to the mandatory provision as being impractical and unnecessary"

The Speaker Inasmuch as that motion does not contain any new matter, I will have to rule that it is out of order The substitute motion is before you Is there any further discussion?

Dr Podvin I would like to call attention to Dr Aranow's first suggestion Those of us particularly

from New York City where legislation of this kind does not prevail, have no intelligent idea upon what to vote, would it be possible to have a member of the Committee or the Chairman of the Committee give us the reasons why the recommendation as read by Dr. Goodrich was presented to this House?

I believe there must be good argument on both sides. We outside of the area affected want to vote intelligently on the subject.

The Speaker: I will be very glad to afford Dr. Farmer the privilege of the floor.

6. STUDY OF REPORT BY THE JOINT COMMITTEE

Dr. Farmer: The Joint Committee held meetings at various places throughout the State so that it might be convenient for every County Medical Society to have its authorized representative appear before the Committee.

Every County Medical Society was given ample notification not only of one meeting but of several meetings, so that if for any reason the representative could not appear at one time he could appear at another time.

Furthermore, the Committee invited the Commissioner of Health of every County Department of Health in the State to appear before it, and interrogated him on every vital point that they could think of. They also asked other persons who might have had some information to come before the Committee and give their information.

The Committee approached this whole subject without any pre-conceived opinion whatsoever. It was only after we had gone through our records and tabulated the advantages and the objections as detailed in our printed report that we made up our minds as to how we should report.

I am quite in agreement with Dr. Knickerbocker that the conditions vary very greatly throughout the State, but I do feel that this opportunity should not pass without criticizing one of the County Societies because of the fact that their representative told us that he did not know what the Governor's Health Commission's report was about, nor did he know for what purpose our Committee was appointed.

Now, where can a Committee get to when they get such help? I think that ought to be brought out here.

We met that situation in other cases. On the other hand, I am sure if you men could have had the privilege which we had of going through the State and finding the energetic, progressive men who took occasion at great time and expense to come before our Committee and report honest and conscientious objections to this plan, or give splendid arguments in favor of it, you would have been inspired with what the medical profession really means as a public health agency.

Now, we found to begin with, that the State Society was on record as favoring County Health Departments. There was no debate about it. The Medical Society of the State of New York, I believe, at its meeting in Niagara Falls approved of the principle of the County Health Department. So that part we have to accept unless we reconsider our previous action.

We felt that the arguments for a County Health Department certainly were progressive ones. We cannot stand still in this matter any more than we can stand still in the matter of the practice of medicine.

Just as the Governor said, new things in medical science and new things in public health administration are coming up every day, and it is simply absurd to think that all things can be accomplished in the old method of procedure. Everybody knows that. We don't need to debate it. The old procedure possibly can be carried on better under the old plan. But there is no question about the fact, in order to go along with the progress of medicine, we do have to change our plans from time to time.

Furthermore, it struck us that the medical profession of the State of New York was a very vital force in any progress that was to be made in public health, and with-

out its complete coordinated cooperation, the public would not receive the benefits that they should receive.

Whenever the Joint Committee advocated a County Health Department, we always meant a properly organized County Health Department. We meant one that was organized within the county, that exemplifies the spirit of home rule better than the present practice of health administration in counties now does, and the sort of a department that would give opportunity for coordinated cooperation on the part of the medical profession of that county to take part in public health work.

Now, we found out that there was a great realization of this fact by the Medical Societies as represented by their delegates to our meetings and furthermore there were several counties that wanted us to approve of the mandatory provision at the present time.

I feel that we cannot stand in absolute opposition to the question of mandatory provision as Dr. Rooney or Dr. Bonnar have indicated. Mandatory laws are very, very common. And in the question of public health, as you know, the rights of the State are quite paramount. That goes back to the time of Disraeli who made the statement that the first duty of the State was the care of the public health.

We don't want to come to the point when it will be necessary for mandatory action. Our Committee feels that there is enough expression throughout the State of realization of the progress that can be made by a county health organization, originating where it should originate, in the medical profession of the State. If ample time is given there will be no need for a mandatory provision, and then, perhaps, if there are a few laggard counties where the governing body of the county is an obstacle to this thing, this Society will want a mandatory provision. It will be the only way of improving conditions. I personally feel that the mandatory provision at the present time is unwise.

I am not trying to cater to any one part of the State Society. I feel that every member of the Committee has approached or arrived at his decision in the same way. We are trying to do the absolutely right thing. To create a mandatory department of health at the present time, in such short time, is unwise, because there will not be the right type of a County Health Department. We must obtain the proper men to act as the commissioners of health, men who are properly trained. We believe that local men should be trained for these positions. We believe there should be local initiative and local control, and I am sure when those things are all done nobody is going to have any objection to a County Health Department.

And then when two or three laggard counties refuse to do this—I don't mean the medical profession, but the political governing body, and if the medical officers in those counties are unable to succeed in having a County Health Department organized, then our State Medical Society is going to reverse itself and demand mandatory provision.

Dr. Flynn: I think we are getting very much excited over a political measure. The creation of a county health position in the Constitution of the State of New York—The Constitution of the State of New York will take care of that. Why should we fuss about a political proposition for the creation of more jobs? That is what it amounts to. And to put the thing down as being approved by the Medical Society and made a mandatory provision as Dr. Rooney has stated is one of the worst precedents that we could establish.

Health Commissioners, Deputy Health Commissioners, and so forth, are nothing more or less than political positions, and it is pretty near time we realized that. This is a taxpayer's argument. It has nothing to do with the medical profession. It is a political measure, and the Medical Society of the State of New York is being used as a goat.

Dr. Podvin: Regardless of the economics of the question I want to call attention to one point which has not

been mentioned; namely, that it is going to facilitate and make easier the administration of state aid to counties from which they will derive benefits that they cannot have without it, and state aid cannot be properly administered unless you have a unit with which to deal.

Dr. Knickerbocker: I rise to a point of information. Does Dr. Farmer know that the representative from the County who gave such an unsatisfactory report was unaware of his appointment within three days prior to his appearance in Syracuse and had no data on which to express any opinion?

Dr. Farmer: We have no criticism of the man himself, but we are criticizing the County Medical Society, which did not see fit to appoint a man who was versed on the subject. The County Medical Societies knew all about this from the June meeting. They had plenty of time to see that their representative was prepared. Letters had been sent to the Secretaries of the County Societies in June or July. It isn't the representative but the County Medical Society which is dilatory.

Dr. Sadler: I wish that it were possible for every man present in this audience, even though he represents his particular county society, to read that set of volumes which represent the stenotype report of the meetings of your Joint Committee, and I feel that if you were conversant with the report of the Governor's Special Health Commission, and also as conversant as you would be with the medical opinion throughout this State, you might consider that the report of your Committee which asked for deferment of the mandatory principle was rather mild.

Now, to speak more particularly on the report of the Committee, the Joint Committee has had in mind only a county health unit which would be efficient, economical and progressive, an organization which through the co-operation of a medical profession should benefit the community and the medical profession.

The Joint Committee does not feel that establishing county boards of health without regard to standards is a progressive step.

I am not going to dilate upon the number of meetings we have held throughout the State, but I am going to, as a member of that Committee, thank the hundreds of men who gave up their time to come and express their opinions before the Committee.

With reference to the question of State control, centralization, I wish you gentlemen would study it. You gentlemen who fear that this means centralization in the State Office Building, I wish you could have heard the testimony delivered with reference to three departments of health now in existence in New York State. There never could be a finer argument on decentralization of power than is expressed in those volumes by the records of three county departments of health in this State, nor could there be a better establishment of the fact that the County Department of Health is actually a home rule principle.

With reference to the fourth county department of health—I think the least said the better, but it would seem to me personally, that it represents what a county department of health should not be.

We gave this matter very careful painstaking consideration. There are five counties in this State, all of them counties of a great deal of importance, that are definitely in favor and so expressed themselves, of the mandatory procedure. There is a fairly considerable number of counties—I cannot give you the exact number—that are working out at the present time a very nice cooperative coordinate arrangement with their various health organizations and governmental forces in their efforts to establish county departments of health under the permissive plan, under the permissive law, and they are getting along very nicely.

Eight counties in the State did not take interest enough in the work of the Joint Committee or in the whole question to even send a representative.

A fairly considerable number of county societies were against the mandatory procedure.

Your Committee was quite impressed by the splendid activities being carried on, especially in two of the county departments of health, Suffolk and Cortland, where, without the use of clinics, with the doctor being made paramount in all health matters, a splendid principle of home rule is being carried on.

Westchester County rather stands by itself, a splendid department of health, the department of health in a very rich county, and as we all know, these departments of health whenever established will vary to a very considerable degree, depending upon the wealth and prosperity of the county.

Your Committee also feels and one reason why it asked for deferment of the mandatory procedure, is because the recently enacted welfare law constitutes a fairly considerable burden upon the taxpayers, and I think we are all cognizant of the fact that it has not been properly and sufficiently digested as yet by the government authorities in the county or by the taxpayers. We were also cognizant of the fact that the old age pension law carries with it a large volume of expense, and that it in turn has not as yet been digested by the taxpayer and the governmental forces. We are also cognizant of the fact that this is a period of great economic depression, and therefore, that the taxpayer should not be additionally burdened.

Furthermore, we have had a very considerable amount of sympathy for the counties that are trying to work this out under the permissive plan, and that are on the verge of going over.

Furthermore, or rather, for some of those reasons, we felt that the mandatory provision should be deferred.

But, gentlemen, how many laws are passed up on this hill each year that are not mandatory? Very few. And at the present time, as was told you by Dr. Davis of Suffolk, you are working under a public health law that is mandatory.

I also feel, that you are spending several thousands of dollars each year for a Public Relations Committee, of which you did me the honor to make me chairman. Of what use is your Public Relations Committee, I ask you, if it is placed in the position of objecting to everything that is progressive or anything like this which is progressive in medicine? It would seem to me that a proper coordination, a proper cooperation between the governmental forces, both state and county, with your Public Relations Committee and your Public Health Committee, and with the lay organizations during this deferred period, should be the proper line of activity, and it would seem to me that you should adopt this principle of deferment of the mandatory principle and instruct your Public Health Committee, as this report says, and perhaps your Public Relations Committee, if you so choose, to work this out from an educational standpoint, not only with the medical men but with the people of the State, and have this brought to a point where it could be put over amicably county by county.

7. PRINCIPLE OF MANDATION

Dr. Rooney: I would like to say a few words in relation to my substitute motion (Sec. 5). All the arguments that I have heard against it have been purely emotional ones leading toward the question, does the House give a vote of confidence to its committee which is perfectly correct.

I have heard the same type of argument in relation to mandatory provisions advanced, the same idea of inevitability, the same idea of joining the progressive group, the same idea of not taking too definite a position. All of these arguments are old ones to me. I have heard them since 1917 in relation to everything that has been advanced in relation to medicine joining a so-called progressive movement.

If the movements are progressive the argument is

valid. The essential question is: Are these movements actually progressive? Or, are they very much like the old Irishman's maxim that "far away cows have long horns?"

I feel that the policy of this Association has been against mandation. Irrespective of all of the arguments that I have heard advanced I am still of that opinion. I have yet to hear a valid financial or professional argument advanced by any of the speakers for their side of the question to merely defer the idea of mandation.

Now, there is a very definite argument that is a public one, and that is the question of finance. In Albany County a careful estimate of what the cost to the taxpayers of this county in the event of the compulsory institution of a county health unit would be, has been that the total expense at a minimum figure would be two and one-half times the present amount expended for all health endeavors that are going on in the county.

I realize that we are not spending perhaps as much money for public health as we should. On the other hand, a serious question to the taxpayer today, in view of our present situation, is that one thing.

Has the State Government the right to impose upon the individual smaller federation a mandatory policy that is going to require them to tax their own taxpayers for benefits that so far as I have been able to see from a reasonable study of this question are perhaps illusion, except in so far as centralization of power is concerned.

I don't pretend to have been all over this State as the Committee has, I have no criticism to offer, I have nothing but commendation for the labors of this Committee. But irrespective of those labors, I feel that the question of mandation is important and that the Society should make up its mind regarding it. It makes a beginning for more and more unnecessary legislation. It is leaving the door partly open. Leave the door partly open; start an institution. Next year amend it a little. When the compulsory health advocates could not agree on total compulsory health they said: We will make it permissive. Then try it out and amend it each year until it is finally complete and compulsory.

I have heard these same arguments for years. I still hold and I still feel that there is a little over a half of the population of this State which will be affected by this law. All of Greater New York will not be affected. New York City is extremely wise. From the very beginning they have created a state within a state. There is no section of this State that has as much local self-government as New York City. There is no state in the Union in which statute after statute passed by the Legislature for the whole state reads "Except for the Greater City of New York." The proposed law relates to all of the State except that of the Greater City. Now, then, New York County has no stake in this thing. Greater New York has no stake in this thing. Kings County has no stake in this thing. But the counties outside of Greater New York have a manifest and a great stake in it. And it is from those representatives that we should hear the main arguments.

I feel that this matter should still remain one of education, as the present law provides permissive action by counties, the refusal to the Commission for centralization in the Health Department by the prescription of qualifications for officers under the proposed act, and when any central department is given the right to prescribe the qualifications for those who will administer the law they hold every official that qualifies under those qualifications in their hands, and I will call your attention to the repeated enactment of the State Society of Sanitary Officers, which is not controlled entirely by the Health Department, but which repeatedly has been in effect controlled by it.

I do not intend to take up your time any further. I hope that this House without offense to anyone, and I intend no offense to anyone, State officials, the Governor, his Welfare Commission, or members of this Committee,

were all in my opinion very largely well-meaning but not entirely guided by the medical profession,—the number on that Commission of actual practicing physicians was very few—I hope that this body will have the courage to stand up for its convictions and not vote for mandation either now or in the future.

Dr. Colic: It is perfectly true as the last speaker said that New York County and the other counties of the Greater City are outside of this consideration, but the physicians resident in the Greater City are citizens of the State of New York, and nothing which is a real issue to the profession is foreign to their interests. I think as the gentleman from Erie said that the idea of superimposed and mandatory government is obnoxious. One of the great reasons is the tremendous tendency of democratic institutions as they have been working out with us to degenerate into government by regulation and this is another indication of the same thing. I think we have got to fight mandation.

Dr. Garen: Is it in order for me to offer a substitute resolution upon the substitute resolution?

The Speaker: State it, and I will rule on it.

Dr. Garen: Resolved that the House of Delegates following consideration of the report of its Joint Committee hereby records itself as opposed to universal compulsory county health units.

Motion seconded.

The Speaker: I think I shall have to rule that at this time that is not in order, because it contains entirely new matter which is not relevant to the question at hand regarding the report of the Special Commission. I think it would be relevant at another time but not just now.

8. CONTROL BY COUNTY MEDICAL SOCIETY

Dr. Cottis: I agree very largely with something that almost every speaker has said, especially agreeing with Dr. Rooney.

This is not a matter for emotionalism, and I think it is not a matter for politics. I think it is a very serious matter that this House should consider this question in the same way that its Joint Committee has, purely from the point of view of the good of the profession and its relations to the public.

I am in a peculiar situation in that I know more than anybody in this room all the circumstances that lead up to the recommendations of the Governor's Commission.

I shall try not to be emotional nor feel emotional.

The first thing that I want to impress upon you is this: That that Commission did not have a great representation from the practicing physicians of this State. Dr. Ross and I were the only ones, I think, who did practice medicine for a living.

And yet that Commission met for a whole year and considered some 15 or 16 divisions of public health, appointed sub-committees, so that we had something like 85 people working on the Commission, of whom about 55 were physicians, before anybody even suggested the idea of a county board of health. The Milbank Foundation, the State Charities Aid, did not propose this thing. It was only after we had our Sub-Committees' reports on the various things that were necessary that it occurred to me that all of these things that had been discussed, the question of the school child, of cancer control, venereal disease control, tuberculosis, nursing, and the thousand and one things that now go into public health, that all of the recommendations made by these Sub-Committees were futile because there was no machinery for carrying any of them out.

Now I will emphasize this; That I or Dr. Ross—I am not sure which, was the one who called the Commission's attention to the need for some machinery by which this thing could be carried out under medical supervision. Make no mistake about that. That did not come from the lay organizations. That came from one of us two medical representatives.

Now, I will tell you why. There has been a good deal

of loose talk about mandation, mandatory rule, rule from higher up. Don't you realize that all through this State today, in every county in the State most of the public health activities are being carried on by county-wide organizations which are essentially lay organizations? We have our Tuberculosis Association in every county who employ nurses and send them around. We have our school nurses. We have our social welfare worker. We have our dependent children organizations. The whole State is being administered from the public health point of view today by voluntary lay organizations in every county, with no supervision of any reputable qualified organization in that county.

Now, the reason that we proposed that what this Society decided two years ago was a good thing, the County Organization of Public Health should be made mandatory, was simply that if it is good the only way you can make it effective is by substituting one mandate for another. At the present time it is mandatory that the medical profession shall have nothing to say about rural boards of health, because the present law provides that every Town Board of Health shall be made up of the town trustees and unless the local doctor wants to run in politics and become a trustee of the town he cannot serve on that Board of Health. The medical profession is not recognized and has nothing to say about it at the present time.

We talk about State supervision. Every health officer in this State today is under the supervision of the State sanitary inspector appointed by Albany without anything from us in regard to approval or disapproval. We propose to take that power away from Albany and bring it home to our little local communities. We propose to take this mandate away from the towns and villages and center it in the county so that a county board of health appointed by our own county Supervisors with at least three men on that Board nominated by the County Medical Society should have the power to tell these lay organizations, these tuberculosis nurses, and school nurses, and all the rest of them what they shall do.

In other words, gentlemen, this is the first time in the history of this State that a law has been proposed which compels the County Medical Society to be recognized in public health matters.

In regard to these two motions, I think the first motion is preferable simply for this reason: On account of the financial situation, on account of the fact that there is opposition in some of the counties in the State, it would be very unwise to have a bill pass the Legislature this year compelling every county to have a county board of health. The Commission itself feels that it would be unwise. We feel that there is not the personnel developed yet to supply local men for this work, and we think every county ought to have its own man ready for the work when the work comes.

Therefore, I am heartily in agreement with the recommendations of this Committee, and I want you to notice that that Committee has studied this thing and that they are not advocates of State medicine. They are some of the old stalwarts in this State Medical Society. They have always worked for organized medicine. Whatever you may say about Dr. Ross and myself, that we have sold out in the hopes of some day riding in a State limousine, you may believe that if you wish, but you can't believe that of this Committee. Therefore, I think we should endorse the recommendations of this Committee to the extent of advocating a local county form of medical government under the control of the County Medical Society, as this would be, and not close the door, as Dr. Rooney would have us do to advocate that this thing be made statewide at some future time. If we have five or six counties voluntarily taking this up next year, and it seems as though we will, if the thing can be demonstrated, as it has been demonstrated in three counties of the State already, as it has been demonstrated in every county of the State of Ohio for twelve years,

the time will come when we are all going to be convinced that this thing is worthwhile. There may be a few counties where the politicians will not allow it to go over. Then we may want to make it mandatory in order to have the rest fall in line. If we adopt the substitute motion we are not only closing the door to that sort of thing, but we are making it very hard for us as a Society perhaps five years from now to demand that what we have by that time recognized as the best form of rural health administration, should be made mandatory. We are not advocating a new mandate. We are advocating a change of a mandate from the little towns and villages where everybody must pay fifteen cents per head for the town health officer, whether he wants to or not, to the County Health Board which should be done now.

I want you to consider whether the first motion does not meet the situation, leaving it indefinite, reaffirming what this Society did two years ago, in saying that this is the logical way to take care of public health in the rural county and deferring indefinitely the mandatory provision until such time as we are convinced that we want it.

9. MANDATION VS. PERMISSION

Dr. Ross: I suppose that I have been in the limelight enough during the last year to claim the privilege of talking to you for a few moments, and if I indicate some personal history in addition to discussing the Governor's Health Commission, it will be because I think that I have a right to do so.

Last year as President of the State Society I undertook to discuss the situation in medicine between public interest in organization for the distribution of medical service, on one hand, and the physician's worry about his economic security, on the other. I made an effort to advance the principles of constructive medical relationships as a means of solving this problem. I found it harder work than if I had just kept to the middle of the stream. It is always harder to advocate something than to talk against something because it is harder to construct than to destroy.

Last year I had to assume a position of leadership. This year I have the freedom of the ranks and the opportunity for debate. It is still a complex position, however, because of the thought and action which followed my year of stewardship.

There is ultimate compensation in everything, though often transient doubt of it. When I read last June in the inaugural address of the President of the American Medical Association the words, "Organized medicine must keep its relationships adjusted to advancing social conditions and go with the force of public opinion;" and when I read on the title page of the *Iowa State Medical Journal* a few weeks ago these words, "Organized medicine should assume leadership in proposals for the solution of medical problems," I found in these two quotations from my own addresses some of the compensation that I had begun to doubt.

The President of the American Medical Association said in his inaugural address, "Too often we are content with scientific advances and leave the application of them to someone else."

Dean Rappleye said in a recent address that the "science of medicine has not been made available to all people."

Recently the President-Elect of the American Medical Association said that he saw ahead of us the need of a "joint partnership between medicine and the public."

These quotations should be sufficient to show the drift of medical thought and should suggest to organized medicine the need of careful consideration of the situation in medicine between the profession and the public.

More than three hundred personal contacts with groups of medical men in the last three years seem to indicate that the problems of medicine are not in its science but in its relationships; not in its knowledge but in the dis-

tribution of its knowledge; not in its practice but how all people can have its benefits.

The opportunity is here today, (with the work of this House of Delegates limited to one subject), to develop a definite policy toward public health.

The time is about here when we should abandon the defensive and take a cooperative attitude with the public and take part in a straight forward fashion in the solution of medical problems. To fail to recognize the rapidly changing public thought toward prevention of disease is inimical to professional welfare. Yet, there is nothing strange about it after all. The public interest in medicine today is exactly like that which individuals have had since the beginning of history. The only difference is that we have mass opinion instead of individual opinion.

Whether the solution of one of medicine's major problems shall be by the State, supported by public opinion, or under the cooperative leadership of medicine depends upon the decision of organized medicine today.

When the Governor of New York State in the discharge of his duty appointed a year and a half ago a Health Commission of fourteen members with authority to select sub-committees, he created a Health Commission of ninety-two people—fifty-two of them physicians and forty representatives of civic interests or experts in medical research. Among the fifty-two physicians are such men as James Ewing, Burton T. Simpson, Francis Carter Wood, Nathan B. Van Etten, William Snow, William H. Post, Edward R. Baldwin, Lawrason Brown, Edwin P. Kolb, Surgeon-General Cummings, Howard Taylor, William H. Park, W. P. Draper, and Professor E. K. Clarke. The Commission represented the medical and allied professions, every department of the State government having health interests, such as, Mental Hygiene, Industrial Hygiene, Social Welfare, Compensation, and others, and the interests of the general public. The purpose was to study the efficiency of public health practice under the present laws.

The problem of county organization for the administration of public health has been open for the profession to take action since 1922. The thinking public has been looking to the medical profession for leadership in this problem. It has been willing to follow organized medicine.

There are only two basic reasons for a county health department. One is that it offers a sufficient area to provide by general taxation the services that a small area cannot afford to have and, second, the opportunity of a full time staff. The principle of county organization is now recognized in the care of tuberculosis, in public health nursing, in the administration of county laboratories, and in all civic functions of government.

The purpose of a county board of health is to organize such a health department in each county as will meet the health needs of that county efficiently and economically. It is the very essence of home rule because it is done by the county. It has been done by the County Medical Society in Cortland and in Suffolk without dictation from anyone or any agency. It is in local interest because it increases the local availability of preventive measures and control of disease and because of new fields of activity, it increases the work of physicians.

I am puzzled about the criticism of the word, "mandatory." Are the opponents of county boards of health giving the right reason for their opposition? Let us see what use has been made of mandatory.

I have made a personal survey of the three hundred major health laws enacted since 1676. All but three of them have been mandatory. The exceptions are the permissive law of 1850, authorization for consolidation of health districts, and the permissive law of 1922.

Since all laws relating to public health except three are mandatory and no new principle is involved in a reorganization of a local health service, upon what essential is objection based?

It is mandatory that certain requirements be made in order to practice medicine and for every hospital training internes or desiring a rating.

It is now mandatory that cities having fifty thousand population have a full time health officer.

Would you and I register yearly and pay two dollars for it if it were not required?

Certain requirements are mandatory for admission to the American College of Surgeons and the American College of Physicians. It would be an empty honor if it were not so.

The Venereal Disease law of 1931 is mandatory as to health officers providing treatment for indigent cases.

It is mandatory for physicians to report to the Educational Department any handicapped child seen professionally.

The expense of treatment of indigent handicapped children is mandatory on state and county.

Since orthopedic service is in addition a highly specialized service and verges on State medicine, should the law be repealed even though there are forty thousand cases in New York State, some of them not having been seen by physicians and others not adequately treated?

Has medicine ever made a study of public health practice as now done by the one thousand health officers in the state under the present mandatory law or made any effort to ascertain the real facts? As far as I can see the Joint Committee is silent on this point.

If public health is satisfactorily practiced now and if it is in accord with preventive knowledge in medicine, then no change in the law should be made even if it was enacted fifty years ago.

Medicine, itself, has endeavored to have mandatory laws established, for example, the changes in the Compensation Law. Of course, it is not true that medicine has endeavored to have laws in its own interest made mandatory and in the interest of the public permissive. Even though this statement has been made, it should be unhesitatingly controverted.

I would like to escape the word, "mandatory," in my life and I suppose all of you would. I paid some money last month for registering my car because I had to. I paid for licensing my dog because the county said that I had to. We all pay a tax of two cents a gallon on the gasoline we use.

If a mandatory health law is objectionable, then the mandatory law creating township boards of health of 1880 should be repealed and the existing mandatory provision that the compensation of local health officers shall be fifteen cents per capita should be repealed, thus restoring the original power of the town boards of health to fix compensation of health officers.

If "mandatory" is an objectionable word, let us be consistent and get rid of that which we are now working under. The creation of town boards of health was made permissive in 1850 and nothing being done about it, was made mandatory in 1880. County boards of health were made permissive in 1922. Shall they be made mandatory in 1932 or shall the profession say, "Wait for the full thirty years," as once was done—just as if things were moving at only the speed of fifty years ago.

If the mandatory law of 1880 enacted to meet conditions of fifty years ago is good enough to meet the changes and conditions of the present day and present medical knowledge, then I challenge you to say so. It would be better to face the issue in this way than to try to look in both directions at the same time. We should have the courage of our convictions. Is it necessary for organized medicine to placate any element on either side for the question? The profession should say, "We endorse county organization and a full time personnel," and give its reasons as the Committee has done, or it should say, "We oppose it on the ground of its mandatory feature, if that is true, and wish to continue the mandatory law of 1880." Either the 1880 law is still

sufficient or a new one is necessary after fifty years of changing conditions.

The processes of medical history point unmistakably to the future necessity of organization of all publicly and privately supported agencies with medicine for the advancement and availability of all measures for health protection. Should the factual study of the Health Commission and the study of the Joint Committee have reached a common conclusion or is it too much to expect a common ground?

The action of this House of Delegates today on organization for public health administration will be the opinion of the organized profession in this State and not of any one county. It should be remembered that public indifference to the prevention of disease is disappearing with changing times. That this is recognized is shown by the published thought of the leaders of medicine. There has been more attention given to the public relations of medicine in this country in the last five years than in all previous time. We have thought that perhaps New York State had carried "public relations" farther than other states but the more I see of other places, the more I doubt it.

There are more people and more physicians puzzled by the apparent attitude of the organized profession toward its public services than I had any conception of previous to this last six months. I believe that it is in the interest of medicine to clear up the doubt as quickly as possible and I hope that it will be done at this meeting. We need a united profession and organized medicine cannot long endure half progressive and half conservative. There must be somewhere a common ground that every member of the profession can stand for.

I know that I have been discussed a good deal this last year. Certain statements have been made and I, therefore, claim the privilege of personal comment.

During my medical life my only occupation has been the practice of medicine. I have never had a salary paying job and never expect to have. I have never been a health officer and never expect to be.

A few years in the practice of medicine suggested to me that I was a part of the social structure of my community and under obligation to share its responsibilities. I have taken part in the work of lay organizations, chiefly, those of health and civic affairs. I have never found any of them supplanting medicine and I have found in all of them potential sources of supplementing medical service.

I have given fifteen hours a month for seventeen years to the work of tuberculosis care in my county. I hesitate to add the words, altruistic service. I was the head of the physician-guided directorate of the County Tuberculosis and Public Health Association for twelve years.

I have found time to serve as the President for two years of a Chamber of Commerce, representing a territory of four million people, and to take part in its civic work pertaining to health, sanitation, recreation, and community building.

But, the thing of which I am really proud was to offer in my County Medical Society in 1926 a resolution asking for a county organization for the administration of public health and to hear it unanimously adopted; then its establishment by the county and its prominent location among the departments of the county government; its steady increase in appropriations of an average of twenty-eight per cent per year, with unanimous approval. The only comment ever made was, "Have you asked for enough to do a good piece of work?"

At the 1931 annual meeting of the County Medical Society, the largest in its history, an active member who had never been identified with the administration of the department offered a resolution which was unanimously adopted. It said:

"The Suffolk County Medical Society hereby reaffirms its opinion first expressed in 1926 that public health administration can only be efficiently done by county or-

ganization, (to replace township part time organization); that after three years of experience the local profession more strongly than ever believes that the efficiency of public health practice is greatly improved by county organization; and that the physicians of the county have found that a County Health Department is an asset to their professional work and an asset to their economic welfare."

Suffolk County has carried on a County Health Department, initiated by a County Medical Society, longer than any other county in the State. It has met the dictum of the Joint Committee's report which says that a county health unit should be efficient, economical, and progressive; an organization which through the cooperation of the medical profession has benefited the community. The profession has formally registered its opinion that the County Health Department in Suffolk County has been to them a professional and economic asset. All this has come about while increasing the public services of medicine. There has never been any dictation from anybody or any agency in the State. There has been no politics, no bureaucracy, no State medicine, no violation of home rule.

A demonstration has been made in Suffolk County covering a period of five years under the coordinated leadership of the medical profession with all other health agencies. It illustrates what I have been talking about from one end of New York State to the other, that medicine should have a program; that it should adjust its conception of relationship to changing conditions and that by increasing the public services of medicine, the profession's economic structure can be improved and the profession more firmly united under progressive leadership.

I believe, therefore, that it is time for the profession to modify its defensive attitude toward proposals of other agencies to increase the availability of medical service on the sole ground that it will interfere with the physician's income and instead to take a cooperative attitude under the technical leadership of medicine. Let us not sidestep this question. The action of this House of Delegates today on organization for public health administration will be the opinion of the organized profession of this State. It will be the opinion of thirteen thousand physicians. This opinion cannot be concealed within ourselves. It will be the opinion that will go out to twelve million people. It will go out to the people who are puzzled by the apparent attitude of the organized profession toward public health. Our decision may be simply a continuation of the defensive as we have always been on the defensive. Recall the introduction of Laennec's stethoscope, vaccination in Boston, Valentine Mott's use of ether, Oliver Wendell Holmes' Essay on Puerperal Fever.

The public has expected the profession to make use of the permissive law for county organization since 1922. There never has been any objection to the requirement of county boards of health except that stimulated into action by our own profession. I stand on this statement. Public opinion formed as the result of public health education has brought about such a thing in the minds of the thinking public that if we do not undertake to improve public health organization, we open the door by our opposition for the State to do it and then, we advance State medicine by our own act. If we advocate reorganization for the administration of public health we retard State medicine. It is moderately absurd to base objection on the word, mandatory.

I believe that the real objection is the fear of the loss of the positions of the present health officers and fears of what may happen. Many physicians are puzzled as well as laymen by the opposition of medicine to county organization for better public health.

Medicine has not discussed the merits of this question today. I have not heard a single opinion as to whether public health is well practiced in New York State and whether it is in line with public need and

modern knowledge. We need a united profession. We should have wisdom enough to know that our influence depends upon being a united profession. Medicine cannot long endure half progressive and half conservative. Medicine has come to "grips" with itself today in an effort to decide its own policy toward county boards of health.

At a time when, as the result of better health education, medicine and its practice are being better understood and appreciated by laymen, we should be ready to abandon optimistic out-pourings of ourselves that medicine is all right in its relationships and have the courage to face the realities of changing times.

10. VOTE ON SUBSTITUTE MOTION AGAINST MANDATION

Dr. Podvin: If it is in order I would like to move the previous question.

Motion seconded.

The Speaker: Are you all ready for the question?

Dr. Ludlum: Can it be restated?

The Speaker: I am going to ask that the Secretary give us the substance of the substitute motion upon which you are now about to vote.

The Assistant Secretary: Resolved that the Medical Society of the State of New York, realizing that in certain instances the institution of county health units may be desirable, has no objection to this portion of the report with the proviso, however, that such be inaugurated and controlled by local government as already provided under the present Public Health Law (Sec. 4).

The Speaker: You are now voting on the substitute motion of Dr. Rooney.

All those in favor of the substitute motion will signify by saying aye; contrary minded, no.

The Chair is in doubt.

All those in favor of the substitute motion will please rise.

The Assistant Secretary announced 41 in favor of the resolution.

The Speaker: All those opposed will please rise.

The Assistant Secretary announced 54 opposed to it.

The Speaker: The substitute motion is lost.

11. VOTE ON ORIGINAL MOTION TO DEFER MANDATION

The House will now revert to the original resolution of Dr. Goodrich which will be read again.

The Assistant Secretary: Resolved that while recognizing that the principle of county health units is ultimately desirable the House of Delegates record its opinion that the mandatory provision for same be deferred.

The Speaker: All in favor signify by rising.

The Assistant Secretary announced 56 in favor of the resolution.

The Speaker: All those opposed will please rise.

The Assistant Secretary announced 32 opposed.

The Speaker: The motion is carried.

The Speaker: Is there anything further to come before the House?

12. VENEREAL DISEASE

Dr. Aranow: To my conception the rest of the report with the exception of the question of venereal disease is not very important and I want to tell you one thing in my experience last year with this Commission. When the bill was introduced and the question of venereal diseases came out, most men objected; and when we brought the objection to the Commission, the thing was immediately eliminated.

I am quite sure that this Commission now is not in favor of that phase and therefore I think there is absolutely no objection. I think if the Commission would give their report now on that feature, they would suggest that the State take care of the diseases of venereal origin, irrespective of ability to pay. Therefore, I move that the rest of the report be rejected.

Dr. Reuling: I rise to a point of order. I believe that the House voted to take up this report section by section, and the section on venereal diseases comes in later. (See Section 22.)

The Speaker: You are correct.

13. UNITING COUNTY HEALTH DISTRICTS

Dr. Goodrich: In column 2, page 31 of the report in the Journal you will find the substance of the Committee's report involved in this second resolution.

Resolved that when two or more counties desire they shall be permitted to unite in forming a health district and that such health district shall be operated by an organization precisely like the county health unit.

I move its adoption.

Motion seconded and carried.

14. EDUCATING COUNTY SOCIETIES

Dr. Ludlum: We have omitted a recommendation which it is our obligation to consider in accord with our previous resolution. This says: "We recommend that the Medical Society of the State of New York request its Public Health Committee to carry on a campaign of education," and so forth, and we must act on that (Journal, page 31).

I move the adoption of this resolution.

Motion seconded and carried.

15. DEPUTIES TO COUNTY HEALTH COMMISSIONERS

Dr. Goodrich: Resolved that the present local health officer should be retained as a deputy under the County Commissioner of Health.

I move the adoption of this resolution. Motion seconded.

The Speaker: All those in favor signify by saying aye; contrary minded, no.

The chair is in doubt.

All those in favor will please rise.

The Assistant Secretary announced 48 in favor.

The Speaker: Just a moment. I want the negative vote on that resolution.

Dr. Goodrich: The word "President" does not refer to any individual. It refers to the president's office, not the individual.

The Speaker: I will ask for another vote.

All those in favor of the resolution will please rise.

All those opposed will please rise.

The motion seems to be and is carried.

16. NOMINATING COUNTY HEALTH OFFICIALS

Dr. Goodrich: In relation to part of the report near the bottom of column 2, page 31 of the Journal—Resolved that at least three members of the County Board of Health should be physicians and that the present law should be so amended as to give the County Medical Society the opportunity to nominate a panel of physicians from which the Board of Supervisors may make appointments of medical members of the County Board of Health.

Dr. Ross: That is already in the permissive law and has been there under Section 3, Paragraph 17, I believe, about ten years.

Dr. Garen: Is it possible to so change that resolution as to make it read "must" instead of "may"? We have heard a good deal of criticism of permissive things today, and praise of compulsory or mandatory things.

Well, let us make it mandatory, if mandatory is such a good thing. Let us make it mandatory that supervisors appoint three physicians instead of simply giving us the wishy-washy permissive thing that they may appoint three physicians on that county board.

The Speaker: Dr. Garen, do you offer an amendment that substitutes the word "must" for the word "may"?

Dr. Garen: Yes sir.

The Speaker: Is that motion seconded?

Dr. Farmer: I would like to speak for the Committee on that.

The Committee would like very much to have it just as Dr. Garen has explained, but legally that is impossible. You can't compel an appointing officer to make appointments. It is impossible legally.

Dr. Goodrich: I was simply going to say that point has been ruled upon as unconstitutional by the Counsel of the State Society.

The Speaker: Dr. Garen your motion is illegal will you withdraw it?

Dr. Garen: I withdraw it.

The Speaker: Are you ready for the previous question?

All in favor signify by saying aye; contrary minded, no. So ordered.

17. COMMUNITIES OF 50,000 POPULATION

Dr. Goodrich: Resolved that only incorporated communities of 50,000 or more of population shall have the option of exclusion from the county health unit.

Dr. Leinert: What is meant by a community? A whole county or city?

The Speaker: I will ask Dr. Goodrich to answer your question.

Dr. Goodrich: I would like to pass it on to the Committee. This is simply a boiling down of the Committee's report.

The Speaker: I will ask Dr. Farmer if he will answer Dr. Leinert's question.

Dr. Farmer: The Committee felt that if a county health department was worthwhile at all it was worthwhile for every citizen, and that in a county say, of 75,000 population that an incorporated community of 35,000 might exclude itself and not have the benefit of full time administration of health personnel while the other 40,000 did. The law as passed now makes it obligatory that every incorporated community of 50,000, every city of 50,000, shall have a full time health officer, and it was to bring this in line with that that we felt that communities under 50,000 and perhaps over 5,000 would be operating under the old way of doing things, which is not as progressive as the newer way under the county health department. Therefore, it should be "incorporated community." That word should be in.

The Speaker: The proponent of the resolution accepts the word "incorporated."

The Speaker: All in favor signify by saying aye; contrary minded, no. So ordered.

18. MONTHLY MEETINGS OF COUNTY BOARDS OF HEALTH

Dr. Goodrich: Resolved that Legislative provision for the specified monthly meetings of the county boards of health shall be made by proper amendment.

The Speaker: All in favor signify by saying aye; contrary minded, no. So ordered.

Motion carried.

19. ADVISORY COMMITTEE OF PHYSICIANS

Dr. Goodrich: Resolved, that an amendment shall be offered providing for an advisory committee to each county health board composed of three to five physicians appointed by the County Medical Society. Said advisory committee shall have the right of attendance with voice but without vote at all meetings of the board.

I move the adoption of the resolution.

Motion seconded.

The Speaker: All in favor signify by saying aye; contrary minded, no. So ordered.

20. DISSOLUTION OF COUNTY BOARDS OF HEALTH

Dr. Goodrich: Resolved that that part of the present law providing for the dissolution of the County Boards of Health be retained.

I move the adoption of the resolution.

Motion seconded.

The Speaker: All in favor signify by saying aye; contrary minded, no. So ordered.

Motion was carried.

21. CITY HEALTH ADMINISTRATION

Dr. Goodrich: I move that we approve of the principle that full-time health officers be provided for cities of fifty thousand or more population.

Motion seconded.

The Speaker: All in favor signify by saying aye; contrary minded, no. So ordered.

Motion was carried.

* 22. VENEREAL DISEASES

Dr. Goodrich: I move the approval of the section on Venereal Diseases. (See the Journal, page 24. See also Sec. 12.)

Motion seconded.

The Speaker: Is there any discussion?

Dr. Rosenthal: I believe it should be made mandatory, that in all the smaller towns venereal diseases should be treated by private physicians and paid for out of public funds.

Dr. Bonnar: I do not think the public should be taxed for the treatment of self-imposed diseases, especially for those who are able to pay. If they are able to pay they should pay directly to the attending physician. If they are indigent people I think then that motion might prevail. Otherwise, personally I cannot agree to it. Every man that is able to pay should pay directly. Those who are indigent and not able to pay might be considered.

The Speaker: You are voting on the adoption of that portion of the report relative to Venereal Diseases.

All in favor signify by saying aye; contrary minded, no. So ordered.

Motion was carried.

23. CANCER

Dr. Goodrich: I move you this body record itself in favor of the recommendation "That educational work either public or professional on the subject of cancer should be done in close cooperation with the Medical Society of the State of New York and the American Society for the Control of Cancer (Journal, page 32)."

Motion seconded.

The Speaker: All in favor signify by saying aye; contrary minded, no. So ordered.

Motion was carried.

24. MATERNITY CARE

Dr. Kosmak: In reference to the section on maternity (Journal, page 32), I offer the following resolution:

Whereas recent and careful studies have shown that improved maternity care is dependent upon a coordination of existing agencies which shall include every stage of this process, and that improvement in the education of physicians, nurses and midwives is the most important factor in providing safe and satisfactory obstetric care, therefore be it

Resolved, that this recognition and the requirements for bringing about a change is of greater consequence and importance than the further organization of county-wide health services for this purpose, and furthermore be it

Resolved, that the function of a health department should be of a supervisory character, by establishing standards for proper obstetric practice and by studies of State-wide conditions, the results of which may be applied to the solution of local problems, rather than by direct provisions for pregnancy care.

I move the adoption of these resolutions. Motion seconded.

The Speaker: All in favor will signify by saying aye; contrary minded, no. So ordered.

Motion was carried.

25. SCHOOL HYGIENE

Dr. Kopetzky: I move the adoption of the section on School Hygiene as printed (Journal, page 33).

Motion seconded.

The Speaker: All in favor signify by saying aye; contrary minded, no. So ordered.

Motion was carried.

26. ORTHOPEDICS

Dr. Goodrich: I move the adoption of the section under the heading of Orthopedics as printed (Journal, page 33).

Motion seconded.

The Speaker: All in favor signify by saying aye; contrary minded, no. So ordered.

Motion carried.

27. PUBLIC HEALTH NURSING

Dr. Goodrich: I move the adoption of the section under the heading of Public Health Nursing (Journal, page 33).

The Speaker: There is no recommendation there. Do you want a motion on it?

28. INDUSTRIAL HYGIENE

Dr. Goodrich: I move the adoption of the section on Industrial Hygiene.

Motion seconded.

The Speaker: All in favor of adopting that portion of the report which deals with Industrial Hygiene manifest it by saying aye; contrary minded, no. So ordered.

Motion carried.

29. PUBLIC HEALTH PERSONNEL, AND HEARINGS ON THE STATE SANITARY CODE

Dr. Kopetzky: I move the adoption of the following section on Public Health Personnel.

"Realizing the importance of authoritative medical representation on the Public Health Council, your Joint Committee recommends the consideration of a plan whereby the State Medical Society shall have the privilege of submitting to the Governor of the State of New York a list of suitable names from which he may make appointments when filling the place of a medical member of the Public Health Council."

Motion seconded.

Dr. Farmer: I would ask Dr. Kopetzky if he would include in that recommendation the recommendation in the paragraph before which the Committee feels is very important, recommending "That provision be made in the Public Health Law to require the Public Health Council to hold open hearing upon proposed regulations for changes in the Sanitary Code before their adoption."

Dr. Rooney: I ask Dr. Farmer if there is embodied in this, the resolution which he proposed at the last meeting of the House of Delegates and which was referred to this one, that no mandatory regulations made by the Public Health Council, be effective for a period of at least six months after their promulgation.

Dr. Farmer: It is not, and I think it would be acceptable.

Dr. Rooney: I move as an amendment that there be embodied in this resolution by Dr. Kopetzky that the Society further recommends that where promulgations of regulations are made by the Public Health Council that they be not effective until a period of at least six months has elapsed followed their promulgation and after hearings have been permitted to the medical profession of the State in relation to those amendments.

Dr. Kopetzky: I will accept the amendment, adding the word "open."

Dr. Groat: I have no vote in this, but I am not sure but what there might arise occasions where we would want a regulation put in effect sooner than six months, even though it were made by the Public Health Council. It seems to me it might be left to their discretion.

Dr. Rooney: I think that the House might well be informed that under the present law regulations of the Public Health Council when promulgated have the force of statutory law. They are given legislative power by the act which made them. I can see, I confess, no necessity for any emergency likely to arise that would require an immediate mandatory provision by the Public Health Council in the way of certain regulations. The Public Health Law today covers their complete control in relation to epidemics.

My own feeling is this, that the difficulty has been largely by the medical profession in this State with the Public Health Council, these star chamber sessions, and the promulgation of resolutions and regulations which become statutory immediately upon promulgation without any opportunity for hearing upon the part of the medical profession and with no medical cooperation and coordination.

I feel that the objection raised by Dr. Groat is not valid and I trust that the House will so hold. The law gives the Public Health Council or gives the Commissioner of Public Health absolute and complete police powers after the term of any epidemic, irrespective of the Public Health Council which is purely advisable. The Commissioner of Public Health can do absolutely anything he chooses at times of emergency. This will not prevent his power but will prevent the Council from enacting star chamber legislation. I hold to my original position.

Dr. Farmer: I agree absolutely with Dr. Rooney. It is entirely correct.

Dr. Groat: I was thinking of some emergency which might arise which, Dr. Rooney has stated the Commissioner of Health has the power to handle. That was the point I wanted to make, I understand it now.

The Speaker: All in favor of the resolution signify by saying aye.

Dr. Rooney: As amended.

The Speaker: As amended, yes. All those opposed, no. So ordered.

30. ADOPTION OF REPORT AS A WHOLE

Dr. Kopetzky: We have adopted the report of the Joint Committee in sections, and now I move you, sir, the adoption of the report as a whole as amended this afternoon.

Motion was seconded. (See Sec. 32.)

31. PRINCIPLE OF STATE AID

Dr. Johnson: I want to draw your attention to the fact that you have overlooked one section, one of the most important. Dr. Farmer very justly and very truly said that the meetings of this Committee were harmonious. I was allowed to sit in and talk, but I was the old woman of the Committee. A woman convinced against her will is of the same opinion still. I went there with a couple of convictions. Somebody said, "Opinions fill no cathedrals. Cathedrals are built by convictions." And that was on the question of principle. That is the question of State aid. That was the one I differed with the Committee on and they allowed me to differ, very kindly. I think that the principle of State aid is one that is worthy of some discussion, and it has not been taken up.

I feel that State aid becomes State subvention and finally a bribe. In the hands of those who have the handing out of State aid. And I would like to hear a few expressions of opinion before we adopt this report as a whole; what the men think about the principle of State aid.

You notice our Committee handled it with gloves. We slid around it. I would like to hear that discussed.

Dr. Kopetzky: I move, sir, that the motion to adopt the report as a whole as amended be tabled so that we can take up the question raised by the President.

Motion seconded.

The Speaker: The motion has been made and seconded.

that the motion for the adoption of the report as a whole as amended be tabled. All in favor signify by saying aye, contrary minded, no. So ordered.

The motion was carried.

The Speaker Is there anything further to come before the House of Delegates?

Dr Rooney The President has raised this question as to what position the Society is to take on State aid.

I do not know that I am in order in discussing it except upon the motion made by Dr Kopetzky as to the adoption of the report as a whole. That having been tabled I fear that unless some motion is made I probably am out of order. So that for the purpose of eliciting discussion I will move, that the House of Delegates of the Medical Society of the State of New York is in favor of State aid.

The motion was seconded.

Dr Heyd In order to command a vote on this without discussion I move that the House of Delegates go into a Committee of the Whole informally with the Chairman occupying the chair. In doing that we can discuss our opinions without moving for a vote on the question until we have consolidated our ideas.

Motion seconded.

The Speaker It has been moved and seconded that the House of Delegates go into a Committee of the Whole for the discussion of this State aid proposition. All in favor signify by saying aye, contrary minded, no. So ordered.

The motion was carried.

The Committee of the Whole of the House of Delegates of the Medical Society of the State of New York was called to order by Dr John A. Card, Speaker of the House of Delegates.

Dr Goodrich As long as the Joint Committee has given us a report saying it feels that it has not the necessary information to make a definite pronouncement on the general subject of State Aid which it believes is a subject of great importance and merits study by medical, economic and legislative authorities I move that it is the opinion of this Committee to be reported to the House of Delegates that action on the question of State aid should be postponed until the regular meeting of the House of Delegates this coming year and that the Joint Committee be asked to bring us further data at that time.

Motion was seconded.

Dr Card You have heard the motion. Is there any further discussion? All in favor signify by saying aye, contrary minded, no. So ordered.

Motion was carried.

Dr Goodrich I move that the meeting of the Committee of the Whole be closed and that we report to the House of Delegates.

Dr Dougherty I move that the Committee rise and that the secretary report its action to the House.

Motion seconded and carried.

The Chairman The meeting of the Committee of the Whole is adjourned.

Following the recess which had been taken to permit

of a meeting of the Committee of the Whole, the Special Session of the House of Delegates was resumed and called to order by the Speaker.

The Speaker The House of Delegates will now come to order and we will listen to the report of the Committee of the Whole.

Dr Goodrich I will ask the Secretary to make the report.

The Assistant Secretary Resolved that action on State aid be postponed until the next meeting of the House of Delegates and that the Joint Committee be asked to bring further information at that time.

Dr Kopetzky I move the adoption of the report of the Committee of the Whole.

Motion seconded.

The Speaker All in favor signify by saying aye, contrary minded, no.

Motion was carried.

32 ADOPTION OF REPORT AS A WHOLE

Dr Kopetzky I move to take from the table the motion to adopt the report of the Joint Committee (Sec 30).

Motion seconded.

The Speaker All in favor of the motion signify by saying aye, contrary minded, no.

Motion to take from the table was carried.

The Speaker The motion before you now is the adoption of the report of the Joint Committee on the Governor's Health Commissions Report as a whole as amended by the House of Delegates today.

The Speaker All in favor signify by saying aye, contrary minded, no. It is so ordered.

Motion was carried.

33 THANKS TO JOINT COMMITTEE

Dr Kopetzky As one of those who helped to make the decision of the House today I want to make a motion thanking the Joint Committee for their arduous labors in behalf of the profession.

Dr Rooney I rise with great pleasure to second the motion of Dr Kopetzky.

I think the Committee deserves the thanks of the House.

The Speaker You have heard the motion. All in favor signify by saying aye, contrary minded, no. It is so ordered.

Motion was carried.

34 ADJOURNMENT

The Secretary I move that we now adjourn.

The Speaker You have heard the motion. All in favor please rise.

Motion carried and the House adjourned at 4:45 P. M.

Respectfully submitted

JOHN A. CARD, Speaker

DANIEL S. DOUGHERTY, Secretary

Dr. H. Goodrich



NEWS NOTES



MEDICAL ECONOMICS CONCERNING INDUSTRIAL MEDICINE

From the Committee on Economics of the Medical Society of the State of New York.

Industrial medicine or medicine in industry is no different than medicine in any other part of our social scheme. We have occasionally defined it as good medicine as applied to industry. The attitude of organized medicine toward this particular phase of medical occupation should, I believe, be one of cooperation, and at the same time one of standardization. There is no doubt but that medicine in industry has come to stay, and that in a large part, industry was forced into its present position by way of the compensation laws, plus the reaction of the profession in general toward the arbitrary rulings in what have been deemed professional matters.

In the State of New York, there is plenty of legislation which covers the subject of the practice of medicine. This legislation takes the very definite stand that corporations cannot practice medicine. There are a few industrial organizations in this state which conduct very extensive and very comprehensive medical services both in sickness and in accident for the benefit of their employees. These several services, as viewed from the standpoint of the average practicing physician, take on the appearance of corporation medicine. Nevertheless, if the subject is scrutinized with care, it will be seen that in all cases the responsibility rests with the doctor who renders the service; and even though he may accept a salary from the corporation within whose confines he is carrying on his medical activities, nevertheless, his dealings are with the patient; and inasmuch as the patient in no wise is allowed to compensate him, the legal opinion is that such endeavors do not constitute the corporation practice of medicine.

We do, however, see a very widespread attempt to avoid this very issue in the employment of a medical supervision exercised in a questionable capacity over the activities of the first-aid worker and the trained nurse. The difficulty in differentiating between medical service to employees of the type which would be concurred in by the medical profession at large, centers about the term "first aid." Where there is strict adherence to the letter of the understanding the application of the meaning "first aid" is a perfectly satisfactory solution. However, the day to day rendering of so-called first-aid medical and surgical treatment constitutes little less than the providing of medical service to the employee of a type which might be rendered by the patient's family physician. I believe that many industries, and more or less

unconsciously, their medical people, are offenders against the meaning of this term. The employee, great or small, who is able to go to the job and yet is hampered more or less by reason of a physical or mental disability, should have recourse to easily obtained adequate and inexpensive medical and surgical care. This the medical profession in most communities is unable to supply; and even if they were, such employees would not resort to them for relief inasmuch as in the majority of instances they would consider their discomforts of a not sufficient degree of magnitude to warrant spending money with their doctor. Furthermore, recourse to company facilities under such conditions, while costing nothing, conserves time and enables them to return to work with a more comfortable ability to perform. Or they are sent home with diagnoses of varying degrees of correctness, to seek the ministrations of their local physicians. Viewed in the light of other industrial expenditures of the nature of operating costs, the fixed charges for such endeavor do not form an item of great importance; and with the application of business methods, organizations are able to provide this kind of service in a degree not possible by the average practicing physician even though he may be advantageously located. The matter of compensation varies and, by and large, we do not consider it adequate viewed in the light of the earning capacities of physicians at large. It is the experience of those of us who have been in the executive medical field over a period of time that the number of medical persons seeking this sort of work as a permanent occupation has been constantly increasing. We will always have the young doctor who is in need of temporary quick financial return and it is quite proper that occupation of this kind be made available for him. At the same time it should be within the realm of organization control that the precepts of the profession be maintained and that medical ideals should not be allowed to lapse during the period of their industrial endeavor. Fortunately, we are past the time when the plant physician and surgeon is viewed by his fellow members of the profession as a medical or surgical incompetent classified under the term "company doctor." By and large, within industry today where executive cooperation has blended with professional skill and ambition, the quality of medical and surgical service while of a first-aid character is a direct contribution not only to the employees but to the family physician as well. A properly conducted

medical department is a feeder for the local physician even though for economic reasons diagnostic investigation of first aid problems are not possible. Likewise there is a direct result to the patient himself which is of more moment than any personal economic accrual to himself is con-

cerned. Organized medicine should recognize that it has a part to play in the maintenance of those qualities which should make for professional dignity as embodied in conduct, economic returns and character of the professional product delivered.

CASSIUS H. WATSON

COMMITTEE ON LEGISLATION

Bulletin No. 1

January 26, 1932

We are happy to state that reports from the field indicate that the county committees are going to be unusually active this year. More chairmen have reported to us upon their organizations and their plans for work than in any previous year at such an early date. Naturally, we are encouraged and we shall do our utmost to make ourselves and the Bureau in Albany as useful as possible. We hope that every chairman will feel free to call upon us for assistance and information at any time. We can expect a busy year. While there are rumors that the legislature is likely to have a short session, there is no doubt but that there will be the usual run of bills in which we shall have a deep interest. The anti-vice bill, an annual visitor, has made a very early appearance this year. Bills now before the legislature are:

Senate Int. No. 11—Dr. Love has reintroduced his "baby mixing" bill. Referred to Codes Committee.

Senate Int. No. 71—Hastings, creating a division of medicinal liquor to which is delegated powers to carry out provisions of proposed law relating to prescriptions, sale and use of intoxicating liquors for medicinal purposes and appropriating \$250,000. Referred to Finance Committee.

Senate Int. No. 79—Mastick, an amendment to the Workmen's Compensation Law by providing compensation for all diseases arising out of employment. Referred to Labor Committee. This bill has been before us on two preceding years.

Senate Int. No. 256—Westall, would amend the Public Health Law by providing each city becoming part of a county health district shall be entitled to one additional representative on county health board all members of the board to be residents of the health district. Referred to Health Committee.

Senate Int. No. 324—Berg, would amend the Education Law by extending to six months after May 17, 1932, time for applying for a license to practice physiotherapy under the act. Referred

to Education Committee. The time for physiotherapists to apply for a license expired by law May 17, 1926. Senator Berg by this bill would open the matter again and permit applications to be made for this period of six months in this year. We know of no reason why another opportunity should be given physiotherapists for registration. The bill has just come to our desk and we have not had an opportunity to inquire of Senator Berg or of the Department of Education as to the necessity for such bill. We shall make further report in our next bulletin.

Senate Int. No. 328—Berg, would amend the Education Law to permit restoration by Regents of a license for the practice of medicine to a person pardoned after conviction of felony, for misconduct in his professional capacity. Referred to the Education Committee. Senator Berg's amendment is to delete from the law the following: "Unless such conviction has been for misconduct in his professional capacity."

Senate Int. No. 331—Gates, would amend the Education Law to permit an optometrist or physician to prescribe for and furnish spectacles, eye glasses or lenses to a person "upon request." Referred to Education Committee.

Assembly Int. No. 116—Doyle, is a modified form of the bill which Mr. Doyle had last year regulating the sale and manufacture of bichloride of mercury and compounds thereof, to prevent accidental poisoning. Referred to the Codes Committee. The bill in its present form was considered by this committee and approved. If you find that there is reason why this is unwise legislation we hope you will give us your opinion at an early date.

Assembly Int. No. 261—Vaughan, the anti-vice bill.

* * *

The osteopaths have had some conferences with the Department of Education regarding what they have been seeking in past years, and Dr. Johnson our president, has been invited by the Department of Education to attend a conference and bring with him such members of our Society as he may name. The conference will be held on Thursday

in New York City. This committee has been invited and it is our understanding that representatives of the osteopathic society will also be present.

The anti-vivisection bill has been introduced in the Assembly only and rests with the Codes Committee, whose personnel follows:

Burton D. Esmond, Chm..Saratoga Co.
James R. Robinson.....Tompkins Co.
Willis H. Sargent.....Onondaga Co.
Edward M. Sheldon.....Lewis Co.
Walter W. Abbott.....Oneida Co.
William J. Lamont.....Orange Co.
Howard W. Dickey.....Erie Co.
Daniel J. O'Mara.....Monroe Co.
Oswald D. Heck.....Schenectady Co.
Meyer Alterman.....New York Co.
Wm. C. McCreery.....Kings Co.
Harry A. Samberg.....Bronx Co.
Saul S. Streit.....New York Co.

Won't each of you whose Assemblyman is a member of this committee immediately get in touch with him and establish your opposition to the advancement of the bill? The Anti-Vivisection

Society does not expect to have the bill enacted into law, but they demand that the committee shall report upon it favorably so that it may be debated on the floor of the Assembly.

* * *

HEARINGS

While writing this bulletin, information has come from the Codes Committee that there will be a hearing on the anti-vivisection bill on Tuesday, February 9th, at 2:00 P.M. The members of the committee report that they are being flooded with letters from persons not only in New York State, but from all over the world, urging favorable consideration of this bill. It is, therefore, important that every chairman take the matter seriously and see that letters in opposition to the bill are sent to the members of the committee and especially should there be letters from prominent men and women who are not physicians.

HARRY ARANOW,
JOHN J. BUETTNER,
MARSHALL CLINTON,
Committee on Legislation.

Letter to County Committees

The following letter has been sent to the Chairmen of the Legislative Committees of County Societies under the date of January, 30, 1932:

Enclosed you will find the following bills and we hope you will read carefully what is written in italics, which is the new part. In some bills, however, where there is an entirely new section added, the new part is not written in italics. Let us have your comments whether you are for or against the matter, and your replies particularly if you are in opposition. You may say that we know what your reaction would be, but, nevertheless, you would be surprised to know how many times we get valuable suggestions from men who state to us the very things we had in our mind:

Senate Int. No. 256-Westall, to amend the public health law in relation to the members constituting the county board of health. In Westchester County, from which Senator Westall comes, there is a county health unit operating and about a year ago the City of White Plains decided to come into the unit, and it understood that the health officer of the city would be made a member of the county board of health and, accordingly, the county health department appointed a deputy to the commissioner, to be in charge of health activities in White Plains. When the time came for election to the county board of health, the supervisors chose to return the physician who was a member of the board,

and not to replace him with the retired health officer of White Plains. This bill is to meet a situation of that kind and seems to us to be a fair proposition. We expect to ask Senator Westall to amend this bill in line 7 on page 2, changing the word "two" to "three." This will be in accordance with action taken by the House of Delegates at the recent special meeting and also in accordance with the recommendations of the Governor's Special Health Commission.

Senate Int. No. 324-Berg, to amend the education law, in relation to licenses to practice physiotherapy. Mr. Berg says that there are six or eight physiotherapists who, although entitled to do so, failed to make application for license in 1926, and he would like to give them an opportunity. We do not think it wise to reopen the matter which was closed six years ago. We believe that all the persons who were entitled to licensure at that time had ample opportunity to make application for such license if they desired it. We believe that the Department of Education supports us in this opinion.

Senate Int. No. 328-Berg, to amend the education law in relation to restoration of licenses for the practice of medicine to persons pardoned after conviction for a felony. This needs no explanation; you can understand it as well as we. Give us your opinion.

Senate Int. No. 331-Gates, to amend the education law in relation to peddling of spectacles, eyeglasses or lenses by optometrists or physicians. You will note that the

amendment here is very small, it simply introduces the phrase "upon request" permitting a physician or optometrist to prescribe and furnish spectacles to any person upon request. Give us your opinion as to the value of this amendment.

Assembly Int No 261, is Mr Vaughan's annual "dog bill," identical with the bill of last year.

In order that our records may be correct and complete will you please let us know if

you are not the chairman of the County Society Legislative Committee or the proper person to receive bills in your county. We regret that we cannot regularly send all of the bills to every person who makes requisition, but we do want to send them to the chairman of the County Society committee and we frequently can send several bills to others, upon their requisition.

HARRY ARANOW, *Chairman*

PRIZE ESSAYS

The Committee on Prize Essays desires to call the attention of the medical profession to the following prizes offered through the Medical Society of the State of New York.

The Merritt H. Cash Prize. This prize was established by Dr. Merritt H. Cash in 1863 and is given to the author of the best original essay on a subject designated by the Committee on Prize Essays. Competition is limited to the members of the Medical Society of the State of New York, who at the time of entering the competition are residents of New York State.

The essay shall be typewritten or printed and the only means of identification of the author shall be a motto or other device. It shall be accompanied by a sealed envelope having on the outside the same motto or device and containing the name and address of the writer.

An idea of the type of subject upon which competitors may write their essays is indicated by the list of previous awards of this prize which is as follows:

- 1864—A. N. Bell, Brooklyn "How Complete Is the Protection of Vaccination, and What Are the Dangers of Communicating Other Diseases with the Vaccina?"
- 1913—William Kirk, Jr., Troy "Brown Sequard Paralysis: Review of Subject with Summation of Cases and Report of Case Resulting from Stab Wound of Autopsy."
- 1920—Hernan B. Sheffield, New York City "Present Status of Poliomyelitis."
- 1923—Arthur M. Wright and Edward M. Livingston, New York City "Eucocytosis of Internal Hemorrhage."

The Lucien Howe Prize. In 1906, the late Dr. Lucien Howe, then residing in Buffalo, presented the State Medical Society with a prize fund, the interest of which is to be used by the Society for the presentation of a suitable medal for the best original contribution to our knowledge of some branch of surgery, preferably ophthalmology. The author need not be a member

of the Medical Society of the State of New York.

The method of presenting the communication and of awarding the prize shall be substantially the same as that followed in regard to prize essays. That is to say, the communication shall be typewritten or printed, and the only means of identification of the author shall be a motto or other device. It shall be accompanied by a sealed envelope having on the outside the same motto or device, and containing the name and address of the writer. If, in any year, the committee does not deem any essay or communication which is offered worthy of the prize, then it shall not be awarded, and the interest for that year shall be added to the principal.

In the past this prize has been awarded as follows:

- 1914—Mark J. Schoenberg, New York "Contribution to the Experimental Study of Ocular Anaphylaxis."
- 1918—Israel S. Wechsler, New York City "Ophthalmic Changes in Tabes and Paresis—Pathology and Diagnosis with Reference to Cerebrospinal Syphilis."
- 1922—Arthur J. Bedell, Albany "Some Observations with the Gullstrand Slit Lamp on the Lens Including Cataract."
- 1924—Arthur J. Bedell, Albany "Study of the Vitreous."
- 1927—Arthur J. Bedell, Albany "Photographs of the Fundus Oculi, Normal and Pathological Conditions."

Prize essays must be submitted before May 9th. They must be directed to the Committee on Prize Essays, Medical Society of the State of New York, 2 East 103rd St., New York City.

If any identification marks other than the ones prescribed are attached to the essay, it will be debarred from the competitions.

E. MACD. STANTON, *Chairman*,
ALBERT C. SNELL
EDGAR A. VANDERVEER
Committee on Prize Essays

PUBLIC RELATIONS COUNTY SURVEY NUMBER 20—WESTCHESTER

The Public Relations Committee of the Westchester County Medical Society desires to make the following report:

Following its appointment at the commencement of the year, the committee organized and considered various outlets for its activities. After due consideration we decided that there were a number of conditions existing in the practice of medicine in this county which might be improved, and we felt that if we could develop in some one community some steps tending to improve these conditions, the remaining communities would follow suit. Among the conditions in which we felt there was opportunity for our work were:

(1) In the majority of communities there is no way by which any individual desiring a physician in an emergency and being unable to secure his family physician can secure the services of a doctor without indiscriminate telephoning to all the doctors in his community. Even if the latter procedure is adopted, it is often impossible to secure help. The committee felt that it was desirable to make some arrangement with the hospital in each community whereby this institution would agree to utilize its forces in securing some physician practicing in the neighborhood of the patient for such an emergency. With this arrangement established, the public should be advised of the fact. In every way possible everyone should be informed, "In case of any emergency where you are unable to secure the services of your family physician, telephone the hospital." As a result of our work, in the annual hospital statement 15,000 residents of New Rochelle and its vicinity have been advised of the above-named procedure, and through the medium of the press the general public is to be later informed. It is too early as yet to give any definite results of this plan, but we believe it will be of service.

(2) We know that in the majority of hospitals in the county no social service worker is employed. We feel that our dispensaries are being used by many patients who are able to pay for the services of a doctor, and we feel that a more careful investigation of the financial condition of these patients is advisable. The chairman of the committee appeared before the Board of Governors of the New Rochelle Hospital, stated the situation and asked for the employment of such a worker. This request was granted and the proper person was employed. Unfortunately, after working for a short time, this party was taken ill, was incapacitated for a number of weeks, and finally obliged to resign. A second party, however, was employed a few weeks ago and is now developing our ideals. As a result of her investigation, the dispensary patients appear to be classified into three divisions: (a) those who are

unable to pay anything more than the small minimum charge of 25c or less; (b) those who are able to pay more than 25c but not able to pay the usual fee for a visit to a doctor's office; (c) those who are able to pay the usual fee of a physician. We have found many cases who belong to Group C, and these patients are unhesitatingly refused treatment in the clinic after their immediate wants have been attended to. We have found that Group B included many cases and a plan is being developed whereby these patients can pay a fee that is in proportion to their means, the proceeds going to the attending physician.

This social service worker is now busy in many directions; she is investigating the financial condition of many dispensary cases; she is doing the same for some ward cases; she is following up ward cases after they have been discharged from the hospital, and she is doing the same work for dispensary cases where necessary. We feel that her work will be invaluable to the community, to the hospital and the doctors; we feel that the money she will collect for the institution will more than pay her expenses; we feel that in all probability additional help will have to be given her as this work progresses. We hope that the activities of this department of the hospital can be extended so that it can be employed by the staff of the institution to investigate and report to the doctors on cases desiring special treatment but who claim to be unable to pay the usual fee.

We have addressed a meeting of the hospital superintendents of the county, explaining to them the ideals of this committee, telling them of the plan that we hope to develop in the New Rochelle Hospital, asking them to observe its results, and, if they find these results desirable, requesting them to follow suit. At present we definitely know, by requests of neighboring hospitals, that they also realize the needs of this work and are watching our progress.

The committee realizes that its work has extended only over a period of a few months, but it feels that it has made an earnest effort along the lines indicated and sincerely hopes that the work it has started will be continued by the coming committee. We feel that it represents a very important condition existing in the practice of medicine at present. We believe that the hospital should be the medical center for each community, but we do not believe that the hospital should practice medicine. The doctor is entitled to his fee, the public should receive medical service, but just as the medical profession should not be imposed upon by those able to pay for medical care, neither should the cost of this medical care be a financial tragedy to the patient.

C. C. GUION, *Chairman.*

PUBLIC RELATIONS COUNTY SURVEY NUMBER 21—YATES

The Committee on Public Relations of Yates County Medical Society, having made a survey of the welfare and public health activities in the County, wishes to report to the society at this time.

Yates County, which has been known as Little Yates for some time, is located in the midst of the Finger Lakes Region, and is one of the smaller counties in the state, being only about eighteen miles long and thirteen miles wide. The population is 16,848, of which 5,329 live in the county seat of Penn Yan. There are only nine townships in the county and four incorporated villages, namely, Rushville, Dundee, Dresden and Penn Yan.

One of the oldest public welfare organizations is the Tuberculosis and Public Health Committee, which was organized on the 24th of May, 1921, with Dr. A. T. Halstead of Rushville as first president. This committee derives its entire support from the county's share in the sale of Christmas seals and consists of one supervisor from each township and the officers. Most of their work is carried on through the county nurses, but they do some relief work aside from this. The present medical member of this committee is Dr. J. P. MacDowell of Dundee.

We are not able to learn just when the Yates County Committee of the American Red Cross was organized but it has 23 members and is self-perpetuating. Last year, it spent \$300 through the public health nurses of the county, \$200 for food for needy families, and \$100 for courses in life saving for boys and girls. This year it has appropriated \$300 for eye, and adenoid and tonsil work.

The local Committee for Cancer Control has been organized for several years. Its chairman is always the chairman of the cancer committee of this society. There has been little activity for the last two years because of the re-organization of the state committee. But there is at the present time a movement on for a public meeting to be held in the near future, at which we hope to have the president and executive secretary of the State Society, who have promised to show several reels of moving pictures, issued by the state committee for public instruction.

For a few years there was a milk commission in Yates County of which the chairman and two members were elected from this society; but as the production of certified milk has been discontinued, the commission is now inactive.

During the past year, the Parent-Teachers Association has been addressed by several local doctors on different health problems.

Yates County has two full-time public health nurses, who reported the following activities in 1931:

Medical cases visited	45
Infants	395
Tuberculous positive	70
Tuberculous suspects	60
Pre-school examinations	1,107
Chest clinics, state doctor	4
Orthopaedic clinics, state doctor	2
Rural consultations—local physicians.	15
Regular consultations	37
Vaccination clinics	6
Toxin anti-toxin clinics	3

The Yates County Laboratory was established in 1925 under a committee of the County Supervisors with three medical members. The laboratory is located in the Yates County Soldiers and Sailors Memorial Hospital, and during the past year it has handled about 5,000 specimens, about one-third of which have been public health cases and two-thirds hospital cases. The biopsy specimens are sent to the State Cancer Laboratory, and the serological ones to Albany. There have been between 300 and 400 specimens of milk, and 100 of water examined during the year. The Laboratory is under the supervision of the Director of the Ontario County Laboratories with a technician, recommended by the State Health Department, in charge.

There were only three toxin anti-toxin clinics held during the year 1931 because as far as we can learn, there was little need of them in most of the townships. One township reported that all but two families had been taken care of up to January 1, 1931, and one township reported 80 children to be immunized this year, there having been no clinics for lack of funds during 1931. The county nurses estimate that more than 80 per cent of all children between six months and ten years in the county have been immunized.

In 1922, the Cripple Children's Committee of the local Rotary Club was organized, and joined the State Association of such committees. They made a survey of the county and found 150 crippled children and grownups, some of which were classified later as adenoid and tonsil cases. Many of the throat cases were operated on with the assistance of the committee. Its work has been less each year until 1931, when it was looking after five cases of post-polio conditions. Each week they have been taken to Geneva where they have the advantage of the Y.M.C.A. swimming pool, and have been under the supervision of state orthopaedic nurses.

The County Medical Society has sponsored the rural pre-school examination since 1925, working in conjunction with the county nurses and children's agent, together with the District Health Officer. Formerly, there were at least two clin-

ics held in each township each year, but because of lack of funds, only one is now held. Some of the townships having more children than can be handled at one clinic, are assigned two clinics on the same day, which accounts for the fifteen held last year as given in the nurses' report.

Yates County has one hospital with 38 beds, which is located in Penn Yan, the county seat. While it is known as Yates County Soldiers and Sailors Memorial Hospital, it was built by public subscriptions and is self-supporting, except for a few legacies, the income from which help in the overhead. This hospital has been classified in class A by the American College of Surgeons for the last several years. The staff of this hospital consists of all the local doctors qualified to practice residing in the county.

According to the 1931 state directory, Yates County now has 22 licensed physicians, all of whom are members of the county society, except

three who were former members, but are now retired from active practice.

On December 21, 1926, this society adopted a fee bill which was sent to all insurance companies carrying compensation risks in the county, and as far as the committee can learn, they have all accepted these fees in settlement of all claims.

This fee bill has also been of great help since the enforcement of the new State Welfare Law in coming to terms with the County Commissioner of Public Welfare.

While, with few exceptions, the county society has not been consulted in the welfare work carried on in the county, in most cases, there are members of this society in the different organizations and they are active in mapping out their policies. In one case, your committee was informed that our only representative was a local optometrist.

G. H. LEADER, *Chairman.*

TRI-STATE MEDICAL CONFERENCE

The Nineteenth Tri-State Medical Conference met in the Hotel Chelsea, Atlantic City, N. J., on December 5, 1931, with Dr. John F. Hagerty of Newark, President of the Medical Society of New Jersey, presiding.

Those present from New York State were Dr. Thomas J. Harris, of New York City, who read a paper; Drs. Wm. H. Ross, J. E. Sadlier, and J. S. Lawrence.

The program consisted of three papers. The first was entitled "Looking at Both Sides of Our Public Relations," and was given by Dr. William Rowland Davies, of Scranton, Pa. Dr. Davies discussed economics, nursing and cults at considerable length, and his paper was discussed by nearly every physician present.

The second paper was entitled "Specialists and Specialism,—A Plan for Proper Control by State Societies," by Dr. Edward G. Waters, of Jersey City, N. J. Dr. Waters outlined a plan which

had already been presented before the New Jersey State Society and which was published in the Journal of the Medical Society of New Jersey of June, 1931; and in turn was abstracted in the NEW YORK STATE JOURNAL OF MEDICINE of July 15, 1931, page 928. This article indicates the trend of the paper.

The third paper was by Dr. Thomas J. Harris, of New York City, who discussed the attitude of the American College of Surgeons, the American College of Physicians, the American Society of Otolaryngologists, the American Gynecological Society and the Academy of Medicine to the certification of specialists and felt that progress was being made towards a solution of the problem, although he did not state what the probable outcome would be.

The next meeting of the Tri-State Conference will be held in New York in February.

CERTIFICATION OF SPECIALISTS IN OBSTETRICS AND GYNECOLOGY

The increasing amount of consideration given to the subject, "The Certification of Specialists," makes the announcement of the American Board of Obstetrics and Gynecology of interest to every physician. New York physicians will have an additional interest in the following announcement because the president of the board is Dr. Walter F. Dannreuther of New York City:

"The next written examination of the American Board of Obstetrics and Gynecology will be

held in nineteen different cities of the United States and Canada at 2 P.M. on Saturday, March 26, 1932. The general, oral and clinical examination will be held in New Orleans on Tuesday, May 10, 1932, immediately preceding the meeting of the American Medical Association. Reduced railroad fares will be available. For detailed information and application blanks apply to the Secretary, Dr. Paul Titus, 1015 Highland Building, Pittsburgh, Pennsylvania."

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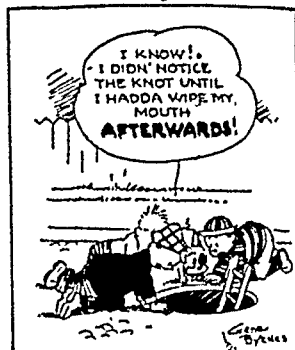
THE DAILY PRESS



Reg'lar Fellers

Not Easy to Remember

By Gene Byrnes



N. Y. Herald Tribune, January 4, 1932

MODERN ASTROLOGY

Astrology still flourishes in New York City and its practice is so profitable that a dealer in toys is suing a leading practitioner of the ancient mystery for \$25,000.00 for the alleged pirating of a chart showing the days which are favorable and those which are unfavorable. The makers issued the chart as a mere toy or game, but it was republished by an astrologer as a genuine article; and hence the law suit.

The New York *Herald Tribune* of January 8, describing the suit, commented as follows:

"In recent years, she has obtained, with her corps of assistant astrologers, almost a monopoly on the casting of horoscopes, her chief competitors having been wiped out by the general skepticism towards the science following the failure of any astrologer to make a public prediction of the World War or of the depression. She has made no public prediction of any kind since 1923 when,

on arriving here from Europe, she announced that President Harding and his Administrations were under happy auspices a few weeks before President Harding died and his Administration was involved in fearful scandals.

She tells in one of her books how she chose her husband through astrology. The Jordan horoscope proved that he was the perfect mate for her. She also has told how she selected her pet Pekinese through astrology. She would not buy even a goldfish without casting its horoscope. In an autobiographical volume she stated that she was wooed years ago by a British nobleman and was on the point of accepting him and settling down in his beautiful palazzo in Rome, but she was forced to reject him because on casting his horoscope she found that the nobleman's moon indicated that, if she married him, she would die early or prove unfaithful."

SPECIALISM IN MEDICINE

The inauguration of Dr. Frank L. Babbott, Jr., as president of the Long Island College of Medicine (the former Long Island College Hospital) in Brooklyn, on January 14, was described by the New York *Herald Tribune* of January 15. The *Herald Tribune* described the address by Dr. J. R. Angell, President of Yale University as follows:

"Dr. Angell criticized the specialization which concentrates too many physicians and surgeons in the metropolitan areas and leaves the less populated districts without adequate medical service. He pointed out that it was an ability to see the patient as an entity, coupled with a thorough

knowledge of his personal history, environment and background, that made the old-time country doctor a success.

"In these days of scientific knowledge of bacteria, surgery and the like, my statement may sound like a recrudescence of allegiance to the medicine man and faith healer," he said; "but at the least of the remedies carried by the country doctor of old was the confidence he inspired. Sooner or later modern medicine must recognize the intrinsic significance of these emotional and psychic factors in human health."

"Dr. Babbott in his installation speech said

BOOKS RECEIVED



Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits, or in the interests of our readers.

MIDWINTER. By Ten Teachers, under the direction of CONYNS BERKELEY, M.A., M.D. Edited by CONYNS BERKELEY, J. S. FAIRBAIRN and CLIFFORD WHITE. Fourth edition. Octavo of 740 pages, illustrated. New York, William Wood & Company, 1931. Cloth, \$7.50.

MANUAL FOR THE JEWISH DIABETIC. By WILLIAM S. COLLENS, B.S., M.D. Octavo of 138 pages, illustrated. New York, Bloch Publishing Company, 1931. Cloth, \$2.00.

ALLERGY AND APPLIED IMMUNOLOGY. A Handbook for Physician and Patient, on Asthma, Hay Fever, Urticaria, Eczema, Migraine and Kindred Manifestations of Allergy. By WARREN T. VAUGHAN, M.D. Octavo of 359 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, \$4.50.

LIVING THE LIVER DIET. By ELMER A. MINER, M.D. 12mo. of 106 pages. St. Louis, The C. V. Mosby Company, 1931. Cloth, \$1.50.

CONQUERING ARTHRITIS. By H. M. MARGOLIS, M.D. Octavo of 192 pages, illustrated. New York, The Macmillan Company, 1931. Cloth, \$2.00.

HEALTH CENTER DISTRICTS. New York City. Handbook. Statistical Reference data. Compiled by GODIAS J. DROLET and MARCQUERITE P. POTTER. Prepared under direction of ROBERT D. WIDEMER, Director, Committee on Neighborhood Health Development, Department of Health, City of New York. Second edition. Quarto of 59 pages, illustrated. (New York, Department of Health), 1931. Paper, \$1.00.

CERTIFIED MILK CONFERENCES held in 1931. Annual Conference American Association of Medical Milk Commissioners, Inc., and Certified Milk Producers Association of America, Inc., Philadelphia, June 8-9, 1931. Octavo of 334 pages. Cloth.

THE NOTE-BOOK OF EDWARD JENNER. In possession of the Royal College of Physicians of London. With an introduction on Jenner's Work as a Naturalist by F. DAWNEY DREWITT, M.D., F.R.C.P. Octavo of 49 pages, illustrated. New York, Oxford University Press, 1931. Boards, \$1.25.

MEDICAL CLINICS OF NORTH AMERICA. Vol. 15, No. 4, January, 1932. (Boston Number). Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues). Cloth, \$16.00 net; paper, \$12.00 net.

A RAPIOLOGICAL STUDY OF THE PARA-NASAL SINUSES AND MASTOIDS. By ARTHUR GRANGER, K.C.B., M.D. & FELIGER, 1932. Cloth, \$5.50.

LECTURES AND THE ELEMENTS OF LIGHT THERAPY. By RICHARD KOVACS, M.D. Octavo of 528 pages.

PHYSIANS' MANUAL OF BIRTH CONTROL. By ANTON-NEETE F. KONIKOW, M.D. Octavo of 245 pages. New York, Buchholz Publishing Company, 1931. Cloth, \$4.00.

THE PRACTICAL MEDICINE SERIES. Comprising Eight Volumes on the Year's Progress in Medicine and Surgery. Series 1931. Chicago, The Year Book Publishers, 1931. General Medicine. Edited by GEORGE H. WEAVER, M.D., and others. 12mo. of 814 pages, illustrated. Cloth, \$3.00.

AIDS TO PHYSIOLOGY. By HENRY DREYER, Ph.D., M.R.C.S. 16mo. of 255 pages, illustrated. New York, William Wood & Company, 1931. Cloth, \$1.50 (Students Aids Series).

THE USE OF THE SELF. Its Conscious Direction in Relation to Diagnosis, Functioning and the Control of Reaction. By F. MARTINUS ALEXANDER. 12mo. of 143 pages. New York, E. P. Dutton and Co., Inc., 1932. Cloth.

ILLUSTRATED PRIMER ON FRACTURES. Prepared by the Cooperative Committee on Fractures. Under Auspices of Section on Surgery, General and Abdominal and Section on Orthopedic Surgery in cooperation with Medical Association. Second edition, revised and re-edited. Quarto of 63 pages, illustrated. Chicago, American Medical Association, 1931. Cloth, \$1.00.

IS LOOSE MILK A HEALTH HAZARD? The Report of the Commissioner of Health of the City of New York, to study the Public Health Aspects of the Sale of Loose Milk in New York City and to make Recommendations. Edited by EDWARD F. BROWN and Professor LELAND SPENCER. Octavo of 254 pages, illustrated. New York, Milk Commission, Department of Health, 1931.

THE FUNDS OF THE HUMAN EYE. An illustrated atlas for the physician. By HARVEST CLARKE, C.V.O., M.D. Octavo of 51 plates. New York, Oxford University Press, 1931. Cloth, 18/.

A TEXT-BOOK OF MEDICINE FOR NURSES. By E. NOBLE CHAMBERLAIN, M.D., M.Sc. Octavo of 439 pages, illustrated. New York, Oxford University Press, 1931. Cloth. (Oxford Medical Publications.)

CLINICAL ROENTGEN PATHOLOGY OF TUBERCULOUS LESIONS. By WILLIAM H. MEYER, M.D. Octavo of 272 pages, illustrated. Philadelphia, Lea & Febiger, 1932. Cloth, \$6.00.



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A DOCTOR OF THE 1870's AND '80's. By WILLIAM ALLEN PUSEY. Octavo of 153 pages, illustrated. Springfield, Charles C. Thomas, 1932. Cloth, \$3.00.

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N. Y. State J. M.
February 15, 1932

Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits, or in the interests of our readers.

- MIDWINTER.** By Ten Teachers, under the direction of COVINS BRKELEY, M.A., M.D. Edited by COVINS BRKELEY, J. S. FAIRBAIRN and CLIFFORD WHITE. Fourth edition. Octavo of 740 pages, illustrated. New York, William Wood & Company, 1931. Cloth, \$7.50.
- MANUAL FOR THE JEWISH DIABETIC.** By WILLIAM S. COLTENS, B.S., M.D. Octavo of 138 pages, illustrated. New York, Bloch Publishing Company, 1931. Cloth, \$2.00.
- ALLERGY AND APPLIED IMMUNOLOGY.** A Handbook for Physician and Patient, on Asthma, Hay Fever, Urticaria, Eczema, Migraine and Kindred Manifestations of Allergy. By WARREN T. VAUGHAN, M.D. Octavo of 359 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, \$4.50.
- LIVING THE LIVER DIET.** By ELMER A. MINER, M.D. 12mo. of 106 pages. St. Louis, The C. V. Mosby Company, 1931. Cloth, \$1.50.
- CONQUERING ARTHRITIS.** By H. M. MARGOLIS, M.D. Octavo of 192 pages, illustrated. New York, The Macmillan Company, 1931. Cloth, \$2.00.
- HEALTH CENTER DISTRICTS.** New York City. Handbook. Statistical Reference data. Compiled by GODIAS J. DROLET and MARCURETTE P. POTTER. Prepared under direction of KENNETH D. WIDEMER, Director, Committee on Neighborhood Health Development, Department of Health, City of New York. Second edition. Quarto of 59 pages, illustrated. (New York, Department of Health), 1931. Paper, \$1.00.
- CERTIFIED MILK CONFERENCES** held in 1931. Annual Conference American Association of Medical Milk Commissioners, Inc., and Certified Milk Producers' Association of America, Inc., Philadelphia, June 8-9, 1931. Octavo of 334 pages. Cloth.
- THE NOTE-BOOK OF EDWARD JENNER.** In possession of the Royal College of Physicians of London. With an Introduction on Jenner's Work as a Naturalist by F. DAWTREY DREWITT, M.D., F.R.C.P. Octavo of 49 pages, illustrated. New York, Oxford University Press, 1931. Boards, \$1.25.
- MEDICAL CLINICS OF NORTH AMERICA.** Vol. 15, No. 4, January, 1932. (Boston Number). Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues). Cloth, \$16.00 net; paper, \$12.00 net.
- A RADIOLOGICAL STUDY OF THE PARA-NASAL SINUSES AND MASTOIDS.** By ARTHUR GRANGER, K.C.B., M.D. Octavo of 186 pages, illustrated. Philadelphia, Lea & Febiger, 1932. Cloth, \$5.50.
- ELECTROTHERAPY AND THE ELEMENTS OF LIGHT THERAPY.** By RICHARD KOVACS, M.D. Octavo of 528 pages, illustrated. Philadelphia, Lea & Febiger, 1932. Cloth, \$6.00.
- CLINICAL ROENTGEN PATHOLOGY OF THORACIC LESIONS.** By WILLIAM H. MEYER, M.D. Octavo of 272 pages, illustrated. Philadelphia, Lea & Febiger, 1932. Cloth, \$6.00.
- A TEXT-BOOK OF MEDICINE FOR NURSES.** By E. NOBLE CHAMBERLAIN, M.D., M.Sc. Octavo of 439 pages, illustrated. New York, Oxford University Press, 1931. Cloth. (Oxford Medical Publications.)
- THE FUNDS OF THE HUMAN EYE.** An illustrated atlas for the physician. By ERNEST CLARKE, C.V.O., M.D. Octavo of 51 plates. New York, Oxford University Press, 1931. Cloth, 18/. (Oxford Medical Publications.)
- IS LOOSE MILK A HEALTH HAZARD? The Report of the Commissioner of Health of the City of New York, to study the Public Health Aspects of the Sale of Loose Milk in New York City and to make Recommendations.** Edited by EDWARD F. BROWN and Professor LELAND SPENCER. Octavo of 254 pages, illustrated. New York, Milk Commission, Department of Health, 1931.
- ILLUSTRATED PRIMER ON FRACTURES.** Prepared by the Cooperative Committee on Fractures. Under Auspices of Section on Surgery, General and Abdominal and Section on Orthopedic Surgery in cooperation with Medical Association. Second edition, revised and re-edited. Quarto of 63 pages, illustrated. Chicago, American Medical Association, 1931. Cloth, \$1.00.
- THE USE OF THE SELF. Its Conscious Direction in Reaction.** By R. MARTINUS ALEXANDER. 12mo. of 143 pages. New York, E. P. Dutton and Co., Inc., 1932. Cloth.
- AIDS TO PHYSIOLOGY.** By HENRY DREYER, Ph.D. M.R.C.S. 10mo. of 255 pages, illustrated. New York, William Wood & Company, 1931. Cloth, \$1.50 (Students Aids Series).
- THE PRACTICAL MEDICINE SERIES.** Comprising Eight Volumes on the Year's Progress in Medicine and Surgery. Series 1931. Chicago, The Year Book Publishers, 1931. General Medicine. Edited by GEORGE H. WEAVER, M.D., and others. 12mo. of 814 pages, illustrated. Cloth, \$3.00.
- PHYSICIANS' MANUAL OF BIRTH CONTROL.** By ANTONIETTE F. KONIKOW, M.D. Octavo of 245 pages. New York, Buchholz Publishing Company, 1931. Cloth, \$4.00.
- A DOCTOR OF THE 1870'S AND '80'S.** By WILLIAM ALLEN PUSKY. Octavo of 153 pages, illustrated. Springfield, Charles C. Thomas, 1932. Cloth, \$3.00.



OUR NEIGHBORS



INCOME TAX COMPUTATION

The Journal of March 1, 1930 carried a brief note on deductions allowed in the Federal Income Tax, which was abstracted from the *Wisconsin Medical Journal* of January, 1930. The receipt of the thanks of several New York physicians for the suggestion in the abstract has led the editors to print an abstract of a somewhat similar article taken from the February number of the *Ohio State Medical Journal*. After giving the general provisions of the law, the Ohio Journal discusses the allowable deductions as follows:

"OFFICE RENTALS: If a physician pays rent to another person for office space, he may deduct the amount; if he owns his own home and maintains an office in it, he cannot claim deduction for office rent.

"AUTOMOBILE: The cost of repair and upkeep of an automobile used in professional visits may be deducted. That part of a salary paid to a chauffeur and attributable to time spent in driving his employer on professional calls, may be deducted. Sums spent for taxi hire, carfare, etc., while on professional calls, may be deducted.

"Loss on an automobile used in professional business through depreciation may be deducted. The depreciation which should be deducted annually is figured by dividing the cost price of the machine by the number of years of its usefulness.

"If a physician has one automobile which is used exclusively in professional business, he may deduct the full depreciation each year. If the machine is used only partly in professional business, the deductible depreciation should be computed on the basis of the amount of time the car is used for professional purposes.

"If a physician possesses two cars, each of which is used partly in professional business, the deductible depreciation on each car should be computed on the basis of the amount of time each car is used for professional purposes.

"In other words, if an automobile is used only partly for business purposes, depreciation may be deducted only on a proportionate part thereof, the amount of depreciation depending on the amount of time the machine is used in professional business.

"PROFESSIONAL DUES: Dues paid to professional associates to which, in the interest of his profession the physician belongs, are exempt and may be deducted. Travelling expenses incurred in attending medical conventions of organizations of which he is a member are deductible from gross income in determining net income derived from

practice. Expenses incurred in taking graduate courses have been held NOT to be deductible.

"ASSISTANTS: Deductions are permitted for the salaries of nurses, laboratory workers, technicians, assistants, stenographers or other clerical workers in offices so long as their duties are connected with professional work. Wages paid maids for services rendered in connection with practice are deductible.

"MEDICINE, INSTRUMENTS, SUPPLIES: Medicines used in the office to treat patients, medicine dispensed, bandages, laboratory materials and all other supplies necessary to operate the office may be deducted. Upon surgical instruments, one-fifth of purchase price may be deducted annually for five years under depreciation account. All office fixtures, appliances, etc., used in office or laboratory may be depreciated annually, according to the estimated life of their usefulness.

"GENERAL OFFICE EXPENSE: Cost of telephone, telegrams, etc., used in professional services may be deducted. Expenditures for heat, light, water, etc., are deductible. Office fixtures and furnishings may be depreciated 10 per cent annually. Original cost of medical books may be depreciated 10 per cent annually, since the life of these is usually considered 10 years.

"WHEN TO DEDUCT DEBTS: If the physician's books are kept according to the 'Cash Receipts and Disbursement' system, he may not charge off any unpaid debt because he is then only reporting as gross income those accounts which have proved to be good. Bad accounts have not been reported and are therefore, not deductible.

"If books are kept on an 'Accrual Basis' (where expense is actually incurred and payable even though not yet paid, or income earned although not yet collected) it is permissible to charge off all debts which have been definitely ascertained to be worthless during the fiscal year covered by the report.

"In the same way, the physician is permitted to claim deduction for all other expenses within the scope of his profession, and the amount of his tax is determined on the net income which remains after these items have been deducted.

"TAXES AND LICENSES: Any tax paid upon materials required in professional work are exempt. All license fees which physicians are required to pay are deductible items. This includes the narcotic tax, automobile license, local occupational taxes, taxes on club dues, etc. The Ohio Gasoline Tax is not deductible.

(Continued on page 240—Adv. xiv)

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(Continued from page 238)

"LOSSES BY FIRE AND THEFT: Loss of and damage to a physician's equipment by fire, theft, or other cause, not compensable by insurance or otherwise recoverable, may be computed as a business expense, and is deductible, provided evidence of such loss or damage can be produced. Such loss or damage is deductible, however, only to the extent to which it has not been made good by repair and the cost of the repair claimed as a deduction.

"INSURANCE PREMIUMS: Premiums paid for insurance against professional losses are deductible. This includes insurance against damages for alleged malpractice, against liability for injuries by a physician's automobile while in use for professional purposes, and against loss from theft of professional equipment, and damage to or loss of professional equipment by fire or otherwise.

"LEGAL EXPENSE: Expense incurred in the defense of a suit for alleged malpractice is deductible as business expense. However, expenses incurred in the defense of a criminal action are NOT deductible.

"OTHER ALLOWABLE DEDUCTIONS: All taxes paid upon real or personal property, whether the property is used for business or otherwise and all interest paid upon indebtedness (except interest paid to carry nontaxable securities) are deductible. It is permissible to deduct from gross income, contributions when made to charitable, religious, education and scientific organizations, to an amount not to exceed 15 per cent of the net income, exclusive of such contributions.

"ITEMS NOT REPORTABLE AS INCOME: Allowances received under the War Risk Insurance act; bequests; damages received in personal action; dividends on stock of federal reserve banks, land banks and intermediate credit banks; dividends from exempted building and loan associations up to \$300; dividends from corporate earning accumulated prior to March 1, 1913; gifts, inheritances, insurance proceeds; state court jury fees, state court receivership fees, life insurance proceeds, and stock dividends and rights, are not reportable as income.

"All interest received from obligations of a state or political subdivision thereof; from securities issued under the Farm Loan act; interest on Liberty 3½% Bonds and U. S. Bonds issued prior to September 1, 1917, and interest on the obligations of the possessions of the U. S. need not be included in the computation of gross income.

"Interest received on Liberty 4% and 4½% Bonds and certain other U.S. obligations is exempt if the total holdings are not in excess of \$5,000. All interest received on U. S. Treasury notes must be reported. However, all interest received from these sources which is reportable as income, is subject only to surtax."

ANNUAL MEETING IN OREGON

The January number of *Northwest Medicine* contains the minutes of the annual meeting of the Oregon State Medical Society held October 22-24, 1931. Dr. F. D. Stricker, Secretary, reported on malpractice insurance rates as follows:

"The question of employing attorneys for members who were insured by insurance companies against liability from malpractice suits was considered and it was decided that these members were entitled to legal service from the medical defense fund of the Society, if they made a request for such service. However, it was found that most members of the Society were insured for liability insurance by regular indemnity insurance companies. This made it advisable to secure data by which the entire membership of the Society could be so protected. Rates were obtained from a reliable insurance company whereby the following reduced rates would be possible:

"\$ 5,000-\$15,000	\$12.00
"\$10,000-\$25,000	\$16.00

"The proposal was made to pay these premiums by paying three dollars out of the present medical defense fund, three dollars out of the current dues and to assess the balance to the individual members' dues. This proposal is to be submitted to the House of Delegates for action."

The Executive Secretary made the following report on a cooperative business bureau:

"During the past two years, our state medical society has worked out the so-called 'Oregon Plan' under which the local medical society, in cooperation with the local dental and graduate nurses' associations and the hospitals, maintains a cooperative business bureau. Bureaus of this type are in operation in Portland, Salem and Eugene.

"These bureaus have contributed greatly toward improving the methods of caring for the business side of medical care. Delinquent accounts are collected on an actual cost basis and a centralized file of credit information has been developed in each of these communities. Owing to the financial depression, efforts to extend this type of service to all parts of the state have been delayed. Steps were taken, however, to place the facilities of the Portland bureau at the disposal of the physicians of a number of nearby communities, including Clackamas, Yamhill, Washington and Columbia counties.

"During the year, also, a suggested uniform business procedure for physicians, including uniform office record forms and monthly statements, was prepared and made available to the membership. It is believed that the adoption by physicians generally of a uniform approach to the patient in matters relating to the financial aspects of medical care would have a stimulating effect toward educating the public to recognize its obligation to pay the doctor promptly and adequately."

(Continued on page 242—Adv. xvi)

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(Continued from page 241—Adv. xv)

Publicity work included a speakers bureau health news stories, fair exhibits and radio broadcasts. Public reading rooms were described as follows:

"Each of the three component societies which have established permanent headquarters (at Portland, Salem and Eugene) has been assisted in maintaining a public reading room and health information bureau stocked with an excellent supply of health pamphlets and posters of special interest to the lay public. Attractive window displays of health materials are also a feature of these educational efforts. The popularity of this type of activity is attested to by the fact that approximately 20,000 persons made use of the reading rooms during the past year."

Legislative matters were discussed as follows:

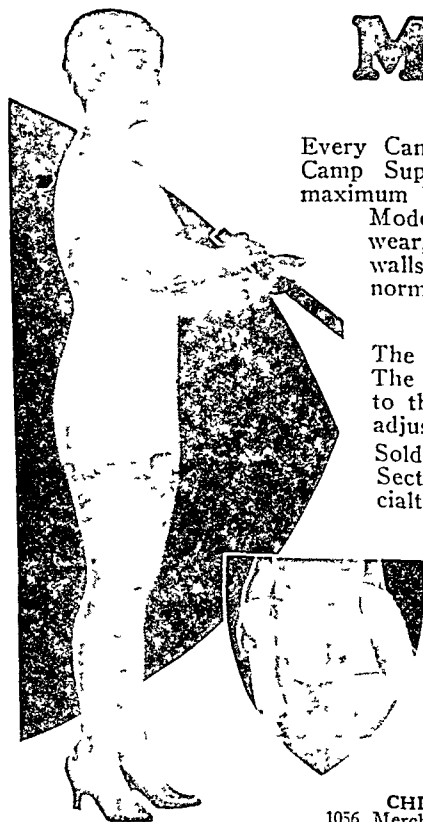
"A basic science act was carefully drawn and its introduction by Senators Booth and Upton arranged for. The bill received more public and newspaper support than at any previous time and after a bitter fight was lost in the Senate by only two votes. The Woman's Auxiliary was of great assistance in organizing the support of numerous prominent club women who appeared before the

Committee on Medicine, Pharmacy and Dentistry in behalf of the bill. Cooperation was also given the hospitals of the state in securing the passage of the hospital lien law. The defensive strength of the health forces in the legislature was shown by the successful fight on the numerous cult bills, including the measure proposing to create a department of osteopathy at the University of Oregon Medical School, the bill to permit chiropractors and naturopaths to treat patients in the hospitals, and the measure proposing to compel the State Industrial Accident Commission to allow chiropractors and naturopaths to care for industrial accident cases."

Comment was made on the standing of the scientific articles in *Northwest Medicine*:

"*Northwest Medicine* is maintaining the high standard it has set for itself. This is shown particularly in the reviews of abstracted literature.

"In the last issue of the Year Book of Surgery of the Practical Medicine Series, *Northwest Medicine* was quoted ten times, this being an average of almost one abstract from each issue during the year. It ranked right near the top in this regard among the twenty-one state journals abstracted, many of which had but one reference."



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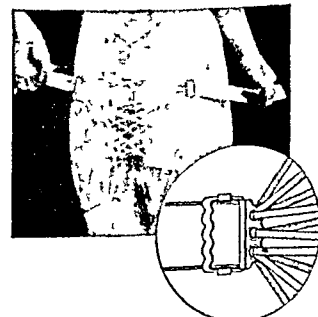
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PUBLIC RELATIONS IN IOWA

Many State Societies have Committees on Public Relations but these committees are diverse in the scope of their activities. The January issue of the Journal of the Iowa State Medical Society suggests that the Society form such a committee, whose duties should be as follows:

- 1 Caring for business problems, effecting commercial and lay contacts
- 2 Coordinating lay and scientific activities
- 3 Molding thought and leading auxiliary health movements
- 4 Directing publicity and educational campaigns for the profession and the public
- 5 Sponsoring and censuring general and special articles of news value
- 6 Providing editorials
- 7 Outlining programs for the press and county units
- 8 Directing business service and research in new methods of doing and obtaining business and the best methods of dealing with other economic problems of interest to the doctors of the association
- 9 Supplying the doctors and committees with information relative to the fitness of the respective candidates for public office with special reference as to how they would vote on matters of public health
- 10 Investigating and advising in all matters submitted to the legislature
- 11 Directing the legal aspect of business procedure of the association and doctors
- 12 Furnishing information concerning mal practice, systems of collections, as well as special information for the members, upon request

The Iowa State Medical Society already has the following standing committees:

- 1 Medico Legal
- 2 Scientific Work
- 3 Public Policy and Legislation
- 4 Constitution and By-Laws
- 5 Publication
- 6 Finance
- 7 Arrangements

The State Society also has the following special committees:

- 1 Historical
- 2 Economics
- 3 Library
- 4 Military Affairs
- 5 Nurses Training
- 6 Speakers' Bureau
- 7 Superannuated Physicians
- 8 Women's Auxiliary
- 9 Child Health

It would seem that a large part of the field of the proposed public relations committee is already covered by other committees.



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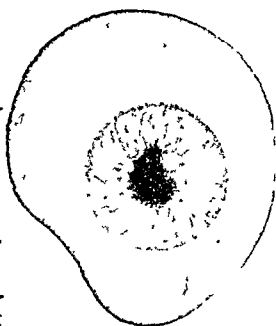
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OSTEOPATH CLINIC IN DELAWARE CHURCH

The December issue of the *Delaware State Medical Journal* has the following editorial comments on an osteopathic clinic run by a church:

"St. Paul's Methodist Episcopal Church, of Wilmington, provides a clinic for treatment of disease by osteopaths. According to the daily papers specialists of eye, ear, x-ray, proctology, etc., are there to treat special as well as general diseases. Osteopathy as officially defined by the American Osteopathic Association is 'that system of the healing art which places the chief emphasis on the structural integrity of the body mechanism, as being the most important single factor to maintain the well-being of the organism in health and disease.' The Pennsylvania law relating to the practice of osteopathy specifies that license to practice as an osteopathic physician 'shall not authorize the holder thereof to practice operative surgery without obtaining an additional license to practice such surgery, as provided in section eleven (b) of this Act.'

"Are these doctors qualified to do this work as stated in the public press? What training have they had in the various special branches? Have those who are responsible for this clinic investigated, and are they capable of judging? Are any of their surgeons members of the American Surgical Association or the American College of Surgeons? Has any one passed any special national board such as the American Board of Ophthalmology, or Otolaryngology, or Gynecology and Obstetrics? If they have, and are qualified, all well and good. If they are not competent to care for all these poor unfortunate patients who go to this clinic, with the assurance that any condition or complication they may have will be cared for by experts, then the officials of St. Paul's, or whoever may be responsible for such a state of affairs, may have some serious retributions to answer for when they pass across to the Great Beyond.

"But why have medical clinics, sponsored by laymen and run by cultists at all, when there are in the community regular hospitals expensively equipped for all kinds of medical and surgical examinations and care? Would it not be better for laymen to give their aid to such institutions instead of establishing so-called clinics hither and thither, which are not only very apt to be inefficient, but most likely to be bad medically, sociologically and economically? This question is especially pertinent when one realizes that these regular clinics are prepared to give correct diagnosis and efficient treatment, regardless of the social or economic status of the patient."

ECONOMICS IN PENNSYLVANIA

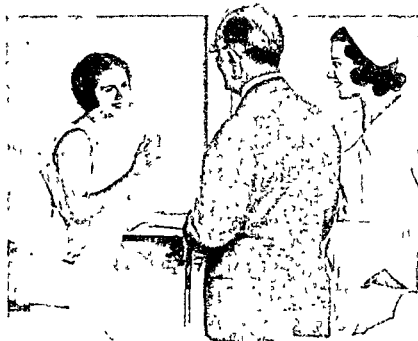
The January number of the Pennsylvania Medical Journal contains an account of a meeting of the Lycoming County Medical Society on December 11, at which a bank official gave some excellent financial advice as follows:—

"Mr. Charles A. Schreyer of the local Lycoming Trust Company, gave an address entitled 'Investing from the Professional Man's Point of View.' He discussed the fundamental principles of investment, and confined his remarks to investments other than one's home, other real estate, or insurance. He said in part that the doctor should always have a steady income apart from investments; that stocks, bonds, and mortgages should represent a reserve fund. He advised that the average physician should invest only in the higher sort of securities not requiring close observation and to avoid those classed as speculative. He explained that investment plans of twenty years ago would not apply today since many securities considered gilt edge then are considered poor today. The comparative merits of common and preferred stock were dealt with and he informed us of the plan advised by certain reliable banking firms. First, major investment should be in gilt edge securities in the sound basic industries. The modern belief is that the following proportions are sound; 20 per cent in good bonds; 50 per cent in mortgages; and 30 per cent in reliable stocks.

"The average price of a good bond 10 years ago was \$78.20, whereas in October, 1931, it was \$100.50. A diversity of holdings is desirable, in that some fluctuate adversely, which yields a steady income under all conditions.

"The average yield of the highest grade bond is 4.92 per cent; next highest grade, 5.28 per cent; and of some sound bonds 6 1/2 per cent. The current yield on United States government bonds is 3 1/2 per cent, a good rule being that any bond yield of over twice that of the Government bond is apt to throw it into the speculative class and therefore risky. In fact anything over 5 1/4 per cent is risky. First mortgages are good if ready market ability is not required, and mortgage certificates yielding 5 per cent make a good backlog. Among those investments recommended were telephone, and sound public utilities, such as P. P. & L. Railroads' stock not recommended at present. Securities should be bought only through the most reputable firms to be advised by the bank. He did not recommend the purchase of common stock by physicians."

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City _____ State _____

(Continued from page 247—Adv. xxi)

is an old law, but it was stated that in some towns the legal requirement is still carried out when it seems desirable. One of the speakers stated that while cards are useful, the man whose house is carded may, if he wishes, tear up the card and the board of health has no redress. Another speaker voiced the principle, that if the board is likely to go to the courts in the matter of a quarantine, it will be well to attend to the required detail of the red flag. Mr. W. G. Kirschbaum of New Bedford, stated that he had been to all of the Massachusetts state health commissioners from the time of Dr. McLaughlin, in attempts to have the law so changed that cards would be legal, but thus far without legislative result.

"The matter of notification of cases by physicians was subject to a long discussion. The first question was that of notification by telephone. The law was quoted as requiring this notification in writing, but in these days, in many places, the telephone is used almost exclusively. In New Bedford a card record is made of the telephone information, and when the board of health physician visits the house other cards for contacts and other persons are made, and the office record is thus complete. In some smaller places there is not a constant service, and the telephone does not

prove so satisfactory. Mr. Hallett noted that here there is a difference in procedure between large and small places.

"Dumping grounds and nuisances were other matters discussed. With reference to the first, the law places the care of such with the boards of health. The nuisance seems to be a very uncertain matter, because litter and smells do not always constitute a menace to health, hence the boards may be puzzled as to whether a 'legal' nuisance exists."

ANNUAL MEETING IN MAINE

The January issue of the *Maine Medical Journal* comments on the annual meeting of the Maine Medical Association to be held June 16-18, 1932. Concerning the scientific program it says:

"The program as adopted for this year will be considerably different from previous years. It will cover two and a half days instead of two full days, as formerly, closing at noon on Saturday. The two afternoon sessions and the closing session Saturday morning will be given over to papers, while the two morning sessions, Thursday and

(Continued on page 249—Adv. xxiii)

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(Continued from page 248—Adv. xxii)

Friday, will be devoted to a series of group round-table conferences, covering a variety of subjects.

"The papers will be about twelve in number, four to a session. All the papers will be of general interest, based upon some phase of diagnosis and aimed to assist the general practitioner in a practical manner.

"It is felt that this system, which has proven so popular and worthwhile in some of the national societies, will fulfil a long-felt want in our association. Everyone will find something in which he is vitally interested and will be able to discuss it with others similarly interested. A complete list of the conferences will soon be announced in the Journal. Applications for each conference can be made to the committee and will be filled in order of their receipt."

PUBLIC RELATIONS IN CALIFORNIA

California and Western Medicine of January contains the following note regarding the administration of public relations of the State Society:

"The Department of Public Relations of the California Medical Association has had two meetings and the organization is now complete. It is ready for work. The problems before it are many and varied, and involve a complex picture of economics, social adjustments, and legislation.

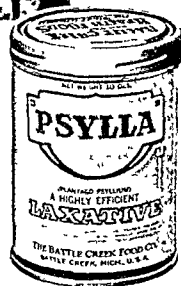
"The members of the committee have canvassed the Association for a man to act as a director of their newly formed department. According to the resolution, this man must be a doctor. However, there are many other prerequisites for this man. He must be a good speaker as well as a good fellow. He must be a good organizer. He must be a man who has studied, and knows, the problems of medical economics. He must be a statistician, and know how to evaluate statistics. He must be a publicity man, and understand how to organize publicity. He must be a politician, and be able to follow legislative measures in our legislature, as well as organize the medical profession in legislative matters.

"And, above all, he must be a man who is willing to act in accordance with the decisions and will of the Council of the California Medical Association and the Public Relations Committee.

"Thus far, the committee have been unable to find this man, but they are not discouraged and they feel that there is such a man in our society who can take up the reins and act as the executive officer in a fulltime position with the California Medical Association."



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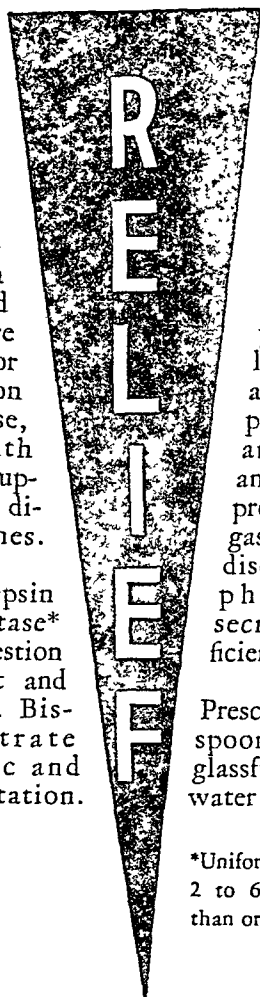
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JOURNAL OF DISTRICT OF COLUMBIA

The Medical Society of the District of Columbia has established its own monthly journal, called *Medical Annals*, beginning with the January issue. This journal takes the place of its annual volume of transactions, and also of the defunct *Washington Medical Annals*. Its immediate predecessor was a monthly bulletin of the society, which was expanded into the present journal. The aims of the journal are set forth in the following editorial:

"The year 1932 marks the birth of this publication. The *Annals* replaces the Bulletin but is really a continuation of the *Washington Medical Annals*, coming back to life after a period of eleven years.

"The contents of the *Annals* will be somewhat as follows:

- "1. Selected papers and abstracts of papers presented before the Medical Society.
- "2. Reviews of various subjects and reports of recent advances in medicine, surgery and the specialties, to be designated 'Science Series.'
- "3. Transactions of special sections of the society.
- "4. Editorials.
- "5. News of activities of organized medicine throughout the world.
- "6. Report of accomplishments of interest from local medical schools, hospitals, and government institutions, and also from the various smaller local societies.
- "7. Activities of committees and also individual members of the society of general interest."

DISCUSSING PAPERS IN COLORADO

Dr. Earle Whedon, the editor of the Wyoming Section of *Colorado Medicine* for November, commends the scientific meeting of the Colorado State Society, as follows:—

"It was the privilege of Ye Editor to attend the Colorado Medical Society, September 15, 16, and 17. There were several outstanding things in these days spent so delightfully.

"The members talk like gentlemen when reading and discussing the scientific papers. Ye Editor has been present in Colorado State Medical Society meetings when he thought those who discussed the carefully prepared papers were auto mechanics, their only desire being to tear out the rear ends of the authors who presented the papers. This year it was different. Those who discussed the papers—as we said above—talked like gentlemen. Really, it was fine."

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ACUTE GLANDERS IN MAN. A CASE REPORT

By LLOYD I. ROSS, M.D., and R. LOMAX WELLS, M.D., NEW YORK, N. Y.

From Medical Division A, St. Luke's Hospital, New York, Dr. H. S. Patterson, Director

WITH the constant advance in the understanding of disease aided by increasing and efficient public health measures, many diseases have reached comparatively low levels of incidence, and others have come to be classed as rare. Among the latter we find glanders. In New York City the decrease in glanders is shown in the following table of figures on the total number of cases reported yearly to the Board of Health since 1920:

1920.....	71	1926.....	4
1921.....	75	1927.....	1
1922.....	117	1928.....	1
1923.....	43	1929.....	12
1924.....	100	1930.....	0
1925.....	8		

Interest in the case of infection with *B. mallei* in man here reported centers in its occurrence in a thickly populated district as an isolated case and at a time when the disease is rarely considered in differential diagnosis. The identity of the disease process was not suspected during the course of the disease and was not proved until after the death of the patient. After the existence of *B. mallei* infection had been proved by bacteriological and serological studies, an effort was made to locate any contact that the patient may have had with stables, horses, etc.—a point not considered or elicited in the history on admission. It was discovered that the patient was a great lover of horses and was a frequent visitor at a stable in New Jersey where he kept a horse. About two months previous to the onset of the patient's illness his horse had died following a short illness characterized by profuse mucous nasal discharge and cervical glandular enlargement, the diagnosis of influenza having been made by the veterinarian. Previous to this another horse in the same stable had died of "pneumonia." It was our feeling that the patient had harbored the glanders organisms in his upper respiratory tract and that the extraction of teeth two days prior to admission had furnished the point of lowered resistance in

which the organisms gained a foothold, multiplied, and spread.

In view of the original diagnosis of acute fibrinous pleurisy in the case here reported it is of interest to note that Meyer and Crohn¹ in 1908 write: "In reviewing the literature one is struck by the failure in making even a tentative diagnosis of glanders in the early stages of the disease. The diagnoses most frequently made are pleurisy, acute articular rheumatism or typhoid fever." They attribute this to the late appearance of the eruption.

Furthermore, in view of the positive blood culture in our case, we note with interest that Crohn² reported fourteen cases from the literature in 1909 with eleven positive and three negative blood cultures. Blood cultures taken early in the course of the disease were negative as were those in chronic cases. The positive cultures were reported late in the disease. The duration of the acute cases varied from 11-36 days and were invariably fatal. In 80% of the cases initial symptoms were referable to the lungs.

We present this case to remind the physician that glanders despite its decreasing rate of incidence must still be considered in his differential diagnosis in cases of sepsis with symptoms of pulmonary disease and abscess-like lesions of the skin.

Patient: F. D.

Admitted to St. Luke's Hospital on March 28, 1931.

Died April 8, 1931.

Past History: Born in Holland, patient came to U. S. A. in 1910. For the past 9 years has worked as a tester for the N. Y. Telephone Co. Father and mother died of pneumonia complicating influenza. Family history irrelevant. While serving overseas, he was gassed with chlorine and suffered from "shell shock." Since then he has had occasional sore throats, and this winter he has suffered with colds.

Two days before admission patient had had three teeth extracted. At 6 P.M. on March 27,

1931, as he was going to work, the patient was seized with an intense pain in the left lower chest, posteriorly, near the spine. The pain was increased on deep inspiration, or motion. No cough, chill, sweat, sore throat or headache. No nausea or vomiting. Appetite good. Bowels regular. The pain continued to increase and patient came to the hospital at 3 A.M., March 28th, and was admitted to medical ward.

On admission, physical examination showed: "A well developed, well nourished white man of 37, complaining of pain in left posterior chest. Head: No mastoid or sinus tenderness. Eyes: Pupils equal and regular, react rather slowly to light. Ocular movements normal. Ears and nose normal externally. Mouth: Tonsils small, teeth in poor condition. Upper right first and third molars recently removed with blood clots in tooth beds. Pharynx negative. Neck: No adenopathy. Chest: Symmetrical, both sides move freely and equally, with respiration, but patient complains of pain on deep inspiration. Lungs are resonant throughout. Normal voice and breath sounds. No rales or friction rubs heard. Blood pressure 108/65. Abdomen soft, no tenderness. No masses or organs felt. No scars or herniæ. Genitalia normal. Extremities negative. Reflexes: Knee jerks and ankle jerks active and equal. No abnormal reflexes. Impression: Fibrinous pleurisy (?)"

The admission temperature was 99.4. Pulse 96. Respirations 24. X-ray reports showed 4 molars in the upper left jaw and absorption around the roots of the first bicuspid and first molar. The remaining teeth in the upper jaw and all the teeth in the lower jaw appeared normal. There was marked thickening of the antra and ethmoidal sinuses. The heart, diaphragm and aorta appeared normal. Some thickening in the lower inner zones of the lung fields but no evidence of definite consolidation.

The urine was normal. The Wassermann was negative. The blood count showed hæmoglobin 99 per cent, red blood cells 4,900,000, neutrophils 67 per cent, lymphocytes 32 per cent, basophils 1 per cent.

The temperature rose to 102 the afternoon of admission, and spiked to 104.2 by March 31st. It remained spiking between 102 and 104 till April 6th, after which it remained at 104, and then went to 105 on April 8, the day the patient died. On March 30th, at 4 P.M. the patient complained of pain in the left side of his face and also a stiff neck. The next morning he had a headache and by noon the pain in the left side of the face was very severe. The patient was examined by the otologists, who decided that the pain was reflex from the throat. Blood culture of March 31st showed no growth. April 1st, the headache and face pain persisted, very severe. The throat seemed inflamed and was cultured, a

few fusiform bacilli and spirochetes were seen in the smear, and the culture was negative for diphtheria. Patient had severe pain in the back of his head. April 2nd: Profuse diaphoresis. Intense pain across forehead and down left side of face. Cannot seem to get his tongue out of his mouth at all. Extreme pain on left side of face, which is markedly swollen, when side of mouth is touched, causing twitching of face. Blood urea 25 mg., sugar 125 mg. April 4th: Both tonsils red and swollen, left more than right. Gums in bad shape. "Left tonsil might break down and form abscess." Nose negative. Impression: "Vincent's Angina of tonsils and gums or beginning left peritonsillar abscess." Salvarsan and 5% glucose to gums, 1000 c.c. infusion of 5% glucose. April 5th: Patient had difficulty in swallowing. Nose and throat consultant advised lancing peritonsillar abscess. Incision made in left peritonsillar region, but no pus obtained. Six-thirty P.M.: Patient unable to speak intelligibly, in much pain, mentally dull. April 6th: White blood cells 3,800. Neutrophils 80%. Lymphocytes 20%. Hardly able to open his mouth, much difficulty in swallowing. Patient taken to operating room. "There was a brawny necrotic induration involving the major portion of the soft palate, extending over in the left tonsillar fossa" which was incised with a cruciate incision and was found "to contain a small amount of necrotic granular base from which a culture was taken." This showed streptococcus hemolyticus and streptococcus viridans. The pathological report showed "acute suppurative inflammation." April 7th: Patient definitely worse, despite clysis, infusion, and transfusion. Induration of left cheek and temporal region more marked. No area of fluctuation. In center of area there have now appeared several small pustules. April 8th: Progressively worse. Face and arms now covered with pustular papules. Temperature from 104.4 to 105.2. Urine shows very faint trace of albumin, rare hyaline and granular casts. Blood culture taken. Consultant from Board of Health saw case and said it was not smallpox but possibly a staphylococcus pyemia. Patient died at 10:40 P.M.

Autopsy No. 2999: ". . . There is a massive swelling of the left side of the face with ulcerated area with raised edge 2 cm. in diameter in the preauricular region. There is a similar ulceration over the zygoma and one on the lobe of the ear. Scattered over the skin of the face, neck, trunk and extremities there are discrete raised lesions each about 1 cm. in diameter. Some of these are vesicular, others pustular, still others umbilicated. A few smaller ones appear as nodules. No free fluid is in either pleural cavity. Both lungs are free. The pleura is smooth but studded with small, firm, raised areas, some of which are white, others purple. On section these

are seen to be minute abscesses, the purple ones resemble infarcts with a necrotic center. There are also numerous similar abscesses throughout the parenchyma of the lung. There is an ulceration 3x4 cm at the base of the tongue on the left side. The tissues of the left side of the mouth and pharynx are necrotic. There are small collections of pus in the epiglottis and upper part of the trachea. The tongue and larynx appear normal."

May 4th Report of blood culture taken on April 8th shows *B. mallei* in both the broth and the plates. Culture from pustule of the skin, April 8th, shows *B. mallei*.

These findings have been checked by cooperation of the Board of Health.

After the autopsy had been performed and the blood culture had been found to be positive, showing a Gram negative bacillus which morphologically and culturally was characteristic of *B. mallei*, an investigation was begun into the history of the patient with regard to possible contact with horses. This investigation revealed the fact that the patient had been an ardent horseman all his life, had been accustomed to ride three or four times a week and owned his own horse which he kept in a stable in New Jersey. This

horse had developed a cold during February with a profuse mucoid discharge from the nose and mouth with palpable glands in the neck. The horse had subsequently died about three weeks prior to the patient's admission to the hospital, the veterinarian's diagnosis being influenza pneumonia. So far as could be ascertained only one other horse in the stable had been ill, and this horse had an illness similar to the above and died of so called influenza pneumonia about a month prior to the death of the patient's horse. The owner of the stable and the veterinarian were both consulted with regard to the possibility of glanders, but seemed reluctant to discuss the matter and gave very little information, all of which would be of questionable value as to its truth. It seems reasonably certain that the two horses in this stable were afflicted with glanders and died of that disease rather than of influenza pneumonia. Presumably the patient, who was in constant contact with his horse during its illness, received his infection at that time.

REFERENCES

- 1 Meyer and Crohn *JAMA*, May 16, 1908 Vol L pp 1593-95
- 2 Crohn *Am J of Med Sc* August 1909

PLASTIC SURGERY, ITS USES AND LIMITATIONS

By CLARENCE R. STRAATSMA, M.D., NEW YORK, N. Y.

I HAVE chosen to talk to you on the uses and limitations of plastic surgery because I feel that it is well to know the extent of any branch of surgery and because there still exists in the minds of many professional men some doubt as to the indications for it.

The last war gave a new impetus to reconstructive surgery and many possibilities which had previously remained dormant developed at that time. After the war new fields for service in our everyday life were opened up. Congenital deformities,—such as hare lip, cleft palate, ear malformations, web fingers, etc.—and acquired ones,—such as noma, osteomyelitis of the jaw, scarlet fever with its resultant mouth and facial infections, diphtheria, causing stenosis of the pharynx, and trauma,—all require certain types of reparative surgery.

For centuries all surgeons have done a certain amount of reconstructive surgery, including rhinoplasty, repair of cystocele and rectocele, but it has always been the specific aim of men doing surgery of the head and neck to leave as little scar as possible. Nevertheless, the primary

endeavor is to restore the function, for authorities have found that if the function of the affected part is restored, the cosmetic result will quite likely be satisfactory. It must be remembered that the word "functional" may be applied to the repair of the mouth, a portion of which may have been removed in the treatment of cancer, or because of trauma, to a finger or arm which may have been rendered useless because of contractures, which require both the excision of the scars and the covering of the defect by grafts of one type or another, or to patients having limited motion of the neck with inability to lift the chin because of severe scarring which in some instances actually fastens the chin to the chest.

In the plastic clinics of the New York Post-Graduate Hospital and the New York Eye and Ear Infirmary we see from time to time all types of cases needing such surgery—for example, paralysis of the face due to injury of the seventh nerve during a mastoid operation, ectropion of the eyelids due to fire or acid burns, or to accident, atresia or partial atresia of the nostrils, partial loss of the cheek or lip, contractures of the neck, partial loss of the buccal sulcus, so that plates cannot be fitted properly, depressed scars, with

* Read at the Annual Meeting of the Medical Society of the State of New York at Syracuse N. Y. June 2, 1931.

adhesions limiting the motion of the parts involved. It is a known fact that an individual who has had open sores with constant irritation for a period of years, may develop cancer. In such cases timely repair of an ulcer will then prevent malignancy. X-ray and radium burns very frequently produce open lesions which require plastic work. These cases need plastic surgery to restore the function as well as the cosmetic condition.

We also see the type of case which needs repair entirely from the cosmetic standpoint. This phase of reparative surgery is done to alleviate or remedy illnesses which in many cases are far more serious than bodily pain; namely, mental anguish due to the patient's constant realization of a defect which in turn causes the development of an *inferiority complex*, resulting in an attempt of the individual to withdraw from society. Though the world may seem at times too full of humanity—and especially the wrong kind of it—still we must be thankful for our fellowmen, for we cannot live without them. Even the lonely miner in the far-off mountains finds himself affected with hallucinations because he is not buoyed up by the necessary human stimuli. He knows that as the danger signal warning him to hasten back to civilization where human contact restores his equilibrium. Hence, the type of introvert who has withdrawn from society because of a deformity will doubtless never take his normal part in life until his whole outlook is



Case I Figure 1



Case I Figure 2

changed—by correction of the impaired portion or function, thus removing the focus of his inferiority. Likewise, in this machine age in which the number of men and women employed in gainful occupation is decreasing so rapidly, and in which competition is so keenly acute, persons afflicted with physical disfigurements are much less likely to secure employment than are their physically normal competitors. Therefore, our problem is immediately placed on an economic basis. During this present depression the economic importance of a person's appearance has been especially stressed, and we are constantly besieged by patients who want all sorts of physical defects repaired, the reason in all cases being that they "cannot obtain work because of their appearance." Consequently, many dependent persons are made self-respecting and self-supporting members of society by the removal of physical and resulting mental handicaps.

Again, plastic work has its legal aspects, for reparative surgery has been found invaluable in reducing disfigurements resulting from wounds and from automobile and industrial accidents. In one case the sentence of an offender was shortened several years by a nice repair of the loss of his victim's nose, which was severed in a fight in which knives were used. In cases of automobile injury we can so repair the defect that very little functional or disfiguring damage remains, thus relieving the insurance companies of damages for permanent disabilities. In compensation cases,

we can frequently repair the various deformities so that the patient can resume his former occupation. Therefore, it is readily seen that by restoring the patient's former state, we can remedy many difficulties that formerly involved much legal routine.



Case II Figure 1

Though the field for this type of work is a very broad one, and the indications manifold still at the present time there are limitations in plastic surgery which both the general practitioner and the surgeon should recognize. We are unable to transplant corneal tissue by means of which we might replace an opaque cornea with a clear one. We are limited as to the repair of big blood vessels and nerves, which makes it impossible to repair severed members successfully. At times we are hindered in accomplishing a perfect result by the great extent of the damage or by the inability to match skins. It is most important that the surgeon make clear to the patient, not only what result is to be expected, but also what obstacles might be encountered which might lengthen the process or possibly even interfere with the final outcome. Occasionally, a completed case which is quite pleasing to the surgeon may be absolutely distasteful to the patient, but in all fairness let me say that this situation is very rare, as most patients are more than appreciative.

Looking into the near future, we may safely wager that as the methods of asepsis become more absolute and their administrative technique

more accurate, we will be limited in our scope only by the cooperation of the patient and by our own perseverance over an extended period of time. And again, in conclusion, let me stress that plastic surgery has established its right for existence not only through its success in the repair of disorders of function, but also through its ability to rehabilitate those individuals who suffer solely from mental torment because of physical disfigurement without disturbance of function.

CASE REPORTS

Three cases of facial deformity from the plastic department of the New York Post-Graduate Hospital present distinct economic problems, and illustrate various methods of correction and repair.



Case II Figure 2

Case I A young woman who graduated from a Teachers' College and who was unable to secure steady employment because of a facial deformity. Figure 1 shows the condition on admission to the hospital. To correct this deformity it was deemed advisable not to attempt any bone manipulation because she had satisfactory mastication. An incision was made along the lower angle of the jaw on the right side, and the tissues over the depressed area were elevated. The defect was then filled in by the use of a dermo-fat-fascial graft taken from the left abdominal wall. The above graft was obtained by first shaving off the epithelial layers of skin and then cutting the shaved area to size, including fat and the super-

ficial fascia of the abdominal wall. This entire mass was then placed in the defect and the skin edges closed, using several silk sutures. A pressure bandage was then applied, and left for four days. The abdominal defect was closed by first undermining the cut edges and then sewing them together. The patient left the hospital two weeks after admission.

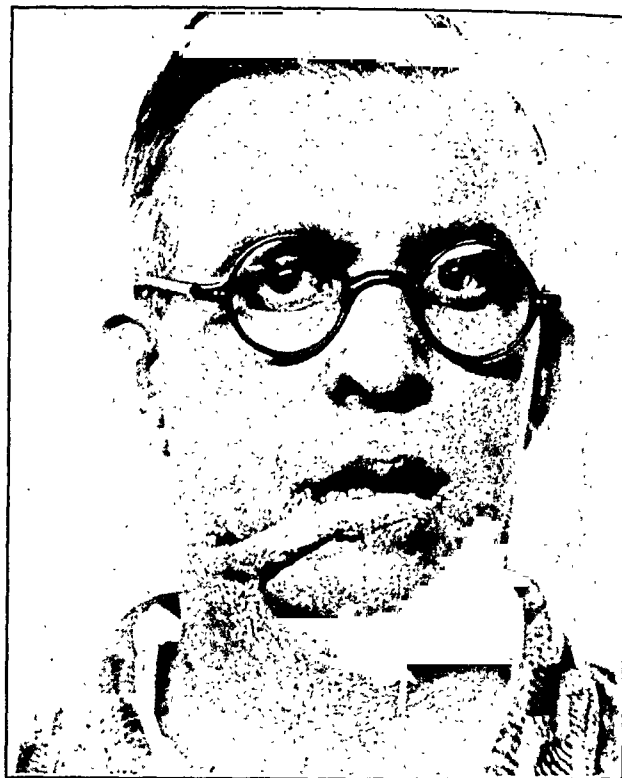


Case III. Figure 1.

Figure 2 shows the final result, and upon re-application she was given a permanent teaching appointment by the same school board which had previously refused her.

Case II. This presents a deficiency of the chin due to malocclusion. To remedy this appearance an incision was made internally at the buccal-gingival junction. The soft tissues of the chin were elevated from the jaw bone and, to give prominence to the chin, a rib cartilage graft was inserted between the bone and soft tissues. The edges of the mucous membrane were then carefully sutured, and a pressure bandage applied for a period of six days. The patient left the hospital two weeks after admission and returned at a later date for correction of her hump nose because this type of nose tends to exaggerate chin deficiencies. Figure 2 shows the final result. The patient secured desirable employment.

Case III. A man who had a portion of his lower lip removed for carcinoma in the skin clinic of the New York Post-Graduate Hospital. He



Case III. Figure 2.

was unable to carry on his regular work because of his appearance (Figure 1).

Figure 2 shows the method of repair. A tube pedicle graft was taken from the anterior fold



Case III. Figure 3.

of the neck and attached to the lip the grafted portion being nourished by the end attached to the neck. Figure 3 shows the finished operation

which was completed by severing the tube at both ends and discarding it. After complete repair he was able to resume his former occupation.

RECORDED AND RESIDENT DEATH RATES IN NEW YORK STATE

By J V DE PORTE, Ph D, ALBANY, N Y

Director Division of Vital Statistics New York State Department of Health

IV—INFANT MORTALITY, 1927-1930

ONE of the outstanding achievements in the field of public health has been the great reduction in infant mortality. A quarter of a century ago Sir George Newman, the eminent British sanitarian, deplored the fact that "although the general death rate is decreasing, the infant mortality is not declining." At that time the statement was true, not only for Great Britain but for most, if not all, of the civilized countries of the world.

In the course of the following years the situation changed radically. The rate of infant mortality has been moving almost uninterruptedly downward—faster than the total death rate. In the State of New York in 1915 (the earliest year when the registration of births was practically complete) the infant mortality was 99 per 1,000 live births, in 1930 it was 58. Thus, in the fifteen-year period the rate dropped 41 per cent, again, in 1915 infant deaths represented 16.4 per cent of the mortality at all ages, in 1930 the proportion was practically half of the earlier figure, 8.6 per cent. While it is true that the declining birth rate accounts for some of the decrease in the total number of infant deaths, even when the necessary correction is made for this factor, the last percentage is raised only to 9.6.

The causes leading to the death of an infant may be divided into two large classes: (1) antenatal and neonatal factors, operating before, during, and just after birth while the infant is still adjusting himself to an extra uterine existence, and (2) post natal factors, consisting to a greater extent of environmental influences. The first set of causes acts during the foetal state of the infant (fatalities taking the form of abortions, miscarriages, and stillbirths) and for several weeks after birth. The majority of deaths during the first month is due to congenital debility, congenital malformations, premature birth, and injuries at birth. Deaths at a later age, even those induced by prenatal causes, are to a large extent associated with environmental influences.

The progress made in the saving of young lives has been due primarily to the reduced total of deaths from gastrointestinal and respiratory diseases, to which fall victim mainly infants over one month old. The movement of the death rates

from causes operating during the first month of life has been less favorable. A considerable reduction was recorded in the mortality from congenital debility and premature birth. On the other hand, the death rate from congenital malformations remained practically stationary, while the rate from injuries at birth even increased.

It is, of course, impossible to postulate an irreducible minimum of infant deaths. The mere fact, however, that in certain countries infant mortality is now lower than in this country (New Zealand, to take a notable example, had a rate of only 34.5 in 1930) shows that our rate is still unnecessarily high.

Any effort to reduce infant mortality in a community must be based upon an accurate measure of that mortality. Infant mortality rates are expressed in terms of live births, thus, when we say that the rate of the State of New York in 1930 was 58 we mean that for every thousand infants who were born alive in the course of that year there were recorded 58 deaths of infants under one year of age. The recorded rates are subject to a varying degree of error because many births, to mothers who are residents of rural and smaller urban communities occur in the hospitals of neighboring cities. These births, as well as the deaths occurring among the newly born babies are recorded in those cities. Occasionally, local health departments in refining their infant mortality rates, deduct the deaths of infants whose mothers were non-residents of their communities, but do not consider the non resident births. Such a one sided correction is palpably wrong. In making a correction for residence it is clearly necessary to allocate not only the infant deaths but also the births.

Main Divisions of the State The recorded and resident infant mortality rates of the main divisions of the State in 1927-1930 are shown in Table I.

The allocation of births and of infant deaths according to residence of the mother increases slightly the New York City rate. There is no sustained change in the rates of urban and rural Upstate sections. In three of the four years the urban resident rates were higher than the recorded, while in 1930 the resident rate was slightly

cancer of the cervix offers fewer chances of a cure by proper irradiation.

On the other hand, cancer of the mouth and skin, are becoming preventable diseases. The modern woman is teaching men how to smoke with the least risk of cancer, because women keep their teeth clean and report to a dentist the moment they notice a sore spot. No one under the proper care of a dentist should develop cancer of the mouth. The same is true in regard to the skin. Women pay attention to any skin lesion or blemish and therefore come under the observation of the medical profession before cancer has developed. I have not observed a cancer of the skin over the nose the result of the chronic irritation of the never-slip vanity glass in the last five years. Either women or opticians, or both, are fully aware of this possibility.

We have no evidence as yet that cancer of the breast like cancer of the cervix or skin, or mucous membrane of the mouth can be made a preventable disease. We do not know the local conditions that precede a cancer of the breast.

We do know that if the lump just observed proves to be cancer when explored, the probability of a five-year cure, when the glands are not involved, varies from seventy to ninety-five per cent according to the type of cancer. If the glands are involved, the five-year cures fall to twenty-five per cent, when the base glands only are involved; to twenty per cent when the mid-glands show cancer cells, and to ten per cent when the apex glands, the highest are affected. These results are obtained only after the very best surgery. There is little evidence the pre- or post-operative irradiation increases the number of these permanent cures, although both x-rays and radium are our chief therapeutic agencies in the relief of pain from metastasis and in temporarily checking the rapid growth of cancer cells in some metastatic areas.

Our object, therefore, must be to increase the number of cancer lumps in the breast explored, recognized with the microscope and completely removed, before the glands are involved. In the first place, there is every evidence that if every lump in the breast observed in a woman over twenty years of age were removed within a few days after it has been felt, the chances are that a large number of precancerous areas would be eliminated from the breast, and, in this sense, cancer prevented. However, at the present time the chief hope of decreasing the number of deaths from cancer of the breast lies in giving the women the benefit of the radical operation before the glands are involved. This will increase the cures from an average of less than twenty to

an average of more than seventy. To accomplish this, more and more mothers must follow the recommendation of a semi-annual pelvic examination during which the breasts are properly inspected, palpated and transilluminated. More and more women, whether mothers or not, must learn and practice the rule of modern medicine—select your family physician while you are well, seek your first annual examination while you are well; and between these annual visits to your physician, report the moment there are any warning signs or symptoms in any part of your body. As a matter of fact, many people are doing this today. There is first, the prenatal clinic. Then, a large number of people see their dentist, oculists, dermatologists at proper intervals, and an increasing number are seeking annual examinations.

The Progressive Change for the Better Among the Correctly Informed Women Who Seek an Examination Immediately After the First Warning Sign or Symptom: By 1910 we were able to contrast the results of treatment between the first decade up to 1900 and the second decade up to 1910. At this time there had been no general educational program. The complete operation for cancer was well established, and the results in large clinics had been estimated. In the second decade, there was an increase in the per cent of five-year cures largely explained by the increase in the number of cases of cancer of the breast without involved glands. The two factors which influenced prognosis were the grade of malignancy of the breast cancer and the absence or extent of involvement of the glands. Early intervention had less influence on low grade cancer than on the more malignant types. But there is no question that the only factor over which we had control was the duration of the lump in the breast.

In the beginning, the early cases came from members of the families of the faculty and of outside physicians, and most especially marked were the patients of those practitioners of medicine who had the greatest confidence of their patients. It is unnecessary to go into details. Fortunately we had card indexes of the patients according to the doctors who had referred them to the clinic. In my first extensive studies, in 1910, which included every malignant tumor recorded in the laboratory of Johns Hopkins University, I was struck with the factors which brought patients early to the surgical clinic and with the factor of the grade of malignancy.

It was this evidence from this and other clinics that allowed Samuel Hopkins Adams to write his popular articles in lay journals. It was these observations that justified the

organization of the American Society for the Control of Cancer

There are four decades, and since 1910 there has been a gradual improvement along all lines. The number of women seeking advice because of breast symptoms has increased five times. With this, the incidence of cancer has fallen from more than eighty to less than ten. Inoperability has fallen from more than fifty to less than five per cent. Benign lesions subjected to operation have increased from less than twenty to more than fifty per cent. The five year cures have increased from less than ten to more than fifty. Benign breast conditions for which operations are not necessary have increased from less than one to more than eighty.

This progressive change varies in different parts of this country. The more the medical profession performs its part in the continuous, systematic instruction of the public, the better are the figures.

The Increasing Difficulties of Clinical and Pathological Diagnosis Among Women Correctly Informed Who Seek an Immediate Examination. In the first place, we know that in this type of woman the chances are that there will be a definite lump which should be explored in less than twenty per cent of the cases only. Therefore, in eighty per cent it must be decided by inspection, palpation and transillumination of both breasts, by a careful study of the clinical history whether operation is indicated.

Today the majority of women who report for an examination the moment they observe any sign or symptom suggesting trouble with the breast present on examination no indications of cancer or even for any operation. In less than 20 per cent the breast presents a definite lump and in most of these cases there are no signs of cancer. Therefore, today the first diagnostic dilemma is to find a lump which justifies exploration. The second diagnostic difficulty is to differentiate when that lump is removed by gross and microscopic study the benign from the malignant.

For example, quite recently a woman of thirty three complained of a lump in her breast. It was situated in the upper hemisphere where it could not be transilluminated. The lump was not larger than a twenty-five cent piece. Three of us in the clinic carefully studied the case by careful palpation. We all concluded that it was a benign cyst buried in breast tissue. At the exploration it was a small scirrhous cancer buried in edematous breast tissue. Less than two years ago, there were observed two similar cases. The one we diagnosed cyst proved to be cancer, the second one, in which we favored the diagnosis of cancer proved to be a benign cyst. The same is

true of very large tumors of the breast. Only exploration with frozen sections will distinguish between the sarcoma and the benign intracanalicular fibroadenoma, and the large aberrant fibroadenoma. There is no difficulty in feeling a definite lump in the breast. If this lump is the size of a twenty five cent piece or larger and transilluminates clear, operation is not indicated. If there are one or more definite lumps and all transilluminate clear, the removal of even a single one is not necessary. The examiner, however, must have considerable experience with transillumination before he is justified in depending upon it. In small single, definite lumps it is dangerous to depend upon clear transillumination to exclude a solid tumor which may be malignant, for example, a colloid cancer.

In the majority of instances among the correctly informed women today, there is no definite tumor. A single indefinite tumor in one breast justifies exploration. A single indefinite tumor which the patient has picked out and the examiner can pick out in a lumpy breast or in a shotty breast, justifies exploration. When there are two or more indefinite tumors in one or both breasts, whether the breast be normal, lumpy or shotty, exploration is less urgent and in the hands of experienced examiners can be left alone without danger.

On palpation, one should become familiar with the various types of breasts which may be described as normal, senile, lumpy, shotty, the breast at puberty, the breast in pregnancy, the breast during lactation, the breast after lactation, the fatty breast large or small, the breast with excessive parenchyma with and without the history of lactation and palpating differently from the normal, lumpy or shotty breast.

There is no question that today every general practitioner and specialist interested in breast lesions are given more opportunities to palpate breasts in which there is no definite tumor. There is no question that cancer and distinctly benign tumors like the encapsulated adenoma and the cyst with intracystic papilloma occur in normal breasts. The chief factors in lumpy and shotty breasts are chronic cystic mastitis, and the mastitis of lactation without abscess. These conditions tend to ultimately disappear. When women waited after feeling a lump for months or years and entered the clinic with a definite lump, there was no difficulty whatever to distinguish this lump on palpation. Today, the educated woman comes to the examination the moment she feels a lump, and often she will feel an indefinite lump as readily as a definite one. In the majority of cases this lump which the woman thinks she can feel, with and without tender-

ness, is only part of a lumpy or shotty breast. There is no question that cancer in the beginning may be an indefinite lump and for some weeks or months the lump may remain indefinite. The larger the breast and the deeper the seat of the lump, the longer the period during which it remains indefinite. There is no reason for further discussion—the fact is today, among enlightened and courageous women, there is to be more and more difficulty in picking out the single lump which is indefinite and situated in a shotty, lumpy breast, and subject it to exploration for frozen section. The actual per cent of cancer in such instances is not large, but practically all these cases, if explored at once, should be cured. Therefore, if there is any doubt about the nature of the indefinite lump, it should be explored, studied, in the gross and in the frozen section, and, of course, if it is malignant, the complete operation for cancer must be performed.

What to Do If the Surgeon, With the Aid of His Pathologist, Can Not Decide from the Fresh Gross Appearance and an Immediate Frozen Section the Exact Nature of the Explored Tumor in the Breast: My associates and myself have given this problem more than usual attention in the past two years. Our conclusion is based upon the breast tumors referred to the laboratory by outside surgeons and pathologists and from the diagnoses of pathologists and surgeons from all over the country who have attended the microscopic demonstrations which now have taken place in the laboratory for two years three times a year.

No surgeon without pathological knowledge and without the assistance of a trained pathologist should explore these indefinite breast tumors, because the only safe procedure would be the complete operation for cancer in every instance. On the other hand, when the surgeon and pathologist have the training of the average, and are unable to recognize cancer, it is safe to excise the area with a margin of healthy breast tissue, close the wound and submit the tissue to one or more consultant pathologists. In the great majority of the cases the lesion will prove to be benign and, if malignant, it will belong to the rare type of low-grade duct cancer or colloid cancer in which the danger of a few days' delay between the excision of the tumor and the complete operation will not lower the per cent of five-year or permanent cures. This conclusion is almost a reversal of that usually reached fifty years, and even five years ago.

We are preparing to submit the detailed evidence in favor of this statement.

What Special Training and Assistance Should the Surgeon Have Who Takes the Responsibility

for Exploring a Breast Tumor?: In the first place, the great advantages of the surgeon who is a good gross pathologist as well as a clinical diagnostician, are less valuable today than of the surgeon who is trained in microscopic pathology. It is true that the opportunity for a surgeon to become a microscopic pathologist is more limited than to become a gross pathologist, and, in addition, it was easier to learn naked-eye diagnosis in the late stages of the disease than microscopic differentiation in the earliest. However, today, if a surgeon is not a microscopic diagnostician, he must have with him a trained microscopic pathologist.

Whether the surgeon is microscopic diagnostician or not, the best results for the cure of cancer of the breast are obtained not only by the best surgery, but by a special training in the accepted technique for the complete operation for cancer of the breast.

The operator must improve his technique in the physical examination of the breast and should follow a well-thought-out method of inspection, palpation and transillumination. The pathologist cannot do this for him. Therefore, the training of the surgeon should be in the decision whether there is a definite lump which must be explored, and in the operative removal of the lump, and in the complete operation for cancer of the breast. In addition he should associate with himself a pathologist properly trained in the microscopic diagnosis of tissue; removed in the operating room, by the rapid frozen section method.

The disease in the breast which is giving the most trouble to differentiate it clinically and microscopically is chronic cystic mastitis. When the symptoms observed by the woman are of but a few days' duration, the most common condition of the breast is chronic cystic mastitis. When women delay for months or years, the most common condition of the breast becomes cancer, and, as a rule, hopeless cancer, although it may still be operable.

What Every Physician in General Practice Should Know About the Breast: Unfortunately, the majority of medical students, even today, are given little opportunity to palpate breasts in women, and many receive no special instruction, and for this reason the breasts in the routine examination of women in the dispensary and in the hospital wards, is largely neglected.

Both medical students and the general practitioner should follow a definite plan in the examination of the breasts of all women who come under their observation for some form of physical examination. It should be as precise and thorough as the now recognized phys-

ical examination of the chest the pelvic examination, the urological examination, the examination of the eye. When all women seek annual or semiannual examinations and report to their family physician the moment they experience breast symptoms, the general practitioner will have an increasing opportunity to improve his diagnostic abilities as well as to systematize his methods.

Methods of Examining the Breasts In the first place, the examiner should be ignorant of which breast the patient thinks is involved and what symptoms she has experienced. That is, the examination should be identical whether the breasts are being studied in a routine physical examination, or because the patient seeks examination for definite symptoms.

The preparation should be the same as for a physical examination of the chest—the patient should strip to the waist. The individual should sit sideways on the examination table, properly covered to protect her from cold until the examination begins. The table should be so placed that the examiner can walk around it. First inspect the exposed upper trunk, arms, neck, head and face. Look for skin defects, thyroid enlargement, pulsation in the neck. Look at both breasts, with the arms of the patient down. Note specially the nipples and areolæ and the skin over the breast. Look for any irritation and keratosis of the nipple, for retraction and any sign of a discharge. Note the size and symmetry of the breast, asymmetry, bulging nodule, dimpled skin, redness or any discoloration. Have the patient slowly lift the arms in the air a number of times. Observe whether there is any difference between the movements of the breasts or nipples, especially retraction or dimpling of the skin. When the arms are raised observe the axilla. Don't touch the breast until this inspection is complete. Then let the arms fall to the sides, darken the room and transilluminate. Place the light first behind the nipple zone. Learn to distinguish the dark lines of branching veins. As a rule, if there is a single, definite tumor which is solid, or if there is a cyst filled with blood or grumous material, this area will be picked out as quickly with the cold light as with the finger. Small cysts with papilloma in the nipple zone which may not be palpable are often brought out by transillumination. Tumors in the middle of the upper hemisphere as a rule cannot be reached by the light. Next palpate both breasts with one hand to each breast and then one breast with both hands. Palpate gently. Do not pick up and pinch the breast tissue. Leave the nipple zone temporarily alone. If you palpate a tumor in the sitting position and it is in a situation in which you can place the lump

beneath it, try the transillumination test again and again. Now the patient should lie down and hold the arms over the head. Inspect again, palpate again, palpate from both sides and when striding at the head of the examination table. Press gently on each breast to see if you can express material from the nipple. Palpate the areola for dilated ducts beneath the nipple. When you feel a worm-like mass or a nodule near the nipple, press on it gently and see if anything is expressed from the nipple. While you are palpating the region of the nipple, the apparently retracted nipple may protrude, or you may produce intermittent retraction of the nipple. Ultimately pull each nipple forward to detect any fixation, no matter how slight. When a definite lump is found, study it most carefully, especially for dimpling or fixation of the skin. When the patient is lying down, palpate for a definite edge of the breast. If there is a definite edge, see if the breast when picked up is saucer shaped. No matter how definite a single lump may be, never neglect the complete study of both breasts. The less definite the findings, the more thorough the study, and as a rule this should be repeated at least once again in a few days or a week. This thorough examination of both breasts decides whether an operation is to be performed or not.

Conclusions I have covered the more important points in a much more emphatic and decisive way than has been possible in previous communications. I have tried not to repeat what has been well described in my former contributions to the literature, because every one who reads this may read the others.

The essential features, then, in the attempt to reduce the deaths from cancer of the breast in women are: The recommendation, through education, of annual and semiannual examinations by a competent physician selected while well, the education of the general practitioner on the proper physical examination of the breast so that he may select those patients who should be referred to a consultant with the least risk to those whom they diagnose themselves as belonging to a group of benign conditions for which operation is not necessary, the training of the surgeon to meet the new demands in the search for the lump that should be explored, and the training of that surgeon to maintain the technique of the complete operation for cancer successfully established more than thirty years ago, the training of the pathologist in the more certain differentiation between the benign and malignant breast tumors in the fresh frozen section made in the operating room.

I will not take up the equally difficult management of the more advanced or hopeless

cancer of the breast, of the different types of local and regional recurrences and remote metastasis; the decision as to pre- and post-operative irradiation; the choice between x-rays and radium; the attempt to make the dying patient more comfortable; the psychic control of the hopeless case, even when the patient is not suffering from pain; the danger of giving prognosis, and a large number of detailed questions which are unfortunately far too common today, because many women still delay when warned.

Brief summary of essential statements in this paper:

Protection Against Cancer of the Breast: Thousands of women who have read the correct information in the daily press or who have learned it from their family physician, or have acquired the modern habit of annual examinations, have shown that the greatest risk a woman runs today if her lump proves to be cancer, is about twenty-five per cent, while the ignorant woman who delays largely because of her ignorance and not of fear, has less than ten per cent chance of a cure.

Women need no instructions in what the warnings are. They will recognize them in time. But every woman needs special instruction how to act when warned. Recent figures show that when a woman seeks an examination the moment she observes anything unusual in one or both breasts, the chances are that eighty-five per cent of the warnings will be of such a character and the examination of such a decided finding, that no operation or irradiation with X-rays or radium is necessary. In about fifteen per cent of the cases a lump of such distinct character will be discovered by the finger of the physician or the transilluminating light, that the lump must be removed, and the lump only. The lump is immediately subjected to microscopic study. In less than one-half the cases, cancer or suspicion of malignancy will be discovered by the microscope, and the complete operation with removal of the breast must follow. In more than one-half the cases only the lump will have to be removed and the breast saved. Therefore the woman who seeks an examination at once runs the risk of cancer in less than ten per cent of the cases and increases her chances of a cure from less than ten to more than seventy per cent. Those who delay increase the incidence of malignancy and decrease the chances of a cure.

Without doubt annual examinations of all women and semi-annual pelvic examinations of mothers during which the breast will be carefully surveyed, should increase the protection of

women from death by cancer of the breast. As yet we do not know how to prevent the development of cancer in a woman's breast, but we do know how to teach and influence her to have the cancerous lump discovered and properly removed early, so that the chances of a permanent cure are best.

TO THE PEOPLE

The Board of Directors of the American Society for the Control of Cancer, after careful consideration, issued the following statement, March 7, 1931. This has already appeared in the New York Times and the New York Herald Tribune for Sunday, March 8, 1931.

In the opinion of the Board the only effective treatments for cancer today are surgery or irradiation with X-rays or radium. It further desires to emphasize the point that the best palliative or permanent results are to be obtained when the treatments are applied as soon as possible after the first warning symptoms.

"The Board also wishes to make this statement to the public: If people wish the greatest possible protection against cancer and other disease they should, while they are well, select a family physician if they can afford it, or a clinic while they are well and should ask not only for an examination but for advice on the rules of health and on the earliest symptoms of disease."

TO MOTHERS

The almost unanimous opinion of 900 obstetricians, Fellows of the American College of Surgeons and many other Physicians and Fellows of the College, is that mothers' best protection against cancer of the cervix of the womb depends upon the repair of all injuries and irritations following the birth of a child, and semi-annual pelvic examinations thereafter.

Every woman should know that anything observed unusual in the monthly period; the appearance of a discharge, with or without blood, between periods; and the reappearance of the menses or any discharge after the menopause (change of life), are warning symptoms which demand an immediate proper examination by a competent physician.

Consult your family physician about this statement.

Do it now, regardless of any previous examination or conversation.

This statement is based upon the recent research work of the Amanda Sims Memorial Fund for the Protection of Women from Cancer by Correct Information.

CERVICAL CANCER. ITS 1926-1929 INCIDENCE IN FIVE N. Y. STATE CITIES. ITS PREVENTION. ITS FUTURE*

By GLENN A. WOOD, M.D., SYRACUSE, N. Y.

From the Department of Obstetrics, Syracuse General Hospital

IT has been determined¹ that in the United States over 13,000 women die annually from cancer of the female genital organs. 72% of this number, based on a future observation in this paper, have a cancer of the cervix. If every year 72% of a city such as Fulton, N. Y., or Little Falls, N. Y. or Tonawanda, N. Y. or any other city of about 13,000 population were to be suddenly wiped out of existence, I am sure governmental and individual attention would go to the very limit of investigation to determine the cause and correction of such a catastrophe. Cancer of the cervix takes this yearly toll, yet, it has not received the limit of investigation probably because of its widespread distribution and, therefore, low mortality rate in each individual area.

From our local Registrar of Vital Statistics, I have secured some data concerning Syracuse on the incidence of deaths from cancer of the female genital tract, or, as it is at present classified in the International List of Causes of Death, and hereafter referred to, as Code No. 46

I have personally interviewed a considerable number of the doctors who signed the death certificates to determine what percentage of deaths listed as cancer of the uterus should have been listed as cancer of the cervix, the primary site of the disease having been in the cervix. In this investigation I have found that 84% or 94 of those listed as cancer of the uterus should have been listed as cancer of the cervix; 9% or 10 were primarily cancer of the fundus or body and 7% or 8 were seen so late in the disease that a determination of the primary site in the uterus was impossible. It is entirely probable that some of these undetermined cases might have been primarily in the cervix.

The 12 deaths among unmarried women reminds us that Code No 46 is not entirely confined to women who have had injuries to the cervix during childbirth. With one exception, all of this unmarried group were over 50 years in age. A further analysis of the Code No 46 deaths among these 12 unmarried women shows that 1

TABLE A

DEATHS IN SYRACUSE FROM CODE NO. 46. (1926 TO 1929, INCLUSIVE)

Listed as to yearly totals, anatomic location, number from out of City and number that were single

	Total Cases	Ca of Cervix	Ca of Uterus	Ca of Vulva or Vagina	Ca of Ovary	From out of City	Single
1926	35	6	23	1	5	6	3
1927	42	9	30	0	3	5	5
1928	39	10	25	1	3	5	1
1929	45	5	34	2	4	7	3
TOTALS . . .	161	30	112	4	15	21	12

84% of Ca of Uterus is primarily Ca of Cervix 84% of 112 is 94
9% of Ca of Uterus is primarily Ca of Fundus 9% of 112 is 10
7% of Ca of Uterus is primarily undeterminable 7% of 112 is 8

Adding 94 to 30 (listed Ca of Cervix deaths) gives 124 or number of deaths in Syracuse from Ca of Cervix for years 1926 to 1929, inclusive..

. 124 is 77% of 161, the total Code No 16 deaths for 4 years

In Table A you will note that by far the greater number of deaths from Code No. 46 occur under the subdivision, Cancer of the Uterus. Cancer of the Uterus, as such, is an acceptable term to the Bureau of the Census for classification of deaths. This term, however, includes deaths not only from cancer of the fundus or body of the uterus but, as well, many more deaths from cancer of the cervix. Concerning the 112 deaths listed under cancer of the uterus, I

had a cancer primarily in the ovary, 2 were seen so late in the disease that it was impossible to determine the primary site of the disease in the uterus, 6 were primarily in the fundus or body of the uterus and 3 were primarily in the cervix. Among these unmarried women, cancer of the body or fundus of the uterus was two times more frequent than cancer of the cervix.

Later in this paper I will quote a noted gynecologist who believes that "the parous woman whose child-bed injuries have been wisely and skillfully repaired has at least an even chance

* Presented at the October 6, 1931, Meeting of the Onondaga County Medical Society at Syracuse, N. Y.

with her nulliparous sister of avoiding the later development of a cervical cancer." If the incidence of cancer of the cervix in the married group could have been reduced to approximate the incidence found in the unmarried group, we would have had nearly a 70% reduction in Code No. 46 for the four years '26-'29 inclusive.

No. 46 not only in Syracuse but also in four other New York State cities, namely, Buffalo, Rochester, Albany and Yonkers. In the preparation of these tables I am grateful to J. V. DePorte, Director, Division of N. Y. State Vital Statistics for his assistance in supplying the facts from which the tables are compiled.

TABLE B
INCIDENCE OF CODE NO. 46 IN SYRACUSE FOR 5 YEARS (1926 TO 1930) BY MONTHS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
1926..	2	2	3	2	1	3	2	5	5	4	5	1	35
1927..	5	7	2	6	2	3	2	4	4	4	2	1	42
1928..	5	1	3	1	7	3	6	1	4	4	0	4	39
1929..	3	3	3	8	1	3	0	6	7	3	3	5	45
1930..	1	6	3	5	3	2	5	5	2	4	4	7	47
Totals	16	19	14	22	14	14	15	21	22	19	14	18	

Table B shows no particular month in which deaths from Code No. 46 seem to be more frequent.

This table makes the only reference in this paper to the number of deaths for 1930 from Code No. 46. The total number of deaths for 1930, 47, when compared with the other years shows that, except for the year 1928, there has been a steady rise in the number of deaths from Code No. 46 for the past five years. A fact not demonstrated on this table is, that in Syracuse for the first nine months of 1931 there have been 42 deaths from Code No. 46. 1931 bids to outnumber former years in deaths from this disease.

Table D shows Code No. 46 is common to these five cities.

As in Table A, by far the greater number of deaths are listed under cancer of the uterus.

I have previously called to your attention the fact that a large percentage of cancer of uterus deaths should more properly have been listed under cancer of the cervix. Although I have disregarded the probability in subsequent table compilations, it seems likely that at least some of the cases listed as cancer of the vagina and vulva, broad ligaments, abdomen, uterus and ovary, and uterus and vagina had the primary site of the disease in the cervix and should have, therefore,

TABLE C
INCIDENCE OF CODE NO. 46 IN SYRACUSE FOR 4 YEARS (1926 TO 1929) BY AGE GROUPS

	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 65	65 to 70	70 to 75	75 to 80	80 to 85	85 to 90
1926 ...	..	..	1	1	2	7	6	5	7	2	3	1	..	..
1927 ....	..	1	..	2	2	3	10	5	9	4	2	2	1	1
1928....	..	1	1	2	5	1	9	5	8	3	2	2	..	..
1929.....	1	..	..	..	3	3	7	5	14	1	8	2	1	..
TOTALS..	1	2	2	5	12	14	32	20	38	10	15	7	2	1

Table C shows that the greater number of women died from Code No. 46 during these four years after passing the 40th year.

A discussion of the age incidence of cancer will be later made under Table H.

As a basis of comparison, I have prepared the following tables showing the incidence of Code

been listed under the title, cancer of the cervix.

Note the relatively low incidence of Code No. 46 in Yonkers and the relatively high incidence in Albany.

In Table E-1 you will note that Code No. 46 caused in these New York State cities from 10.8% to 17.8% (average 14.5%) of all the male and fe-

TABLE D
DEATHS FROM CODE NO. 46 (1926 TO 1929, INCLUSIVE) IN 5 NEW YORK STATE CITIES

	BUFFALO				ROCHESTER				SYRACUSE				ALBANY				YONKERS			
	1926	1927	1928	1929	1926	1927	1928	1929	1926	1927	1928	1929	1926	1927	1928	1929	1926	1927	1928	1929
Ovary	10	17	15	18	6	10	15	16	5	3	3	4	3	5	5	6			2	1
Cervix	26	21	16	26	10	13	16	16	6	9	10	5	7	5	6	5	1	2	1	5
Uterus	57	57	53	*45	31	43	42	41	23	30	25	34	23	19	14	17	9	12	14	*11
Vagina and Vulva		4		3	4	1	1	3	1		1	2			1	1	1			
Broad Ligaments	1		2																	
Fallopian Tubes	1																			
Clitoris	1					1														
Bartholin Glands	1																			
"Abdomen".					1															
Uterus and Ovary						1		1						1	1					
Uterus and Vagina						2														..
TOTALS.	97	99	91	92	52	71	74	77	35	42	39	45	33	30	27	29	11	14	17	17

* Includes one Chorioepithelioma
Includes one Pelvic Carcinoma.

TABLE E-1
RECORDED DEATHS AND DEATH RATES PER 100,000 POPULATION FROM CANCER (ALL FORMS), ALSO, CODE NO. 46 PERCENTAGE OF THE TOTAL CANCER DEATHS

	1926			1927			1928			1929		
	Total Cancer Deaths	Rate	Code No. 46 %	Deaths	Rate	%	Deaths	Rate	%	Deaths	Rate	%
Buffalo	669	123.4	14.5	697	127.2	12.8	671	121.2	13.4	715	127.8	12.8
Rochester	396	124.0	13.1	410	126.9	17.3	461	141.0	16.0	432	130.6	17.8
Syracuse	222	116.8	15.6	246	125.1	17.1	290	145.6	13.4	282	139.8	15.9
Albany	204	171.3	16.1	219	183.2	13.6	218	181.1	12.3	192	158.4	15.1
Yonkers	101	86.8	10.8	100	84.2	14.0	117	96.4	14.5	123	99.4	13.8

male cancer deaths. In Syracuse for these four years ('26-'29 inclusive) Code No. 46 caused an average of 26% of all female cancer deaths. This fact is not demonstrated in this table.

Table E-2 shows that when the death rates from all forms of cancer are corrected for residence, the rates for Yonkers increase while the rates for Albany and the other four cities decrease. Note, however, that Albany has the highest relative cancer rate and Yonkers the lowest.

In the preparation of Table E-3 it was neces-

sary to assume for the four other New York State cities the Syracuse ratio of 84% of cancer of uterus deaths being cancer of the cervix. We find that there was in the five New York State cities, during 1926-1929 inclusive, a total of 721 cancer of the cervix deaths, which is 72% of the total Code No. 46 deaths.

In Table F there is no ratio between the birth rate and Code No. 46 death rate for these four years. For example, Rochester and Yonkers are the same regarding birth rate, yet Rochester is

TABLE E-2
RESIDENT DEATHS AND DEATH RATES PER 100,000 FROM CANCER (ALL FORMS)

	1926	1927		1928		1929	
	Deaths Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Buffalo*	+	619	113.0	623	112.5	634	113.3
Rochester*	+	376	116.4	417	127.5	392	118.5
Syracuse*	+	227	115.4	252	126.5	237	117.5
Albany	+	192	160.0	194	161.2	173	142.7
Yonkers	+	109	91.7	131	108.0	145	117.1

+Data not available. *Exclusive of State Institutions.

TABLE E-3
INCIDENCE OF CANCER OF CERVIX IN 5 NEW YORK STATE CITIES, 1926 TO 1929, INCLUSIVE

	Buffalo	Rochester	Syracuse	Albany	Yonkers
Total Deaths, Code No. 46	379	274	161	119	59
Total Deaths, Cancer of Uterus	217	167	112	73	46
84% of Cancer of Uterus Deaths	181	140	94	61	39
Deaths Listed as Cancer Cervix	89	55	30	23	9
Total Deaths, Cancer of Cervix	270	195	124	84	48
Per Cent of Cancer of the Cervix in the total Deaths under Code No. 46	71%	71%	77%	71%	81%

TABLE F
1926 TO 1929 COMPARISON OF 5 NEW YORK STATE CITIES AS TO POPULATION,
BIRTH RATE, CODE NO. 46 DEATH RATE AND CA OF CERVIX DEATH RATE

City	Year	Population	Birth Rate per 1,000 Population	Code No. 46 Death Rate per 100,000 Population	Ca of Cervix Death Rate per 100,000 Population
Buffalo	1926	542,060	22.8	17.8	13.6
	1927	547,817	22.1 Av.	18.0 Av.	12.5 Av.
	1928	553,330	21.8 22.	16.4 17.1	11.7 12.3
	1929	559,330	20.9 1st	16.4 4th	11.6 4th
Rochester	1926	319,242	19.3	16.3	11.5
	1927	323,095	19.9 Av.	21.9 Av.	15.1 Av.
	1928	326,949	18.8 19.	22.6 21.0	15.6 14.4
	1929	330,803	17.7 3rd	23.3 2nd	15.4 3rd
Syracuse	1926	189,991	21.2	18.5	13.1
	1927	196,645	21.8 Av.	21.4 Av.	17.3 Av.
	1928	199,145	21.6 21.	19.5 20.4	15.5 15.6
	1929	201,645	20.9 2nd	22.3 3rd	16.8 2nd
Albany	1926	118,715	21.1	27.1	21.8
	1927	119,542	21.1 Av.	25.2 Av.	18.4 Av.
	1928	120,368	22.1 21.	22.5 24.6	14.9 17.6
	1929	121,194	20.9 2nd	23.9 1st	15.6 1st
Yonkers	1926	116,341	19.5	9.4	7.7
	1927	118,828	19.6 Av.	11.8 Av.	9.2 Av.
	1928	121,315	18.8 19.	14.0 12.2	10.7 9.5
	1929	123,802	17.7 3rd	13.8 5th	10.5 5th

considerably higher than Yonkers regarding the Code No. 46 rate. Buffalo is highest in birth rate while fourth in Code No. 46 rate. The majority of deaths from Code No. 46 occur years after the child-bearing age. Possibly the birth rate of twenty-five years ago might bear some ratio to the present Code No. 46 rate. The cancer of the cervix rate, based on the 84% Syracuse rate before mentioned, follows closely the Code No. 46 rate.

I have never heard nor read that native white were more susceptible than foreign born white to cancer in general or cancer of the cervix in particular.

It is my hope that the presentation of this table will in no way lessen the point that I especially desire to make, namely, that cancer of the cervix is common to Syracuse and other New York State cities. What is true of New York State is also probably true for the rest of the country and,

TABLE G
PERCENTAGE OF POPULATION BY NATIVITY. UNITED STATES CENSUS OF 1920

	Buffalo	Rochester	Syracuse	Albany	Yonkers
Native White.....	75.1	75.3	80.4	83.3	72.4
Foreign-born White.....	24.0	24.1	18.8	15.6	25.7
Negro.....	.9	.5	.7	1.1	1.9
Chinese, Japanese, and Others..	+	+	+	+	+

COUNTRY OF BIRTH OF FOREIGN-BORN WHITE

	Buffalo	Rochester	Syracuse	Albany	Yonkers
Austria.....	2.4	2.2	2.7	1.9	11.4
Canada.....	18.0	13.3	10.7	4.8	2.2
Czechoslovakia.....	.4	+	.5	.6	2.9
Denmark, Norway, Sweden.....	1.5	1.0	.9	1.3	2.3
England, Scotland, Wales.....	7.3	10.1	8.9	7.9	12.1
Germany.....	17.2	15.1	14.7	17.4	8.2
Ireland.....	6.0	6.1	11.8	17.8	16.1
Italy.....	13.5	27.8	20.9	19.3	17.5
Poland.....	25.8	6.4	14.1	8.0	10.0
Russia.....	5.4	9.6	8.6	12.9	7.7
All Other Countries.....	7.5	8.9	6.0	8.1	9.6

+Less than .1%.

Table G is presented for consideration because of the observation that the ratio of Code No. 46 deaths rather closely parallels the percentage of native white and foreign born white in these five cities.

You will note that Albany has the highest percentage of native white and the lowest percentage of foreign born white. This city, as before mentioned, has the highest Code No. 46 death rate. Buffalo, which is fourth in the Code No. 46 rate is also fourth in the percentage of native white population and third in the foreign born white population. Yonkers, which is lowest among these five cities in Code No. 46 deaths, is also lowest in native white and highest in foreign born white population.

for that matter, the world, for humanity is the same everywhere.

I submit this observation of the U. S. census of 1920 regarding these five N. Y. State cities to stimulate a more comprehensive observation regarding this interesting phase of the cancer problem.

Table H attempts to explain why Yonkers is lowest and Albany highest in Code No. 46 deaths.

This table parallels exactly the cancer of the cervix rate and closely parallels the Code No. 46 rate as shown in Table F, in that the order of cities having the highest and lowest rate of cancer of the cervix deaths also have the highest and lowest percentage of population under 45 years.

Yonkers with 80.4% of its population under 45

years should have a smaller cancer death rate than Albany with 73.5% under 45 years.

With a disease so universal, it is gratifying to read of authors expressing the belief that cancer of the cervix is largely a preventable disease. Some writers on this subject stress the recognition and correction of cervical lesions soon after their formation. As the majority of cervical lesions result from child-birth, it follows, that all who do obstetrics should inspect the cervix within a short period following the confinement and then correct the pathology that may be found.

to be satisfactory. A proper use of some of the above procedures will many times remove the necessity for a cutting operation.

It is my opinion that everyone who practices obstetrics should have some means for correction of the cervical pathology observable in the early secondary period of repair. The several methods above enumerated are all excellent procedures. Each have their particular advocates but each try to accomplish the same end result. It is not so important as to what method to employ as it is to select some method.

TABLE H
PERCENTAGE OF POPULATION BY AGE. UNITED STATES CENSUS OF 1920

	Buffalo	Rochester	Syracuse	Albany	Yonkers
Under 45 Years.....	78.8	77.1	76.0	73.5	80.4
45 to 54 Years.....	10.7	11.2	11.8	12.8	10.9
55 to 64 Years.....	6.6	7.1	7.3	7.9	5.4
65 to 74 Years.....	2.8	3.3	3.4	4.1	2.3
75 Years and Over.....	1.0	1.3	1.4	1.7	1.0

In 1929, in New York State (exclusive of New York City) 73.3 per cent of the deaths from cancer were of persons 55 years of age or more, and 89.7 per cent of persons 45 or more.

Dr. Graves states² that "90 to 98% of cervical cancer has its origin in neglected obstetric lesions."

Dr. Dickinson states³ "It seems to me that no more important piece of work in the prevention of cancer of the cervix can be done than to drive home to every man who delivers a patient that it is his duty to see that the cervix is left healed after a delivery."

There are three periods, following their formation, when cervical lesions may be corrected. The first of these is immediately after their formation by the, so called, primary cervical repair. In a previous paper⁴, I described this technique and gave you my experiences as to the results obtained. I am still using this method of repair and the end results have been most pleasing.

The second period of repair is on the ninth or tenth day postpartum with the intermediate repair as described by Dr. Coffey⁵ and others.

The third period of repair may be divided into two parts, the early and late secondary periods of repair. The early secondary repairs of the cervix would include repairs up to the eighth week postpartum. The means of repair in this period would include the use of the electric cautery, the use of the high frequency current by conization or by the endotherm knife, the use of heat as by diathermy, the use of silver nitrate, mercuriochrome, etc. Here, also, I would include the use of surgery with removal of the diseased endocervix if some of the above measures were not found

The late secondary repairs cover all repairs of the cervix after the eighth week postpartum. All the types of repair of the cervix mentioned under early secondary repair would apply to this period. At this time the actual cutting operations such as the Sturmdorf and the Schroder etc. may be more necessary. Some find a use for radium in this late secondary period.

During the immediate, intermediate and secondary periods of repair the aim has been to restore the damaged cervix to normal and, therefore, eliminate a source of chronic irritation with its sequellae. In this connection, it is instructive to note the often quoted statistics of Dr. Graves.⁶ In his study of 538 cases of cervical cancer he found only "12 patients or 2% had had a previous repair of the cervix. In 2 of these 12 cases a re-examination of the specimens of cervical tissue revealed that a cancer had existed at the time of the repair operation and had been overlooked by the pathologist. In another case there was no pathologic record but the symptoms of cancer ensued so soon after the repair operation to make it probable that the disease existed at that time. If, therefore, these 3 cases of already existing cancer are excluded there are left only nine which later developed cancer after cervical repair, and, in most of these, early pathologic records were lacking. On the other hand, out of nearly 5000 cases of cervical repair there were records of only 4 that had developed a cancer later and in 2 of these the disease was conceivably encouraged by

unskillful plastic operations which had resulted in extreme obstructing stenosis of the upper vagina and cervix, conditions which probably play an important part in the production of genital cancer."

These statistics of Dr. Graves are "of value in supporting the belief generally held, and now rationalized by science, that timely reparative operations insure an effective, though not a perfect, prophylaxis against cancer." It is Dr. Graves' personal belief "that the parous woman whose child-bed injuries have wisely and skillfully repaired has at least an even chance with her nulliparous sister of avoiding the later development of a cervical cancer."

Pemberton and Smith⁷ state "In a series of 3814 trachelorrhaphies, 740 amputations and 1408 cauterizations of the cervix (total of 5962 cases), only 5 are known to have developed cervical cancer, and these were in the trachelorrhaphy group. That only 12 out of 669 patients with carcinoma of the cervix had had trachelorrhaphy and that none had had cauterization or amputation also suggests the prophylactic value of careful cervical treatment."

What is the future of cancer of the cervix? The future is a physician-patient responsibility, with much emphasis on the physician. The physician must insist on the sixth week check up examination. This examination must be thorough, including the use of the speculum. In this connection I have made an interesting investigation. I have asked 100 women, either friends or patients, who have borne children whether or not they were requested by the doctor in attendance at their last confinement to return for a six weeks check up examination. Thirteen per cent had been so requested, although only ten per cent had actually gone for the examination while eighty-seven per cent had not been asked by the physician to return for this important examination. Ladies and Gentlemen this is one, self evident answer as to what is the future of cancer of the cervix.

When pathology is found it must be early corrected by any of the several methods above enumerated. If the physician is incapable of doing this, he should be duty bound to refer this patient to one who can. The obstetrician's responsibility should not cease until the cervix is returned to normal. The yearly health examination offers an excellent opportunity for the examiner to ascertain the condition of the cervix in those women who have borne children. Here, again, the responsibility rests largely with the physician.

If the death rate from cancer of the cervix is ever lessened, organizations, be they medical or lay, must devote more of their energies and finances toward the education of physicians who are doing the obstetrics of today. This education must

emphasize the importance of early diagnosis and treatment of cervical cancer's progenitor lesions. All propagandas for early recognition and treatment of cervical cancer are, truly, important projects. Usually omitted in the propaganda is any reference that the recognition and correction of the progenitor lesions, soon after their formation at childbirth, should be the first aim of effort in the elimination of cervical cancer.

Prophylaxis of cancer should have an equal emphasis with diagnosis and treatment, yet, so many times in the literature is this most important phase of cancer elimination relegated to the background or absolutely ignored.

The similarity of the present organized fight against tuberculosis and the possibilities with such an organized effort against cancer are noteworthy.

I believe there already exists in State, County and Municipal governments an organization which is as fully capable of assuming the responsibility for the fight against cancer as it was when it assumed the liability for the fight against tuberculosis.

State, County and Municipal governments have a Department of Health with the broad function of prevention and cure of such conditions that are detrimental to the health of its citizens. To the Department of Health, therefore, should this fight for cancer reduction naturally fall.

Such a plan would offer the following advantages: 1 It would centralize responsibility. 2 It would put into operation an organization already working on health problems. 3 It would make use of an organization financially responsible to start, continue and slowly enlarge the program for cancer reduction. 4 It would carry the fight to the smallest hamlet as well as the largest of urban centers.

New York State is already at the business of trying to reduce the incidence of cancer. Its diagnostic and therapeutic facilities at Buffalo are models of competency. Even if there were several more State Cancer Institutes there would still be need for the advocated centralized Bureau of Cancer to maintain the constant educational program for both the laity and the profession. It is only by continuous educational propaganda that results can be obtained.

In conclusion, I would call to your attention the slogan of the New York State Department of Health "Public Health Is Purchasable Within Natural Limitations Any Community Can Determine Its Own Death Rate." The death rate from cervical cancer can be reduced. We should not be contented with the increasing incidence of this disease. Rather, we as individuals, organizations and communities should recognize the truth in the slogan and by a more organized effort strive to lessen the death rate of this formidable disease.

VINCENT'S OTITIS MEDIA IN INFANCY

By I. NEWTON KUGELMASS, M.D., NEW YORK, N. Y.

From the Department of Pediatrics, the Fifth Avenue Hospital, New York.

EARLY diagnosis, particularly if followed by local and systemic treatment of Vincent's infection in the upper respiratory tract of children, is preventive of irreparable destruction of bodily tissues. Dental literature abounds with statements indicating lack of susceptibility of children to Vincent's infection and yet over three hundred cases have been treated in our dental service in cooperation with the department in the last two years. Great emphasis has been placed upon local therapy in spite of the systemic manifestations that have been conclusively demonstrated by Tenney in the large series of cases observed in this hospital.

The present case is illustrative of the sequence of events which proceeded from a relatively innocent throat infection thoroughly neglected. The rarity of reported chronic otitis media due to Vincent's infection is undoubtedly due to the universal failure of examining bacteriologically ear disturbances. To be sure cases of noma of the ear, now practically extinct, are the results of fusiform bacilli associated with spirochetes emanating from a previously neglected otitis media but there are a series of stages between the initial upper respiratory infection and a fatal noma of the ear for Vincent's infection to be recognized and treated enough to prevent exodus.

Garcia A., a Porto Rican female infant of 19 months was admitted to the service the first of the year with a temperature of 104° which alarmed the parents after a week of her neglect with a marked upper respiratory infection. The child was malnourished and showed skeletal manifestations of old rickets. She was toxic, the breath fetid, the pharynx markedly injected, the ear drums were bulging, the nose discharging muco-pus and the neck showed considerable glandular enlargement. The gums were bleeding and studded with patches of grayish membrane which covered both tonsils. The chest revealed coarse rales throughout; the heart was normal; the abdomen was distended; the spleen was 2 c.c. below the costal margin; the liver was not enlarged. Nose and throat cultures were taken and diphtheria antitoxin administered by the resident physician.

The mouth condition was typical of Vincent's rather than of diphtheria as was confirmed by laboratory findings of fusiform bacilli and spirochetes. The child was treated

locally with 10% chromic acid and irrigated every four hours with sodium perborate. But the spontaneous rupture of both drums revealed a thin fetid discharge of the right ear characteristic of Vincent's infection. The first attempt at irrigation resulted in the return of the fluid through the nose and mouth due to large perforations involving the lower two-thirds of the drum, obviously an extension of infection through the Eustachian tubes through the naso-oro-pharynx. The early cultures from the ear showed fusiform bacilli and it was not until sometime that the spirilla were found. They live in symbiosis with the fusiform bacilli, increasing in concentration as the disease progresses. Pyogenic organisms which prepare the soil for the anorobes were, of course, also present. The ear organisms appeared identical with those taken from the various parts of the mouth and pharynx.

All attempts at local ear therapy with variously treated tampons have failed to yield improvement. The systemic manifestations revealed by the toxicity, the septic temperature, the vomiting, the anemia, diarrhea and pyuria were indications enough for systemic therapy. Neo-arsphenamin (15mg.% per kilo. of body weight) was injected once weekly as a supplementary procedure to all local attempts to clear the deep-seated Vincent's infection.

The child was given a transfusion of 160 c.c. of blood and was maintained on a high caloric base-forming concentrated dietary throughout her stay at the hospital. The Schick, Dick, Mantoux and Wassermann tests were negative. The white blood count was 14,000, polys 72, lymphocytes 24, hemoglobin 70 and red blood cells 4,000,000. The films of the accessory sinuses showed increased markings of both antra secondary to the Vincent's infection. A double simple mastoidectomy and adenoidectomy were performed by Dr. Hunt in order to save the child's hearing. The sinuses were treated with argyrol packs. In spite of all attempts to clear this persistent infection the child returned one-half year later with a chronic fetid discharge of the right ear which showed Vincent's organisms bacteriologically. The mastoid wounds were well healed, the tonsils were markedly enlarged and cryptic and were therefore removed to eliminate an obvious focus of infection that had persisted for some time.

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For list of officers of County Medical Societies, see January 15th issue, advertising page xxxii
Annual meeting, Hotel Statler, Buffalo, N. Y., May 23-25, 1932

THE GOVERNOR'S HEALTH COMMISSION

Public Health administration has been the subject of intensive study in New York State during the past two years, first by a special health commission appointed by Governor Franklin D. Roosevelt, and, secondly, by a committee of the Medical Society of the State of New York.

The Governor's Commission considered problems of public health from the point of view of

the office holder, not only in health departments but in other branches of governmental functions. The Commission recognized four general principles in the basic relation to the state of health:

1. Health deserves the consideration of governmental officials equally with education, transportation, taxation, police protection, and other governmental functions

2. The Commission proposes to extend the resources of the government in providing the means of medical care which individual patients and family doctors cannot supply,—as for example, a major operation on a crippled child and the long after-care and muscle training.

3. A responsibility for health lies with officials of local municipalities, as well as those of the State.

4. Scientific knowledge, administrative experience, and public sentiment have reached such a stage of development and evolution that a group of thoughtful men can devise a practical system of health administration suited to present conditions.

The personnel of the Governor's Health Commission consisted of men and women whose experience was along the lines of administration in distinction from the active practice of scientific medicine. This fact is of great importance in comprehending the true significance of the Commission's report. The suggestions of the Commission may be taken to be those which legislators and officeholders generally will be inclined to adopt.

The report of the Commission also had the great value of being a concrete expression of general principles whose interpretations have varied widely among different groups whom they effect. The report was like a preliminary sketch of a sanatorium, or the outline of a play which is subject to change as the plot develops.

After the report of the Governor's Health Commission had been published in the Spring of 1931, it was considered by a committee of the Medical Society of the State of New York which studied it from the point of view of the great body of physicians who are engaged in the active practice of medicine. They continued their investigations over a period of six months, and met in several sections of the State, and urged the representatives of county medical societies to express their view regarding the practicality of the suggestions of the Governor's Health Commission. The testimony which they took filled 16,000 typewritten pages, whose substance was summarized in a report which was published in the *NEW YORK STATE JOURNAL OF MEDICINE* of January first, 1932. This report was considered at a special meeting of the House of Delegates on January 14, and was approved with little or no change, as is shown by the minutes which are published in the *Journal* of February 15, 1932, pages 213-225. The report of the committee and the minutes of the House of Delegates constitute the authoritative opinion of the medical profession of the State of New York so far as any group of physicians may reflect the attitude of those whom they represent.

The members of the committee and the House of Delegates were in general agreement with the four basic principles assumed to exist by the Governor's Health Commission; but they kept in mind certain qualifications and explanations of their own interpretation of those principles:

1. While physicians recognize the responsibility of lay officials in public health, they are willing and desirous that their medical societies, through accredited representatives, shall advise public officials, just as individual physicians advise individual patients. Responsibility for giving advice rests upon the physicians, or their societies; the decision regarding action to be taken rests upon the patients or the officials.

2. Provision for medical care shall not include the development of a system of family doctors paid by the State, as in Germany and England. Whatever the system of medical administration, the actual care of the sick requires the contact of an individual doctor with each individual case. Physicians insist on the preservation of the individuality of both the doctor and the patient; but they also insist on the observance of certain standards in both science and methods.

3. While physicians believe in the principle of home rule, and are opposed to the exercise of drastic mandation by the State over local municipalities, yet physicians also recognize the necessity of the observance of standards of practice, administration, and conduct of State-wide application. The happy coordination of voluntary standards with mandation will depend largely on diplomacy applied to each individual case.

4. Physicians agree that it is possible for a group of thoughtful men to devise a practical system of health administration suited to present conditions; but they have an opinion regarding the personnel of that group. They believe that it should not be composed of public health administrators only, nor, on the other hand, of practising physicians only. Public health administrators form one army which is attacking disease, while practising physicians form another independent of the first. Action, effective and happy, will begin when the two armies act in coordination, with a common plan and understanding.

The Governor's Health Commission and the committee of the Medical Society of the State of New York, have studied the subject of health administration from the standpoint of two independent armies. There is no indication that either army will engulf or displace the other; there is every indication that each will conduct its departments of intelligence and planning with the full knowledge and cooperation of the other.

STANDARDS OF MEDICAL ARTICLES

Medical journals frequently publish the standards for judging the availability of articles submitted for publication. There are rules for the form of the manuscript,—it is to be written with a typewriter, double spaced, and on only one side of the sheet. But if this rule were enforced, some excellent papers, especially cast reports, would be rejected. Some authors do not have the time, opportunity or inclination to have their papers typed by an expert.

Some journals require their contributors to follow certain medical dictionaries in spelling, capitalization, and punctuation, but not the least of the difficulties in the enforcement of this rule is the disagreement among the dictionary makers, and even the changing standards adopted by the dictionary makers in successive editions.

The editors of the *NEW YORK STATE JOURNAL OF MEDICINE* would prefer that the outward form of the manuscript should be such that the printer can follow in every detail. But after all facts are what are desired, and if they are pertinent, they will be used no matter what their form of transmission may be. The editors are always ex-

pected to exercise their prerogative to edit, abstract, and rewrite the items which are included in news notes and reports. The editors are also gratified at the cordial response of contributors of scientific articles to suggestions regarding changes in the form of their papers.

Each journal is adapted to a certain class of readers. The question uppermost in the minds of the editors of this Journal is "Will the articles help the general practitioner to practice medicine?" The family doctor, for example, is interested in reports of cases rather than the literature of diseases, and he will profit by the positive rather than the negative features of a case. He is likely to be disappointed if the article does not report a series of cases illustrating the salient points of a disease including even the failures and confusions in diagnoses. Medical editors as well as readers are prejudiced against articles written from books rather than actual experience.

A medical editor always likes to have on hand a number of short snappy, clinical reports from half a page to two pages in length which he may use in fitting the articles to the printed page.

LOOKING BACKWARD

This Journal Twenty-Five Years Ago

Definition of the Practice of Medicine. The Education Law of the State of New York, Section 1250, defines the practice of medicine as follows:

"A person practices medicine within the meaning of this article, except as hereinafter stated, who holds himself out as being able to diagnose, treat, operate or prescribe for any human disease, pain, injury, deformity or physical condition, and who shall either offer or undertake, by any means or method to diagnose, treat, operate or prescribe for any human disease, pain, injury, deformity or physical condition."

This Journal of March, 1907, comments on a decision of the Appellate Division of the Supreme Court, affirming a conviction for the illegal practice of medicine, and says in the course of a lengthy opinion:

"The appeal was based upon the contention that he was not guilty of practicing medicine within the meaning of the law, in that he neither

gave nor applied drugs or medicines or used surgical instruments. The judgment of the Appellate Court is, that, to confine the definition of the words 'practice of medicine' to the mere administration of drugs or the use of surgical instruments would be to eliminate the very cornerstone of successful medical practice, namely, diagnosis. This court holds that it would rule out of the profession the eminent men whose work is confined to consultation and diagnosis. Diagnosis is an integral part of both the study and the practice of medicine. The court, citing the instance of consumption, which may, if discovered in time, be arrested and eradicated by simple hygienic treatment, and that in the treatment of this disease drugs have been practically given up propounds the question, 'Would the physician, in such a case, who by his skill discovered the incipient disease, advised the open-air treatment and refrained from administering drugs, not be practicing medicine?'



MEDICAL PROGRESS



The Acidosis Treatment of Inoperable Malignant Tumors.—Willy Meyer, writing in the *American Journal of Surgery*, January, 1932, xv, 1, states that in his recently published book on "Cancer," he attempted to show that for inoperable cancer acidosis is the remedy. He expresses the opinion that the alkalosis in the cancer patient has been turned into acidosis by fever, Coley's fluid, starvation, artificial hyperemia, induced inflammation, the administration of parathyroid extract, etc., This theory has been worked out experimentally and applied clinically by B. Fischer-Wasles in Germany. Its principal features are the breathing, by means of a tight-fitting mask for two to four hours daily, of a gas mixture composed of pure oxygen plus 4.5 per cent carbon dioxide, combined with intensive deep x-ray therapy of the primary tumor and of its metastases after the Holfelder depth-irradiation method; the administration of large quantities of hydrochloric acid, in liquid form or in tablets, three times daily, and, when indicated, ultraviolet irradiation of the entire body for the purpose of activating the reticulo-endothelial system. Meyer describes in detail a case of inoperable cancer, demonstrated at exploratory operation, in which this treatment resulted in an apparent cure, and refers to other cases in which similar results were obtained. He expresses the opinion that further clinical experience will likely demonstrate that the combination of this acidotic treatment with other methods which are known to have favorably influenced inoperable malignancy will be of benefit.

Besides the deep x-ray treatment he mentions particularly prolonged artificial (synthetic) fever. A high frequency apparatus for this purpose is now on the market. Meyer believes that cancer is a systemic disease, is not infectious, and that it can grow in an alkaline medium only. Alkalinity in conjunction with other causes favors the appearance of the tumor whenever a chronic local irritation is present. As a prophylactic measure local stasis must be prevented at all hazards. Local stasis, with its inevitable consequence of local coagulation of blood and of lymph, favors the formation of a focus, which in turn causes the formation of cancer. Malignant tumors do not occur, or at least very exceptionally, in continuously active organs with a massive circulation of blood and lymph. The biological acidosis treatment of inoperable malignant tumors, as described here and in the author's book, must be worked out further by cooperative efforts of the medical and affiliated professions.

Recklinghausen's Disease with Paraplegic Syndrome.—An unusual case of Recklinghausen's disease is described by Benedetto De Luca, in the *Riforma medica* of November 9, 1931, in which the symptoms unmistakably pointed to an involvement of the spinal cord. The patient, a man of 32, had observed the first cutaneous pigmented spots of the disease at the age of 14, with a fibrous nodule here and there. About 4 years before the fatal termination of his malady, he began to have a sense of weakness and pain in his legs, which was followed some months later by motor disturbances so severe that he was liable to fall suddenly when a leg, more usually the right, would unexpectedly go out from under him. Paresthesias appeared in his feet, and hypesthesia of the right hand. In the third year functional disturbances of the rectum and bladder appeared, and he became more or less incontinent. At the time of observation he was in a condition of spastic paresis of his lower limbs, and mental examination showed a weakening of his faculties. Tuberculosis and syphilis of the spine could be excluded, and the differential diagnosis was accordingly restricted to the group of tumors. The slow evolution of the disease at once excluded a malignant tumor—carcinoma or sarcoma. On the other hand a diagnosis of neurofibromatosis with spinal cord localization appeared to account for the syndrome present. A few cutaneous nodules excised for biopsy purposes were found to be fibrous nodules rich in vessels and traversed by numerous small nerve trunks, thus confirming the diagnosis of neurofibroma localized in the spinal cord. The patient's life dragged on for another 7 months, during which spastic paresis changed rapidly into flaccid, accompanied by signs of degeneration, until death ensued. Autopsy was refused, but there was every evidence that the case was one of those exceedingly rare ones in which Recklinghausen's disease attacks the spinal cord. De Luca has found only 3 such cases reported in literature. The compressive tumor must have been located in the lumbosacral segments of the spinal cord. While the syndrome suggested an extramedullary tumor making pressure upon the medullary cone, there was nothing to prevent the idea that new growths had developed within the nervous tissue of the cord itself. In any case compression had caused destruction of nervous tissue, and accounted for the spastic paraparesis which progressed to flaccid paraparesis. The only treat-

ment possible is operative, and in this case the patient's cachectic condition made such a course out of the question

Mistakes in the Diagnosis and Treatment of Syphilis—During the past three years there have come to the attention of Austin W. Cheever and William D. Wheeler over a hundred mistakes in the diagnosis and treatment of syphilis for which there was no reasonable justification. After citing illustrations of such errors, the authors suggest that intensive propaganda by medical schools, public health institutions, hospitals, and other agencies is essential to acquaint physicians with the methods of modern syphilology. The following list, headed "Lest We Forget" might be distributed to every physician to be kept on his desk.

"1 Consider every genital ulcer as syphilitic unless definitely ruled out by repeated dark field examinations

"2 Remember that extragenital chancres are not uncommon and may be located any where on the body

"3 Bear in mind that a chancre in a woman may be located in the vagina. A painstaking thorough search should be made in all cases

"4 Have routine laboratory tests, such as the Wassermann and Hinton, made on the blood of all your patients, and don't forget that one negative test does not rule out syphilis

"5 Have the blood of every pregnant woman examined for syphilis in early pregnancy. A positive blood test would indicate immediate treatment for the expectant mother and incidentally for the fetus

"6 The time to discover a congenital syphilitic is before the syphilitic is born, that is, treating the syphilitic mother early in pregnancy, all through pregnancy, and then continuing the treatment of the child for a number of years

"7 Treatment in all cases of syphilis should be prolonged, intensive when necessary, and always in keeping with modern procedure and progress. One negative blood test during treatment does not mean a cure. About two to five years are necessary before a probable cure can be effected. In most cases lifetime observation is advisable

"8 Examination of spinal fluid is essential in every case of syphilis and is often the only means of detecting incipient neurosyphilis

"9 Always suspect syphilis. In any of its stages it may simulate other diseases

"10 Whenever in doubt concerning the diagnosis of syphilis consult a syphilologist"—*New England Journal of Medicine*, December 24, 1931, cv, 26

Study of a Case of Parathyreoprivic Tetany.—Marcel Labbé, R. Boulin, and A. Escalier have been able to follow up over a long period, not only clinically but also from a biochemical and a chronaxial standpoint, the case of a man of 22 who had an acute spontaneous attack of tetany a week after a thyroidectomy was performed. He remained in a state of chronic latent tetany in the course of which tetanic contractions could be reproduced by the hyperpnea test. The biologic reactions studied at the moment of the crisis of tetany (hyperalkalosis, reduction of calcium, exaggeration of chronaxia) were characteristic. Treatment by calcium chloride and injections of parathyroid extract produced an excellent result, such that provoked crises of hyperpnea no longer evoked crises of tetany. The patient remained, however, in a state of latent tetany one year later, as was shown by biochemical examinations, by the value of the chronaxia, which was clearly increased, and lastly, by the ease with which an attack could be rapidly reproduced at will. This was a state of alkalosis, which became exaggerated during the attacks. The alkaline reserve, which is sometimes rather high during the period of latency, was lowered during the hyperpnea tests: the blood pH rising from 7.31 to 7.61 at the moment of the crisis, and the alkaline reserve dropping from 65.1 to 55.36 volumes of carbon dioxide per cent of plasma. During the attack the urine showed increased alkalinity. The blood calcium was generally lowered. In the chronaxial disturbances it was observed that there still existed, during the period of latency, a manifest increase, stronger on the right side, where the contractures predominated, and that it was of triple or quadruple order. In the most recent test, however, the chronaxia had begun to fall, a small fall being followed by a less rapid rise than before, in a longer curve, although reaching the same height, with the last part of the curve remaining the same. It seems, therefore, that a certain improvement was shown by this less rapid increase of chronaxia, suggesting the possibility that a compensatory hyperplasia had permitted the organism to recuperate a part of the parathyroid secretion and its endocrine equilibrium, although such compensation was far from being complete. The authors call attention to the great value of the examination of the chronaxia, for the fineness with which it reveals the most minute latent troubles.—*Revue française d'endocrinologie*, October, 1931

Injuries to the Crucial Ligaments of the Knee-Joint—Ivar Palmer reports two cases of injury to the crucial ligaments of the knee-joint and suggests a new method of repair of

the posterior crucial ligament. The first case was that of a motorcyclist who sustained a blow on the front of the leg with the knee flexed. Very soon afterward a positive "drawer sign" backwards was obtained spontaneously on active flexion of the knee-joint. The diagnosis of rupture of the posterior crucial ligament was confirmed by the roentgenogram. Cases of injury in which it has been possible to make the diagnosis immediately after the accident have not heretofore been published. The second patient was admitted five weeks after the accident and then presented signs suggestive of a lesion of the menisci. The "drawer sign" could not at first be obtained, but became evident under anesthesia, being positive forward. Arthrotomy revealed rupture of the anterior crucial ligament. These cases emphasize the following points. The only typical sign of injuries to the crucial ligaments is the so-called "drawer sign." This cannot generally be demonstrated until hemarthrosis and muscular contraction have disappeared, but it may also be positive for a short time immediately after the trauma. Occasionally the sign can be demonstrated only during anesthesia. The author suggests a plastic operation for replacing the posterior crucial ligament. He makes use of the lateral half of the semimembranous tendon split lengthwise; the muscular attachment on the posterior surface of the tibia is found on the medial side of the lower attachment of the posterior crucial ligament. On the lateral aspect of the muscular attachment, close to the posterior tibial border, the tendon is guided with retained lower attachment through the posterior wall of the capsule, then retrosynovially upward to a drilled canal through the inner femoral condyle which emerges into the intercondyloid fossa at the site of attachment of the posterior crucial ligament, *i.e.*, immediately behind the line of attachment of the synovial membrane. It is then fixed to the internal lateral ligament on the outer side of the internal femoral condyle. Judging from his experiments on the cadaver, the author thinks that this operation should yield functionally good results.—*Acta Chirurgica Scandinavica*, December 3, 1931, lxix, 1.

Treatment of Chronic Deafness with High Frequency Sound Waves.—Hamm reports improvements in this method which have now made it applicable to many cases of otosclerosis. The prognosis is unfavorable only where the Rinn test is absolutely negative. This treatment, which he has previously described, must never be employed for less than 4 weeks to 2 months. After improvement has set in, a weekly or biweekly treatment is still desirable for 1 or 2 months more. The usual treat-

ment is 2 or 3 sittings a week, of a quarter of an hour each, one ear after the other. Longer sittings have no advantage over these. The external ear is thoroughly cleaned and dried before the irradiation begins. The largest possible speculum should be used which can be inserted without pressure upon the tympanum. It is advisable to use the highest frequency (250,000 Hertz), as this gives more lasting results. With the exception of one case, in which this frequency was followed by tinnitus, there have been no disadvantageous results, even children bearing it without reaction. In children the tonsils should first be removed, since where this is not done, the deafness is likely to return the next time the child takes cold. Hamm has been using this method, carried out with a Mülwert apparatus, for over 2 years, and he reports that he has a number of patients whose improvement has persisted for 2 years without relapse and without renewal of treatment. As a general precaution, he would give a repetition of the treatment after a lapse of 6 months, as he has seen cases in which the result of the second treatment was successful where the first had failed. Contrary to Mülwert's own experience, he has demonstrated that the irradiations penetrate not only the tympanum but also the intact skin. The difference in these experiences is due to the fact that Mülwert's observations were made on cadavers, and Hamm's upon the living ear. Even a tympanum pathologically changed by old age presents no obstacle to the rays. One of his illustrative cases is that of a physician who had been suffering with gradually increasing impairment of hearing for 10 years, which became complete deafness after an attack of grippe in February, 1931. After a 6 weeks' treatment he could hear a watch at 2 cm., whispering at 12 cm. and conversation at 65 cm. distance, and reported 5 weeks later that the improvement had been maintained. Such cases are frequent.—*Klinische Wochenschrift*, December 5, 1931.

Dehydration Fever of the New-Born.—F. H. Clark analyzes 60 cases of dehydration fever of the new-born, also known as inanition fever, transitory fever of the new-born, thirst fever of the new-born, thirst hyperthermia, and exsiccation fever. The highest fever recorded in this series was 106.8° F. The greatest number of cases occurred in April and November. The summer incidence was lower than the winter. The dryer heat of artificial heating in the winter months probably contributes to the higher winter incidence. Of the 60 cases 37 were males, with an average weight of eight pounds and five ounces, and 23 females, with an average weight of seven pounds and eight ounces.

The average loss of weight was 15 ounces. The largest loss of weight was two pounds and four ounces. Of the 60 cases 38 were the infants of primiparae, 12 were second born. The greater difficulty of labor in primiparous patients is contributory. The part that the type of delivery plays does not seem to be significant. Cesarean babies appear to be affected because of the shock of the operation delaying the milk supply. The symptoms and signs appearing most frequently in the mild cases are moderate fever, hoarse cry, dry and lusterless mucosa of the mouth and throat, clean red tongue with prominent papillae, and dry, wrinkly skin. The severe cases are characterized by high fever, squeaky or no cry, hyper-tonicity and dusky color. The treatment consists in supplying fluid, preferably by mouth. The author uses a 5 to 10 per cent lactose or dextri-maltose solution. In extreme cases and those in which the infants do not suckle well, this may be augmented by saline solution subcutaneously and by enema, leaving in two or three ounces if possible. It should be seen that the infant gets sufficient breast milk, and, if not, the intake should be complemented with a formula. The overheating of nurseries should be more carefully guarded against, particularly in unseasonably warm waves. The humidity should be watched in winter. Large babies particularly should be given fluid freely during the first two or three days of life following the usual nursings. Infants of average size, losing over 12 ounces, should be given complementary formulas.—*Archives of Pediatrics*, December, 1931, xlviii, 11.

The Frequent Occurrence of Abnormal Cutaneous Capillaries in Constitutional Neurasthenic States.—In a study of 500 cases showing no evidence of organic peripheral vascular lesions other than perhaps a sclerosis commensurate with age, J. Q. Griffith, Jr, found 31 cases in which the diagnosis included a functional neurasthenic condition. The method employed to determine the capillary condition was that of examining microscopically the skin just back of the finger nail, after covering it with cedar oil to render the epidermis transparent. Of the 500 cases 8 showed a definite morphologically abnormal capillary picture, and these 8 were included in the 31 cases with a diagnosis of functional neurosis. In the 8 cases showing the abnormal capillary picture the diagnoses were as follows: simple psychoneurosis, 2; psychasthenia, 1; neurocirculatory asthenia, 2; neurasthenia and hyperthyroidism, 1; vasomotor neurosis and essential hypertension, 1; infectious arthritis and infected tonsils, 1. In the last case the history indicated a definite neurosis. In all the 8 cases the functional

neurasthenic quality had been present from childhood and peripheral vasomotor instability was a prominent symptom. Of the 31 patients with functional neuroses, 23 were found perfectly normal as concerned the nail-bed microscopy, and their neuroses dated from an emotional or psychic shock and not from early childhood. Griffith makes the deduction that in the absence of any recognized peripheral vascular disease, abnormal cutaneous capillary configurations, as seen in the nail-bed, are most apt to occur in conjunction with neurasthenic states dating from early life and with constitutional nervous instability.—*American Journal of the Medical Sciences*, February, 1932, clxxxiii, 2.

Endometriosis.—Halbert G. Stetson and John E. Moran call attention to the fact that the largest percentage of endometrial tumors have occurred in the ovary, the retrogenital space, the Fallopian tubes, and the uterus. Other localities are the umbilicus, small intestine, rectum, broad and round ligaments, groin, cervix, vaginal wall, appendix, wall of the bladder, and the epiploic appendages. A few have occurred in an abdominal scar following operation. Endometrial lesions have commonly been mistaken for carcinomas, which they resemble in the routes of dissemination. Graves has reported four cases in which oöphorectomy resulted in retrogression of ectopic foci. This type of treatment seems feasible in rather diffuse endometriomatous lesions where extirpation of the mass is impossible. The authors' first case is of this kind. The patient, a woman aged 33 years, developed symptoms of intestinal obstruction. On opening the abdomen a cystic tumor presented at the site of the incision. It was apparently of parovarian origin. The tumor and left ovary and Fallopian tube were dissected out, when it could be seen that the sigmoidal obstruction was due to a circular growth at the junction of the sigmoid and the rectum. It was felt that it was impossible to extirpate the growth. A left inguinal colostomy was made and the abdomen was closed. Later the right ovary, Fallopian tube, and an ovarian cyst were removed. The patient recovered and is well in every way five years after the operation. She has one movement daily through the colonic fistula and a small normal bowel movement each day without discomfort. The second case was one of endometrioma of the umbilicus in a patient 35 years of age. The preoperative diagnosis was probable infected urachus. The umbilicus was removed. The specimen consisted of a piece of skin, measuring about 2 by 2 cm. with an umbilicated center, together with the underlying tissue, to a depth of about 1.5 cm. Sections showed fibrous tissue with small pockets of gelatinous material.—*New England Journal of Medicine*, January 14, 1932, cxcv, 2.



LEGAL



A CHALLENGE TO THE BAR

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The members of the medical profession, when brought into personal contact with the operation of our legal machinery, are often amazed at its delays and technicalities. It is logical that they should compare the marvelous progress in their own profession with the lack of progress on the part of the legal profession. As intelligent observers of the workings of our courts, many of them have given voice to the very just charge that changes are needed in the legal machinery of our courts and that they should be made. The law too often provokes the well-founded criticism that a party to a lawsuit is deprived of a fair and prompt determination of the issues therein involved. The answer is frequently given that such delays and injustice are unavoidable and must be expected as the practical working out of controversies in our complex civilization. Suggestions of change are often silenced by the statement that the present legal machinery has been long organized in its present form, and that it must not be altered in its traditional manner of operation for to do so would destroy the very root of our judicial system.

What we have said thus far will serve to introduce a scholarly and interesting paper by Judge Frederick E. Crane of the New York Courts of Appeals, read before the Bar Association of the City of New York recently. His remarks will be of interest not only to lawyers and judges, but to those outside the profession as well. Judge Crane's paper is filled with plain, ordinary common-sense. In it he points out the need for constructive changes in the law today. We believe this paper to be of such interest that we intend to quote at length from it in this editorial.

The learned Judge points out that " . . . in this day of change and of challenge our own system of administering law is being questioned. The idea is being spread through address, radio and press that somehow something is wrong with our system of justice in this land. It is being challenged. Heretofore the law threw down the gauntlet; it challenged the divine right of kings and the feudal system; it sought to establish and did establish the security of life, liberty and property of the citizen, and the constitutions and statutes under which he might pursue his individual choice of occupation and his own happiness. Now, however, it is said the law has become static; justice cannot be speedily obtained, if ob-

tained at all; the law in its turn is being challenged."

Every practicing lawyer will be in entire sympathy with Judge Crane when he discusses the admitted fact that many controversies which were formerly decided by the courts, have now entirely passed into the hands of arbitration boards, commissions and other bodies selected by the litigants themselves.

"Merchants no longer wait upon the tedium and the uncertainty of legal proceedings. With courts established and judges paid high salaries to decide the disputes between business men, they will have none of it, and have passed arbitration laws whereby their disputes and their agreements will be settled by laymen outside of the court. So we now have not only in the state, but in the nation, compulsory arbitration law. Think of it, the law gives the judge, the jury and volumes upon the technical law of contract, shelves of books upon the law of evidence, and the merchants of this land have arrived at the point where they want none of it; they are through with it; it is useless, too cumbersome, has become like the laws of France before the French revolution—a complication beyond solution. The members of the Produce Exchange, of the Stock Exchange, silk and woolen merchants now take their differences to a layman, a silk merchant, grain merchant or any other kind of business man who hears both sides without any regard to the rules of legal evidence or to substantive law regarding acceptance or rejection or the passing of title, and decides what one man shall pay the other. Under this arbitration system now in vogue by the exchange and by the business men, we do not find that the heavens have fallen or that the results are to blame for the business depression. Our system is being challenged.

"Over in Kings County they have gone so far as to establish a Good Will Court, a voluntary organization which meets every Monday night to settle all kinds of disputes which may be brought before the Court by agreement of the parties. It is presided over by different judges and referees each week. In the past three years, so I am credibly informed by Municipal Court Justice Nathan Sweedler, it has disposed of over four thousand cases.

"Before this court, settlements have been made running as high as six hundred or seven hundred dollars in a case. The judges have included

priests, ministers, bankers, university professors professors of sociology, both men and women"

Judge Crane discussed the interminable delay encountered by litigants in certain of our courts, and commented

"It is about time that we lawyers and judges commenced to clean up and tried to find some remedy for the trouble. We have had much to say this year about our Federal Constitution and look to it as the main guarantee for our civil rights. Like provisions dealing with individual rights are embodied in the state constitution. But what is the good of guaranteeing rights if there is no means of enforcing them? Wrongs which may persist for a lifetime deny the rights guaranteed. A right needs a speedy means for enforcing it, and a wrong, immediate power to overthrow it. Delay is the denial of one and the encouragement of the other. There is nothing new in this idea which is as old as the hills. Repetito mater studiorum

"The lawyers tell me that their clients are obliged to settle their cases at nominal figures, because they are unable to wait for litigation, wait until their case is reached for trial. Financial reasons demand a sacrifice for their rights. As likely as not after a verdict a case is carried up on appeal and reversed either by the Appellate Division and the Court of Appeals, and the same procedure starts all over again. Only those who seek delay or else have money or have some strike litigation can afford to wait and take chances."

A constructive suggestion was voiced by the speaker with respect to the disposition of the thousands of automobile cases that clog the court calendars, and present a real problem in practically every county in our State. He said

"The thought has occurred to me, however, that we might be able to extend the Compulsory Arbitration Law to include a certain number of our tort actions. The number of automobile accident cases has added materially to the number of the cases upon our calendar. While the parties might agree to have such a case heard by a referee, they seldom, if ever, consent to such a procedure. As in arbitration upon contract, so in tort, to make it effectual, there must be some method of compulsion. In the ordinary negligence case the constitutional right to a trial by jury bars the way to forcing the parties to try their issues before selected arbitrators or referees. However, I am under the impression that this constitutional provision will not stand in the way of compelling defendants to arbitrate in automobile cases. The Court of Appeals held in *People v. Rosenheimer* (209 N. Y. 115) that the operator of a motor vehicle exercises a privilege, which may be denied him, and not a right, and in a case of a privilege the Legislature may prescribe on what conditions it shall be exercised. We now tax the owner of an automobile and re-

quire him to take out a license. We also require him to tell the party injured who he is, and to also inform the police authorities, all of which is contrary to certain constitutional rights against self-incrimination. What is to prevent the Legislature from also requiring the owner of an automobile, in taking out his license, to consent to arbitration in case of accident, and also to compel the insurance company insuring such an owner to have such a clause in their policies? We now require the insurance company to put a clause in their policies agreeing to pay the judgment even if the insured be insolvent (section 109 of Insurance Law). At least we would have taken one step toward ridding our calendars of these automobile accident cases. I doubt whether the Legislature could compel the injured party, the plaintiff in these cases, to consent to arbitration (Sec. 2, Art. 1, New York State Constitution), but many would so consent if the defendants were compelled to arbitrate, rather than wait years for a trial. Public sentiment and the attitude of the Bar would soon compel these plaintiffs to seek this relief. And what a speedy disposition there would then be of all these automobile accident cases when the court could appoint arbiters without limit—a lawyer, a doctor, a layman—who would dispose of the case as satisfactorily, yes, more satisfactorily than most of the courts and juries."

Endless appeals which often tie up litigants for years and result in many instances in nothing but delay of the trial or fruitless retrials, were discussed at some length by Judge Crane, and part of his remarks with respect thereto were as follows

"A trial is a matter of right, and an appeal is a matter of favor. The appeal should be the exception and not the rule. Litigation, unless for some very good reason, should end with the trial Bench. Speaking for myself, and for myself alone, and not in any way intimating that I am expressing the views of any other member of my court, let me say that the presumption on appeal should be that the order of the judgment is right unless some very good reason can be shown to reverse it. Cases should not be obliged to run the gauntlet, submit to re-examination, to substitute able appellate judges as counsel for the parties. Unless it is pointed out or clearly appears that serious error has been committed, some injustice done, or a fundamental principle denied, there should be an affirmance. So called interesting cases many times add to the technicalities instead of the usefulness of the law. The main view should be to end litigation unless something decidedly has gone wrong. I think the day is fast approaching, if not already here, when technical errors in the admission or rejection of evidence are brushed aside, if the result appears to be right. The attitude today upon the part of the

profession is an impatience with motions or technical practices which delay the trial of the cause. Hardly any case of importance can be tried without some error."

"It makes a great deal of difference, however, to some unfortunate litigant, who has only one case in a lifetime, which involves his entire livelihood or his reputation or his fortune, if he has to wait four years before his case can be heard. It is a denial of justice and of all the rights guaranteed him by our constitutions. Far better that his case be heard speedily and disposed of than that some very fine opinion be handed down by an appellate court, meeting with the approval of the press, of schoolmasters and publicists."

"A very small proportion of the cases ever go up on appeal. The main or most important thing in the administration of justice, outside of fairness and impartiality, is a speedy hearing of the cause. Mark you, the pages of history show more than one instance where the impatience of a people has broken through the refinements and delays of the law to establish a cruder but a more speedy tribunal for the hearing of their causes. The court, after all, is but a substitute for force, and far better is it that a litigant be heard by one not too learned in the law than not be heard at all."

The learned Judge then took up and considered at some length the abuses that are apparent, even to a layman, in the trial of many of the actions in

our courts—the unnecessary length of time frequently taken by counsel in the selection of a jury, the endless and fruitless cross-examination of witnesses are the subject of pertinent comment. Judge Crane suggests that the trial court should be given more power to restrict such practices, and that the exercise of such power should be supported by the appellate courts unless the matter presents a gross abuse of discretion. It is to be hoped that not only Bench and Bar, but those outside the profession as well, will hearken to the concluding observation of Judge Crane when he said:

"Thus men differ, as you will differ with many, if not most, of the recommendations I have made tonight. We need not fear our differences. No danger will ever come to this country or to our administration of law through our differences. Wide-awake, thinking men are bound to differ. Our danger lies in our indifferences. The whole point of my address tonight is to beg of you not to be indifferent to this restlessness upon the part of our people in this city without administration of law, and that we seek with the exercise of all our powers for a remedy to the delays in litigation."

"May I close with these words from Arthur Stanley Eddington, professor of astronomy at Cambridge, which are as true regarding us and the law as of the scientist and his work: 'You will understand,' said Eddington, 'the true spirit neither of science nor of religion unless *seeking* is placed in the forefront.'"

MALPRACTICE CLAIMED IN TREATING INDUSTRIAL ACCIDENT

The plaintiff in this case, while at work in his employment as a laborer on a construction job, was struck in the leg by an iron beam and suffered a fracture of the femur. He was taken to a dispensary and there given first-aid treatment by the defendant doctor and then removed to a hospital where, under the care of the same doctor, the fractured femur was reduced and traction applied. The patient remained in the hospital for a considerable period of time and during the entire period of hospitalization he was an intractable patient, refusing to obey the orders and instructions of the physicians and nurses, removing traction from his leg, and tearing away the splints and later the plaster casts.

Subsequently an action was instituted against the defendant, claiming that due to his negligence the plaintiff's leg was shortened about 1 3/8 inches and that the leg was caused to be weak, deformed and crippled. The answer interposed on behalf of the defendant

was a denial of all allegations of negligence and contained the special defense that the plaintiff had already received complete compensation for his injuries from his employer under the Workmen's Compensation Act.

The action duly came on for trial before a judge and jury, and at the end of all the proof on the part of the plaintiff a motion was made by counsel for the defendant to dismiss the complaint. The court directed judgment in favor of the defendant without requiring him to put in any evidence as to whether or not he was negligent, upon the sole ground that the plaintiff had received an award made by the State Industrial Commission pursuant to the Workmen's Compensation Act for his injuries, which award included all the injuries sustained by the plaintiff, he having failed to establish by his testimony that he suffered any injuries in addition to those sustained from the accident which occurred during the course of his employment.



NEWS NOTES



COMMITTEE ON LEGISLATION

BULLETIN NO 2

February 3, 1932

Since our last bulletin the following bills have been introduced:

Senate Int No 410—Williams, to amend the Education Law relative to medical inspection by making the section apply also to schools other than public schools and for transferring duties of education boards and trustees to health authorities. Senator Williams in this bill has brought up the question again as to whether school medical inspection should not be a responsibility of the Department of Health rather than the Department of Education. The Governor's Special Health Commission debated this subject for quite a while and in their report state that "school health service logically should be a continuation of health services for infants and pre-school children. Records of examinations and medical history should be continuous."

Senate Int No 415—Pitcher, concurrent Assembly Int No 591—Austin, would amend the Mental Hygiene Law by providing among other things that license issued to private institution for care or treatment of persons with mental disorder or defects or for mentally incompetent epileptics may be for a definite period. This bill was drafted by the Department of Mental Hygiene and is intended primarily to clarify the language in the law at present.

Senate Int No 417—Lord, Assembly Int No 483—Jenks, to amend the Tax Law by providing property held for hospital purposes in name of corporation organized to manage hospital for benefit of city shall be exempt from taxation to same extent as property of corporation organized exclusively for hospital purposes.

Senate Int No 444—Hanley, Assembly Int No 526—Ostertag, would authorize a superintendent of a public general hospital to maintain a revolving petty cash fund not to exceed \$100.00. The object of this bill is to assist particularly the state aided hospital at Warsaw, but probably will be applicable to all of the state-aided hospitals.

Senate Int No 450—Burchill, amends the Public Health Law, providing certificate of birth must contain photograph of finger prints of mother and foot prints of child. Last year Senator Love introduced a bill that differed from this one in stipulating that such procedure was to be followed only if the child is born in a hospital.

Senate Int No 467—Wheatley, Assembly Int

No 604—Otto, to amend the Public Health Law by striking out limitations on compensation of health officers. This bill originated with Mr. Otto. It has been amended so that it now reads that 15c per capita shall be the maximum amount paid a health officer. It is only a few years since this law requiring a minimum of 15c per capita was enacted and it does not seem to us that times have changed so much that it should not be considered a maximum amount.

Senate Int No 533—Twomey, Assembly Int No 598—Gimbrone, to amend the Education Law relative to the sale of poisonous or habit-forming drugs or chemicals. Messrs Twomey and Gimbrone had this bill last year. It passed the Senate and was referred to the Assembly Education Committee, from which it never emerged.

Senate Int No 546—Nunan, Assembly Int No 684—Esquirol, would amend the Workmen's Compensation Law by providing compensation shall be payable for disabilities or death of an employee resulting from any occupational disease. Last year this same bill was carried by Senator Love and Assemblyman Esquirol.

Assembly Int No 464—Coughlin, to amend the Workmen's Compensation Law by adding to list of occupational diseases for which compensation is payable, all disabling diseases and disabling illnesses. You will recall that Mr. Coughlin had this same bill last year.

Assembly Int No 511—Cuvillier, to amend the Penal Law by fixing penalty for torturing and injuring animals, imprisonment for not less than thirty days and not more than one year. The object of this bill, Mr. Cuvillier says, is to "put teeth" in the law so that persons who deliberately run down dogs or other animals with their automobiles shall receive a severe punishment. His attention has been called to several instances where animals have been mistreated, and he feels the necessity of making the law more severe. It is his intention to amend this bill so as to make it clear that it shall in no way be construed as to apply to the treatment of dogs or other animals in experimental laboratories connected with educational institutions.

Assembly Int No 544—Schwartzwald, to amend the Education Law, creating a division of medicinal liquor to which is delegated powers to carry out provisions of proposed law relating to prescription, sale and use of intoxicating

liquors for medicinal purposes and appropriating \$250,000. Mr. Schwartzwald sponsored this same bill last year. It never was reported upon favorably by the Ways and Means Committee, with which it rests again this year.

Assembly Int. No. 584—Theodore, to amend the Workmen's Compensation Law to permit injured employee to provide for his own treatment and care at expense of employer. Mr. Theodore sponsored this bill last year, but it was never reported upon favorably by the Labor Committee, with which it rested.

COMMENTS

We reported last week that Senator Berg had introduced a bill—Senate Int. No. 324—providing that the period for registration of physiotherapists be extended for six months subsequent to May 17, 1932. We understand that a number of physiotherapists claim to have possessed qualifications entitling them to registration in 1926, but neglected to make application, and they have asked Mr. Berg to secure this amendment in order that they can register with the Department of Education. We do not think it wise to open the matter again; it is six years since the period of registration expired.

We also mentioned in last week's bulletin that the Department of Education invited Dr. Johnson

to bring others with him to a conference relative to the proposed bill of the osteopaths. The conference was held and it was reported that the osteopaths contemplate reintroducing their bill of last year with a slight amendment. While no action was taken, it appeared to be the opinion of the physicians attending the conference that the Society would consider it in the interests of the public to oppose the bill as they did last year. It was announced at this conference that the Department of Education contemplates requiring the osteopaths to raise their educational qualifications to the equal of those of physicians, after 1935; that is, students will be obliged to take a two-year college pre-medical course and a four-year regular course. We were informed in the Capitol yesterday that Augustus Downing, Ph.D., lobbying for the osteopaths, was seeking some person to introduce their bill.

HEARINGS

As we announced in our last bulletin, there will be a hearing on the anti-vivisection bill on Tuesday, February 9th, 2:00 P.M., before the Assembly Committee on Codes.

HARRY ARANOW,
JOHN J. BUETTNER,
MARSHALL CLINTON,
Committee on Legislation.

BULLETIN NO. 3

February 10, 1932.

Since our last bulletin the following bills have been introduced:

Senate Int. No. 624—Dr. Love; to amend the Education Law by prohibiting the sale of food in drug stores and pharmacies. This bill is even more drastic than last year's bill, in that it contains this additional sentence: "It shall be unlawful for any druggist or pharmacist to dispense soda water or other beverage on the same day that such druggist or pharmacist dispenses drugs." You may have forgotten that the sentence preceding that is the one to which great exception was taken last year, and reads: "No article of food to be consumed on the premises shall be sold or served in any drug store or pharmacy in the state."

Senate Int. No. 635—Wicks; Assembly Int. No. 793—Austin, to amend the Public Health Law relative to requirements to practice midwifery. The amendment limits the registration of midwives to those who possess a diploma from a school for midwives recognized by the State Commissioner of Health.

Senate Int. No. 636—Wicks; Assembly Int.

No. 792—Austin, is another bill introduced by the Department of Health to amend the Public Health Law relative to district records to be kept by registrars of births or deaths. The principal feature of this amendment is to require that registrars in counties where the public health work is organized under the county health unit plan shall make their report directly to the commissioner of the county health unit.

Senate Int. No. 746—Baxter; Assembly Int. No. 946—Heck, adds new section to the Penal Law, making it a misdemeanor to manufacture, sell or use certain chemical agents classified as a lung irritant, irritating smoke and screening smoke, etc., in gas, liquid or solid form, for use against person or property of another. We haven't seen the printed bill as yet, and, hence, are not in a position to make comment.

Assembly Int. No. 949—Killgrew, would amend the Education Law in regard to the practice of physiotherapy. The amendment consists in adding bacteriology and diagnosis to the list of subjects that an applicant for a license to practice physiotherapy must present a knowledge of, and stating that the method of treatment shall be "only

by means of the use of actinotherapy, hydrotherapy, mechanotherapy, thermotherapy, and electrotherapy, exclusive of the x-ray, and to diagnose and prescribe therefor." It would eliminate from the law the following: "Under the supervision of a duly licensed physician." This bill has been referred to the Committee on Education and no time should be lost by any chairman in acquainting the members of the Education Committee with the point of view of the physicians and the danger that the public would be liable to from permitting these people to practice without medical supervision.

Assembly Int No 975—Garnjost, to amend the Education Law regarding the practice of osteopathy. This is a bill identical with the bill introduced last year and will, of course, be opposed by the Medical Society on identically the same grounds, namely, that osteopaths in the past have not been trained to perform surgery as it is ordinarily construed nor have they had any training or experience in the administration of narcotics, anesthetics or antiseptics, to say nothing of serums, vaccines and antitoxins. Although there are but 362 osteopaths in the state, as we have been informed, we think it exceedingly unwise to jeopardize even such a small portion of the public as may come in contact with these osteopaths, by permitting them to prescribe or administer such powerful drugs, considering that they not only have not had training and experience in their effects upon the human body, but have been specifically trained to believe that they are harmful and possess no virtue. Make no delay in taking up the opposition that you expressed so forcibly last year with the members of the Education Committee, and we may say that there have been very few changes in the personnel of that committee. The white book may be available today and as soon as it is procurable, we shall see that a copy is sent you.

Assembly Int No 996—Stewart, would amend the Penal Law by providing that no hospital supported wholly or partly at public expense shall charge for medical services given while operating a clinic to which public is invited. Last year Senator Howard and Assemblyman Story carried

this bill. When initially introduced, it was construed as retroactive. The bill was amended to correct this and in its final reading was identical with the bill introduced this year.

HEARINGS

As previously announced the Codes Committee yesterday gave a hearing on the anti-vivisection bill. The Anti-Vivisection Society made greater effort in the last year to create sentiment in favor of this bill than in previous years, and submitted petitions said to be signed by 20,000 voters. Dr. Bayne-Jones, Chairman of The Committee on Medical Research, had invited a very impressive group of physicians to assist him in opposing the bill. Among them were Drs. Sondern, John Wyckoff, Allen Whipple, Frederick Tilney, Dr. Canby G. Robinson, of Cornell University, Drs. Simon Flexner, Florence Sabin and Peyton Rous, of the Rockefeller Institute, Drs. Geo. Whipple and John Morton, of the University of Rochester. The committee asked each physician testifying whether, in his or her experience or knowledge, cruel treatment was perpetrated upon dogs, particularly whether dogs were ever operated upon without being properly anesthetized. Naturally, all speakers denied any knowledge of such cruelty. When the proponents of the bill spoke, the committee insisted that as a basic reason for the introduction of the bill they should give at least one specific instance where cruel treatment, as described above, had been given a dog in some laboratory in New York State. Everyone who spoke for the bill admitted to the committee that he or she had no specific knowledge of that character. The committee expressed itself as inclined to believe that there was no need for an amendment to the law unless specific proof could be brought out that violations of the law occurred that could not be convicted.

In closing, may we remind you that the legislature may not be in session long and that what we do must be done quickly.

HARRY ARANOW,
JOHN J. BUETTNER,
MARSHALL CLINTON,
Committee on Legislation

LETTER TO COUNTY LEGISLATIVE CHAIRMEN

February 4, 1932

Dear Doctor

Enclosed you will find the following bills:

Senate Int No 410—Mr. Williams. This bill or a similar one has been before the legislature a number of times, but it carries a little more weight this year because the Governor's Special Health Commission for quite a while considered

the advisability of having the medical inspection bureau removed from the Department of Education and placed with the Department of Health. They did not make such recommendation, but there has been a good deal of sentiment expressed in favor of it.

Senate Int No 415—Mr. Pitcher. This bill was drafted by the Department of Mental Hy-

giene and its prime function is to clarify the law.

Senate Int. No. 444—Mr. Hanley. This bill is drawn to meet a situation that has arisen in the Wyoming County Hospital, which now receives state aid. It probably will be applicable to all state-aided hospitals.

Senate Int. No. 450—Mr. Burchill. Last year this bill was carried by Dr. Love, with the exception that it then applied only to births occurring in a hospital. It would seem to us that it would be very difficult to secure finger prints of the mother and foot prints of the baby in rural practice.

Assembly Int. No. 464—Mr. Coughlin reintroduces his bill of the last several years, making compensable any condition or disease arising out of employment. We have always, as you will recall, opposed the bill on the ground that it would ultimately work a great injustice to the employee.

Assembly Int. No. 511—Cuvillier. Mr. Cuvil-

lier has in mind persons who deliberately run down animals with their automobiles or mistreat them in order to make them "fashionable." He has no desire whatever to have this bill confused with the anti-vivisection bill. Probably it is not wise to have him move it at this time, because the anti-vivisectionists may take advantage of it if it were to come out on the floor.

Assembly Int. No. 584—Mr. Theodore reintroduces his free-choice bill of last year.

Assembly Int. No. 598—Mr. Gimbrone reintroduces his bill on habit-forming drugs. This bill passed the Senate last year, but was lost in the Assembly Education Committee.

Give us your opinion upon the above bills at your earliest convenience.

HARRY ARANOW,
JOHN J. BUETTNER,
MARSHALL CLINTON,
Committee on Legislation.

LETTER TO COUNTY LEGISLATIVE CHAIRMEN

February 15, 1932.

TO COUNTY SOCIETY LEGISLATIVE CHAIRMEN.

Enclosed you will find the following bills:

Senate Int. No. 467, late Print No. 648—Wheatley. You will notice that Mr. Wheatley's amendment is very slight, but it has a very far-reaching effect. He asks that the 15c per capita which now is the minimum amount which health officers are to be paid, be the maximum. This is an unwarranted procedure; nobody believes that the health officers generally are adequately paid now. If there are a few who may appear to be overpaid, we are sure the matter could be corrected if it were called to the attention of Commissioner Parran and the particular board of supervisors.

Senate Int. No. 746—Mr. Baxter has introduced this bill at the request of the state police. It would limit the manufacture and ownership of tear gas to proper authorities. The object is to prevent the gas from being used against the police. We believe it a good bill and should receive our support.

Assembly Int. No. 949—Mr. Killgrew, an Assemblyman from New York City, has chosen to sponsor the physiotherapy bill for this year. You will note the particularly vicious part of the bill is the deletion from the law of that portion which provides that this group of physiotherapists shall not practice except under the supervision of a duly licensed physician. It also adds to the course of studies to be given at New York University to those who elect to take a short course in physiotherapy, the two subjects of bac-

teriology and diagnosis, and then in detail outlines what form of therapy they should prescribe. This is another instance in which an effort is being made to legislate in favor of a few inadequately trained persons. The opposition to this bill should be as definite and vigorous as in past years. We feel certain that the Department of Education will not approve of it and we hope that each chairman will immediately write to his legislators and particularly to those who are on the Education Committee in the Assembly, opposing the bill on the ground that it would be doing an injustice to the public and would be equivalent to lowering the educational standards established by the Regents.

Assembly Int. No. 975—Mr. Garnjost has introduced the osteopathic bill. You will note that it is identical with the bill of last year, except that three words—"or other tumor"—have been introduced following the word "cancer," line 17, page 2. The surgical aspect of this bill is sufficiently vicious in itself to bring forth all the opposition that persons interested in public welfare can muster, but the permission to use drugs is even more vicious. Osteopathic schools published in their catalogs, until this year, that drugs have no place in the practice of osteopathy. If men were trained in that sort of atmosphere, they cannot, in so short a time, adapt themselves to an atmosphere in which a group of drugs as powerful as the narcotics can become safely serviceable.

The osteopaths last year, in urging the passage of their bill, repeatedly stated that they take the same examinations as physicians and, therefore, should be granted the same privileges. This is

another of those half-stated truths. They do take identically the same examinations as physicians, but a candidate for licensure in osteopathy is not

which this bill would permit osteopaths to use, although they have not had adequate training in their uses and dangers:

Narcotics

Paraldehyde
Opium
Heroine
Laudunum

Tronal
Urethane
Morphine
Bromides

Veronal
Chloral
Codeine
Scopolamine

Anesthetics

Chloroform
Ethylene Gas

Ether
Cocaine

Nitrous Oxide Gas
Novocaine

Antiseptics

Potassium Permanganate
Iodoform
Sodium Arsenate
Arsphenamine (Salvarsan,
606)
Formaldehyde (Formalin)
Urotropin

Dakin's solution
Balsam of Peru
Chrysarobin
Ichthyol
Atoxyl
Phenyl Salicylate

Iodine
Bichloride of Mercury
Acriflavine
Tryparsamide
Neosarsphenamine
(Neosalvarsan)

Serums

Normal Human Serum
Antigonococcus Serum
Antiplagueserum
Antistreptococcus Serum
Convalescent Serum from
Infantile Paralysis

Measles Convalescent
Serum
Antianthrax Serum
Scarlatine Convalescent
Serum
Antistaphylococcus Serum

Influenzal Convalescent Serum
Antidysentery Serum
Antimeningococcus Serum
Antipneumococci Serum
Antituberculous Serum
Antivenim for Snakebite

Vaccines

Chlorera Vaccine
Influenza Vaccine
Streptococcus Vaccine
Tuberculin

Dysentery Vaccine
Pneumococcus Vaccine
Scarlatinal Vaccine

Gonococcus Vaccine
Staphylococcus Vaccine
Typhoid Vaccine
Smallpox Vaccine

Antitoxins

Scarlet Fever Antitoxin
Erysipelas Antitoxin

Diphtheria Antitoxin
Tetanus Antitoxin

Gas-Gangrene Antitoxin
Botulinus Antitoxin

required to present for entrance to an examination, the same qualifications as required of candidates for the degree of M.D.; for instance, osteopaths are not required to take two years' pre-medical work, nor to give evidence of having taken two years in the study of drugs. Please bear this distinction in mind.

Another item of misinformation that circulated very extensively last year is to the effect that Augustus Downing, who lobbies for the bill, is an M.D. No longer ago than within the last few days, a letter came to our attention, signed by the chairman of the Assembly Committee on Public Education, in which he expressed surprise that Dr. Downing is an M.D. and yet approves the bill. Dr. Downing is *not* a Doctor of Medicine, nor does he have that degree.

Following are a few of the dangerous drugs

Again may we suggest that you pass this information to as many prominent lay persons as you can and urge them to indicate their feelings to, first, the members of the Education Committee and then to all their legislative representatives.

Assembly Int. No. 996—Mr. Stewart's bill which we mentioned in the bulletin as threatening a powerful influence in the conduct of dispensaries. Note particularly that this bill is not retroactive and, therefore, its conditions will not affect any hospital dispensaries now in existence. There is no doubt but that in certain districts hospital dispensaries are making inroads into the practice of private physicians, but this bill would not correct that situation.

HARRY ARANOW,
JOHN J. BUETTNER,
MARSHALL CLINTON,
Committee on Legislation.

BULLETIN NO. 4

February 17, 1932.

Since our last bulletin the following bills have been introduced:

Senate Int. No. 967—Thompson; Assembly Int. No. 986—Potter, would amend the Mental Hygiene Law by providing hospital unit at Kings Park shall be known as Veterans' Memorial Hospital Division, devoted exclusively to care of war veterans. The object of this bill is to make available to veterans of the Spanish-American war the facilities provided by the Veterans' Memorial Hospital, which was built by the state for the care of veterans of the World War. We understand that this bill was not prepared at the request of the State Department of Mental Hygiene.

Senate Int. No. 994—Wicks; Assembly Int. No. 1098—Austin, to amend the Public Health Law, by providing each board of visitors shall have seven members appointed by Governor for six-year term. This is a measure of the Department of Health providing for the reconstruction of the Board of visitors to the cancer hospital at Buffalo and providing a definite term of office for each visitor.

Senate Int. No. 995—Wicks; Assembly Int. No. 1190—Austin, would amend the Public Health Law relative to the discharge of sewage and other matter into waters of the state in manner injurious to or so as to create a menace to health or a public nuisance, commissioner being empowered to issue permit therefor under certain conditions. This bill was prepared by the Department of Health and has been introduced for several years. It relates particularly to sewage discharged from industrial plants.

Senate Int. No. 1052—Thompson; Assembly Int. No. 1137—Potter, would amend the Mental Hygiene Law to permit use for civilian patients of acute medical and surgical building in hospital unit at Kings Park if commissioner thinks care of veteran soldiers and sailors treated there will be promoted. This is a bill prepared by the State Department of Mental Hygiene, and we believe has the approval of the American Legion, to give the hospital authorities permission to use a certain group of buildings of this Memorial Hospital which have not been in use as yet because their facilities are not needed by the veterans. There is, on the other hand, a civilian need for their use.

Assembly Int. No. 1097—Austin; to amend the Public Health Law by empowering the Public Health Council to prescribe regulations and qualifications of professional and technical positions in state and local health service and to classify such positions. This bill is drawn up in accordance with the recommendations of the Governor's Special Health Commission. It was a part of one of the bills introduced last year and provides particularly that the Public Health Council shall

establish qualifications for pathologists who may be employed in public health laboratories and persons employed at water purifying plants.

Assembly Int. No. 1165—Mr. Cu villier reintroduces his bill of the last several years, authorizing the Department of Health to establish cancer clinics and appropriates \$5,000,000.

Assembly Int. No. 1167—Mr. Cu villier reintroduces his health insurance bill, the omnibus bill which we have seen annually for quite a number of years.

Assembly Int. No. 1191—Mr. Bernhardt introduces the anti-vivisection bill which is already sponsored by Mr. Vaughan. Mr. Vaughan's bill had a hearing before the Codes Committee. Some of the proponents of the bill have concluded that they have made a mistake in having their bill sponsored by a democrat and so have persuaded Mr. Bernhardt, a republican, to sponsor it. There is a rumor that the Anti-Vivisection Society is about to split over this matter. Several ladies who assisted Mrs. Belais in promoting the cause, have of their own initiative secured Mr. Bernhardt's assistance.

There is great necessity for developing a more lively interest among lay persons in support of the position taken by the doctors on this bill. The Anti-Vivisection Society has been campaigning against certain assemblymen and in some districts the number of names on their petitions is greater than the majority by which the assemblymen have been elected. Annually, these men who are staunch supporters of ours, wonder whether the persons who sign those petitions might not vote against them. We hope that every chairman will do his utmost to counteract the influence of the Anti-Vivisection Society's political aspirations and remember that the local humane society is generally an exponent of the Anti-Vivisection Society.

ACTION ON BILLS

The Westall-Gamble Bill—Senate Int. No. 256; Assembly Int. No. 473—which provides that county boards of health shall have three physicians instead of two, has passed the Senate and reached third reading in the Assembly.

Senate Int. No. 634—Wicks; Assembly Int. No. 794—Austin—has been reported out in the Senate and reached third reading in the Assembly.

Senate Int. No. 636—Wicks; Assembly Int. No. 792—Austin—has been reported out in the Senate and reached third reading in the Assembly.

Senate Int. No. 635—Wicks; Assembly Int. No. 793—Austin—has been reported out in the Senate.

Senate Int. No. 11—Mr. Love's "baby mixing" bill was reported out on Monday for consideration. It produced a great deal of discussion, mostly humorous, and finally was recommitted.

* * *

For some unaccountable reason, there was a delay in having the white books printed. They

are at last available and a copy is enclosed for those who have not already received one with bills which went out yesterday.

HARRY ARANOW,
JOHN J. BUETTNER,
MARSHALL CLINTON,
Committee on Legislation.

COMMITTEE ON PUBLIC RELATIONS

The Public Relations Committee which had been engaged jointly with the Public Health Committee in the study of the report of the Governor's Health Commission up to January first, during the latter half of the year 1931, held its first meeting in New York on January twenty-seventh and considered the following agenda:

I. Medical problems of workmen's compensation administration.

II. Conference with the Division of Physical Education in the Department of Education regarding examination of school children.

III. Friendly visits with chairmen of half a dozen county committees at one time for purpose of ascertaining their potential possibilities for work and outlining program.

IV. Preparation of historical sketches for publication in the *NEW YORK STATE JOURNAL OF MEDICINE*, and such newspapers as will carry them. The following subjects were considered:

Development of hospitals.

Extent of the education of students in medicine.

Saving babies' lives.

Calling the doctor in 1832 and 1932.

Disappearance of malaria, typhoid and diphtheria.

Items number II and III were adopted for immediate follow-up.

The Department of Education is administering the school health examination law. Every school child should be examined by the family physician and furnished a certificate. Four things should be accomplished:

1. Exclusion of children having communicable diseases.

2. The use of all the accepted immunizations.

3. The correction of all remediable defects.

4. Good records, kept up to date from year to year and made in duplicate—one for the school and one for the family doctor, because he is the most valuable agent for the correction of defects. An especial effort should be made to stimulate the interest of the physician in the work of good examinations of school children.

Following the committee meeting there was a conference with Dr. Thomas Parran, State Commissioner of Health, Dr. George W. Kosmak, Chairman of the Maternity Center Association; Dr. Elizabeth M. Gardiner, Director of the Division of Maternity and Child Welfare of the State Department of Health; and Dr. Thomas P. Farmer of the Committee on Public Health and Medical Education, on a proposed outline of steps to be taken to inaugurate a study of maternal mortality. Details were agreed upon in the conference between the medical profession and the State Department of Health with mutual satisfaction and pleasure at the evidence of good will and cooperation. It was felt to be the beginning of a new era of cooperation in all matters of public health.

The first sectional meeting of the Public Relations Committee with representatives of eight or ten County Societies will be held in Albany on the afternoon of February eighteenth. The purpose of the sectional meeting is to advance knowledge of the increasing value of medical leadership in cooperative health effort both in the interest of public health and in professional economic welfare.

JAMES E. SADLIER, *Chairman.*
W. H. ROSS, *Secretary.*



KINGS COUNTY

The scientific program of the stated meeting of the Medical Society of the County of Kings, held on Tuesday, January 19, 1932, was as follows:

1. Inaugural Address: "Medicine Besieged," Dr. William Linder, M.D., F.A.C.S., President, Medical Society of the County of Kings.

2. Address: "Concerning the Pedigree of Man," William King Gregory, A.B., A.M., Ph.D., Professor of Vertebrate Palaeontology, Columbia University.

Dr. Linder discussed the problem of medical costs and the need for remedial legislation to correct current abuses. He emphasized the necessity of every physician being a member of his County and State Society, so that the necessary reforms could come about through internal rather than external control. "It is my sincere hope we will all interest ourselves in the problem of economic medicine so that we will be prepared to follow and support a great medical statesman who may, in the near future, be found among us to point the way."

On Saturday, January 23rd, 1932, the Jewish Hospital of Brooklyn, at its annual dinner and ball, held in the Waldorf-Astoria in New York, did honor to Dr. William Linder, the chief surgeon of the medical staff, to celebrate his election to the presidency of the Medical Society of the County of Kings.

In the course of the celebration, Dr. Linder was presented with a set of books, with the understanding that these books be turned over, at once, to the Library of the County Society, as a me-

mento of the occasion. The set was the sixth edition, in six volumes, of *Handbuch der Practischen Chirurgie*, originally edited by E. von Bergmann, P. von Bruns and J. von Mikulicz, revised and edited by C. Garre, H. Küttner and E. Lexer. These volumes are already available for reference to the Medical Society.

We are pleased to announce the resumption of the Friday Afternoon Practical Lectures, which are held in the County Society Building, 1313 Bedford Avenue, Brooklyn, at five o'clock. The spring series for 1932 is as follows:

- March 4th—"Pathology of the Heart," Harrison S. Martland, M.D., Newark, N. J.
- March 11th—"Differential Diagnosis of Acute Abdominal Conditions," Samuel A. Loewenberg, M.D., Philadelphia, Pa.
- March 18th—"More Common Diseases of the Teeth and Jaws," Theodor Blum, D.D.S., M.D., Manhattan.
- March 25th—(No lecture—Good Friday.)
- April 1st—"Cancer of the Stomach," I. Harris Levy, M.D., Syracuse, N. Y.
- April 8th—"Common External Diseases of the Eye and Their Treatment," Bernard Samuels, M.D., Manhattan.
- April 15th—"Osteomyelitis," Dean Lewis, M.D., Baltimore, Md.
- April 22nd—"The Treatment of Circulatory Failure," Ernst P. Boas, M.D., Manhattan.
- April 29th—(Lecture to be announced.)
- May 6th—"Neurological Diagnosis in General Medicine," Israel Strauss, M.D., Manhattan.
- May 13th—"Diagnosis and Management of Uterine Bleeding," Louis E. Phaneuf, M.D., Boston, Mass.

RENSSELAER COUNTY

The regular monthly meeting of the Medical Society of the County of Rensselaer was held in the health center on Tuesday, February 9, 1932.

Dr. Hambrook reported for the legislative committee. Drs. A. J. Hambrook, Wm. B. D. Van Auken, and Warren St. John were appointed as a committee to study and make suitable changes for revision of the Constitution and By-laws.

Mr. Verne A. Zimmer, Director of Compensation of the State Department of Labor, addressed the society stating that under the compensation laws doctors were called upon to prognosticate more accurately than ever before. He stressed the value of thoroughness in physical diagnoses and in the keeping of records as well as promptness with reports.

Dr. Charles F. Goodrich of Brooklyn, N. Y., chairman of the committee on Medical Economics of the State Medical Society, addressed the so-

cietiy on "The Reformation of Medical Economics with Special Consideration of the Arbitration Agreement."

He spoke in detail of the operation of the compensation act with special reference to the County society's economics committee and the function of the arbitration board. He stated that he believed that ninety per cent of the profession was being cursed and damned for the sins of the other ten per cent, and that our profession would have to cleanse itself from within.

The third speaker of the evening, Attorney John J. Scully of Albany, gave a good address on insurance from the viewpoint of the carrier. The title of his address was "A Proposed Fee Schedule."

The meeting adjourned at 11:30 p.m. and refreshments and a social hour followed.

W. B. VAN AUKEN, *Reporter*.

ONONDAGA COUNTY

As a result of a questionnaire sent to the members of the Onondaga Medical Society early in 1931, this Society requested from the Committee on Public Health and Medical Education of the Medical Society of the State of New York a program of lectures dealing with different phases of physical therapy.

The following program was provided by this Committee:

Jan 7th—Application of High Frequency Currents, Diathermy and Electrosurgery Richard Kovacs, M.D., New York.

Jan 14th—Physical Therapy without Apparatus G. K. Hansson, M.D. New York.

Jan 28th—Physical Therapy in Fractures and Other Traumatic Conditions C. R. Murry, M.D., New York.

Feb 4th—Physical Therapy in Arthritis and Rheumatoid Conditions William Bierman, M.D., New York.

The lectures were delivered at 4:30 P.M. in the auditorium of St. Joseph Hospital, two of them being preceded by a short practical demonstration of the subject matter discussed. The lectures were essentially practical in nature and proved to be of considerable interest to those attending.

Advance publicity was freely employed in connection with the Academy of Medicine and County Society programs and announcements. In addition to this a reminder card calling attention to the subject, speaker, time and place was mailed to each member by the County Secretary, Dr. E. E. Mack, two days before the lecture. The attendance was satisfactory.

In addition to these lectures a series of eight

practical demonstrations were held in the physical therapy departments of local institutions where different phases of the subject were presented.

Dr. J. J. Levy, Syracuse University Hospital

1—Air-Cooled Ultraviolet

2—Massage

3—Passive Manipulation

Dr. T. C. Walsh, St. Joseph Hospital

1—High Frequency Electrotherapy

2—Low Tension Electrotherapy

3—Neuromuscular Electrodagnosis

Dr. C. P. Hutchins, The Aetna Life Insurance Clinic

1—Water Cooled Ultraviolet

2—Curative Work Shop

3—Physical Therapy on a Pathological Basis

Dr. L. A. Hadley, Syracuse Memorial Hospital

1—Hydrotherapy

2—Electrocoagulation

3—Therapeutic Pyrexia

Members of the Society who registered for this seminar were divided into four groups and spent about one hour on two different mornings in each of the cooperating institutions. The teaching of technique to registrants was not emphasized. Particular attention was given to indications, contra indications, prescribing of the treatments on the basis of pathology, and other general considerations.

Attendance and interest at these demonstrations was very satisfactory and the feeling was general that the seminar had been well worth while.

LEE A. HADLEY,
*Chairman County Committee on
Physical Therapy*

HERKIMER COUNTY

A regular meeting of the Herkimer County Medical Society was held in Herkimer on February 9, 1932, with twenty-three members present.

The proceedings were in honor of Dr. William D. Garlock of Little Falls, on his completing fifty years of practice. Papers carefully prepared on the life and times of Dr. Garlock were read by Drs. Harry W. Vickers and George S. Eveleth, of Little Falls, and Dr. Garlock responded with reminiscences of his medical career.

Dr. Garlock was born on April 2, 1855, in

Garlock's Corners, almost in sight of the city where he has practiced medicine for a half century. He was president of the Herkimer County Medical Society in 1890, and the Fifth District Branch in 1902.

Dr. Garlock has a store of knowledge of other subjects besides medicine. He has a telescope and uses it in studying the heavens. He is also an authority on geology, recording and publishing his observations and securing the recognition of the geological experts.



THE DAILY PRESS



RELIEF OR DOLE

Legislators and administrators from township trustees to United States senators are divided into two schools of thought as they wrestle with the problems created by the world-wide financial depression. The two schools are alike in proposing gifts of money either directly, or indirectly; but they differ in regard to the name of the donation—one calling it an honorable relief fund, and the other, a dole. The arguments of the two schools are illustrated by a description of a two-hour debate in the United States Senate reported in the *New York Herald Tribune* of February eleventh. The bill appropriating \$375,000,000 was under debate, and the following dialogue occurred:

Speaker No. 1: "That is the opening wedge to the dole."

Speaker No. 2: "A government which will not protect those who protect it is flying a flag which is a dirty rag, contaminating the air in which it flies."

Speaker No. 1: "If we leave this relief problem in the hands of the politicians, God help America."

Speaker No. 2: "We are simply undertaking to control a crisis. Thousands are unable to take care of themselves. There is not a semblance of a dole here. If this is a dole, then Illinois, Pennsylvania and other states are paying a dole. I am convinced there is widespread and terrible suffering in this country. Thousands and millions of homes have not had a day free from care in eighteen months. Disease has visited homes and is taking the children. I sometimes doubt if the great war itself entailed greater misery, more agony of heart and mind than this crisis. True

the armies left their dead and dying, but who cannot paint a picture of desolation and ruin and blasted hopes behind this army of unemployed."

Speaker No. 1: "I am opposed to the Federal government entering on this relief program because when it does there will be no end. It will be progressive. It is not the length of the first step that is dangerous. It is the direction. There is not a city in the country that can't take care of its unemployed."

Speaker No. 2: "Suppose the local community had carried on its relief work for two years and its means of continuing were exhausted."

Speaker No. 1: "I would send some one like the Senator from ——— to investigate."

Speaker No. 2: "Meanwhile babies would die and mothers would starve."

Speaker No. 1: "And that in a civilized community?"

Speaker No. 2: "I am not sure about civilization since I heard the Senator."

Speaker No. 1: "It is not in the general welfare to destroy every fiber of American government by this proposition of giving money away."

Speaker No. 2: "Men who voted to take money out of the Treasury to revive business are now unwilling to take money to save human lives. The issue is materialism against humanity."

Speaker No. 1: "You propose to have the government support the people, instead of the people the government."

Speaker No. 2: "The theory that the people support the government passed away with the revolution."

In the meantime physicians are giving relief to the sick without words or other fuss.

MONDAY SICKNESS IN LONDON

London doctors seem to consider Monday to be their busy day, although this is probably not true in America. The *New York Times* of January 22 makes the following comment on "Monday, the Doctors' Day":

"To many physicians in London the Monday after Christmas brought a rush of patients. Many had barely time 'to pause for a cup of tea.' The celebrations and feasting for Christmas and Boxing Day were doubtless responsible.

"But Monday is regularly a busy day for doctors, they told an inquiring reporter. Week-end parties are often responsible for late hours and over-indulgence in eating and drinking, with their

attendant ailments. For reluctant schoolboys a Monday illness, real or imaginary, means an added day of freedom. For people who contemplate consulting a doctor, there seems to be an 'unaccountable psychological urge' to make the appointment for Monday—perhaps because Monday is proverbially 'blue.'

"London's after-Christmas ills last year were not largely due to over-eating. A suggested explanation was that the keen public interest in diet caused a curtailing of Christmas menus. It is possible that business conditions may have had something to do with the decline in holiday gormandizing."

ACQUIRING HEALTH

A favorite argument put forth by educators to inspire the children of the land to take exercise is that certain men, sickly in their childhood, have achieved the front pages of our daily newspapers

because of their vigor induced by their attention to diet and exercise. James J. Montague, writing in the *New York Herald Tribune* of February 10, reports his experience as follows

WORSF THAN THE DISEASE

"From my youth I have envied the people
Who suffer no physical ills,
Who, through year after year, are immune to the fear
Of druggists' and specialists' bills
I was born with a frail constitution,
Yet I managed to muddle along
Till I made up my mind that I'd go forth and find
The means to grow healthy and strong

"So I studied the subject of diet,
Ate only prescribed kinds of food
Till I learned the right fare, after which I took care
That each bite should be thoroughly chewed
But still I was nervous and feeble
And often confined to my bed
With shuddery quakes and with brain-racking aches,
Which threatened to wrench off my head

"So I took up gymnastics and boxing,
Ran a mile before breakfast each day,
I golfed and I bowled till I caught a bad cold,
Which sapped all my vigor away
Next I put in hard grueling efforts
A heavy canoe to propel,
And my biceps grew strong as I paddled along,
However, I failed to get well

"Today I am shattered and shaky
And barely can walk down the street,
Little food I can touch, and I don't care so much,
For but very few things I can eat
I have long given up all ambition
To gain either wisdom or wealth,
But at last I've found out, past a shadow of doubt,
Getting healthy has ruined my health"

A MODERN BAD BOY

The execution of Francis Crowley, aged 20, for murder was the occasion for the newspapers to discuss the modern bad boy, and the influences which produced him. Physicians will be interested in the following article in the *New York Times* of January 22:

"The life of Francis Crowley epitomized from first to last the career of the petty thug, youthful and ruthless, who has sprung up in our modern cities. Undersized, underchinned, underwitted—he never could learn to read and write in any but the crudest fashion and he never developed beyond the mental age of ten and a half—the world would never have known he existed if he had not turned to crime. And, having vanity, he turned to crime."

Crowley was an illegitimate child who was brought up on a baby farm.

He never could learn at school. He ran away when he could and so gradually fell in with the hoodlum gangs from which he derived the only sense of values he ever knew. He worked at times as a delivery boy and learned to drive automobiles. They fascinated him. One of his favorite crimes in his last two years was stealing them."

He participated in two or three shooting affairs, and acquired the nick name "two gun," and gloried in the prestige which it gave him in dance halls and among thugs.

After being sentenced to death he made one more appearance in public, as he testified in a hold-up case, trying to save the prisoner for his own personal glory.

"Crowley, flanked by prison keepers, came down from the death cell to testify. With nothing to lose he played the part of the bad man to the hilt. He chewed gum, snarled, boasted, twitted and flaunted the attorneys and went back to his death cell with a final "best regards" to the district attorney. The jury did not believe Crowley and O'Brien was convicted again."

A prominent police officer said "He was a fake bad man with the soul of a rat. He fought when he was cornered as a cornered rat will fight. He was dangerous when he got the draw, but he never really shot it out with any one," but this referred to the fully developed mental disorder or defect. The problem from a medical and sociological point of view was the preventive treatment of the boy before his perverted ideas became fixed.



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ASTHMA AND HAY FEVER IN THEORY AND PRACTICE
By ARTHUR F. COCA, M.D. MATTHEW WALZER, M.D.,
and AUGUST A. THOMMEN, M.D. Quarto of 851 pages,
illustrated Springfield Charles C. Thomas, 1931
Cloth, \$8.50

This volume presents one of the most comprehensive and exhaustive treatments of its subject yet published. Although arranged in three parts each of which has been written by a different author the work is well joined, and demonstrates few of the discrepancies and contradictions so often found where the responsibilities of authorship are divided.

Part I, by Coca, deals with the theoretical and many of the practical aspects of human and animal hypersensitivity. These two conditions better known as allergy and anaphylaxis are compared and contrasted. A critical review is presented of the outstanding experimental studies that have influenced the development of our idea of hypersensitivity. The hypersensitivity of infection of the tuberculin type has been considered in a separate chapter. Of considerable practical importance is the chapter devoted to a description of the preparation of extracts and solutions for use in the testing and treatment of human hypersensitivity.

Part II, upon asthma by Walzer has as its two most outstanding features its chapter upon the Pathology of Bronchial Asthma and its chapter by Bowman and Walzer, upon Atopics and Other Excitants. In the former chapter, there have been collected the autopsy findings in detail upon 33 cases of asthma with clinical data representing all the more complete reports to be found in the literature. In the latter chapter there is a most comprehensive study of the various excitants of asthma (inhalants, 'ingestants', contactants) with a description of their varied and numerous uses in the arts and trades in food and drugs. This chapter will be welcomed by all workers in allergy.

Part III, by Thommen upon Hay Fever contains a remarkably complete section upon the botanical considerations of the plants causing and suspected of causing hay fever. There are many drawings and photomicrographs of pollens and plant structures. An important chapter upon surveys of the hay fever flora of different sections is most instructive. An absorbing chapter upon the history of hay fever is given.

Upon first contact with this volume one is impressed and somewhat bewildered by the wealth of information gathered therein and although there is a degree of justice in the criticism that the volume is somewhat unwieldy yet the authors are certainly to be congratulated upon doing what they set out to do—to create a work that would be a necessity to every worker in the field of clinical hypersensitivity. WILI C. SPAIN

COLLECTED PAPERS 1904-1929 By EDWIN BEHR, M.D.
Octavo of 827 pages illustrated. New York Paul B. Hoeber Inc. 1931. Cloth \$7.50

Eighty nine articles written by the author and embracing practically every branch of surgical endeavor have been collected into one volume of 800 pages.

This book therefore does not only furnish a great mass of detailed information on various subjects gathered by one man in his vast experience but it also portrays the mental stature of the author so well known to all American surgeons. GEO. WERN

BACKACHE By JAMES M'FARLAND, M.A. M.D. Octavo of 199 pages illustrated. Philadelphia P. Blakiston's Son and Co. Inc. 1931. Cloth \$3.00

The monograph is over two thirds devoted to history taking and examination. These two subjects are complete and well arranged. It is very fully illustrated with diagrams.

In this monograph pathological consideration of the disease entities are only lightly touched upon and are for

the most part inadequate. In regards to treatment the author is very incomplete and over emphasizes manipulative procedure which in some instances anatomically cannot produce motion or correction of the affected joints. K. T. YOUNG

MEDICAL JURISPRUDENCE By ALFRED W. HERZOG, Ph.D., A.M. Quarto of 1051 pages. Indianapolis, The Bobbs-Merrill Company, 1931. Cloth \$15.00

This work when viewed from its legal aspect shows an immense amount of work in compiling the cases and decisions under the different headings.

The medical aspect of the work is certainly very weak especially the sections devoted to neurology and psychiatry. ARTHUR C. BRUSH

TEXT-BOOK OF PHYSICAL THERAPY By WILLIAM BEN HART SNOW, M.D. Volume I. Octavo of 708 pages illustrated. New York Scientific Authors' Publishing Company 1931. Cloth \$10.00

It is with a feeling of appreciation and reverence that the reviewer approached this volume. In the recent death of the author physical therapy has lost its greatest exponent and father. It is rather fortunate for medicine that the volume should have been completed before his untimely demise. From our knowledge of the author this book is really an autobiography of Dr. Snow's life and teachings.

It is impossible for one to discuss or summarize all of the topics in this volume because it covers the entire field of medicine still each phase is so important that one does not know what to eliminate. It is only possible to give a general impression of the highly important work. It is a well written and highly interesting volume covering all phases of physical therapeutics. The armamentarium of physical therapy is thoroughly discussed. Also the various modalities as produced by every form of apparatus. Their action, indication, dosage or modes of administration. The applications of their various forms of therapy are properly illustrated with case reports.

The only criticism that can be directed towards this work is the lack of the author's appreciation regarding periodicity of disease. A good deal of credit is taken to the form of therapy applied and too little given to the natural reactions that occur during the course of many diseases mentioned. But this criticism also applies to the enthusiast in other forms of therapy.

In short this volume can be classed as a system of medicine with special regard to therapy. B. KOVEN

INTERNATIONAL CLINICS Edited by HENRY W. CATTALL, A.M. M.D. Forty first Series. Volume III. Octavo of 326 pages illustrated. Philadelphia and London J. B. Lippincott Company 1931. Cloth \$3.00

There are many excellent articles in this volume which in part is devoted to honoring one of the nation's ablest clinical lecturers—Lowell Franklin Barker—on the occasion of his sixty fourth birthday. A foreword is written by W. S. Thayer and an appreciation is presented by Fielding H. Garrison. Clinical lectures are given by Barker at the Harvard Medical Society and ward rounds in the Peter Bent Brigham Hospital are made by him illustrating the methods of procedure in diagnosis.

In addition able clinical papers are presented on the heart and abnormalities of the blood. Abnormal conditions in the lungs are presented especially one on chronic non-tuberculous basic disease of the lungs. There are valuable papers on conditions in the central nervous system. This volume contains much valuable information and upholds the excellence of the other volumes of these clinics. HENRY MORRIS MOSES



BOOK REVIEWS



GONORRHEA IN THE MALE AND FEMALE. A Book for Practitioners. By P. S. PELOUZE, M.D. Second edition. Octavo of 440 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, \$5.50.

The second edition includes new chapters on gonorrheal arthritis and ophthalmia, and a new part on gonorrhea in the female. In all these the author is leaning on others and merely adds his criticism condemning in the main the too strenuous methods of therapy in vogue.

The other parts taken over from the first edition are as splendid as ever; even in rereading they are enjoyable and stimulating. This seems to be the only book on gonorrhea which is not written like a cookbook and which is in the best sense iconoclastic. It might be well to point out again that the author's concept of gonorrhea rests entirely on the theory of tissue response. At the present time this seems to be not only the most logical viewpoint, but it also helps a great deal in clarifying an otherwise often baffling clinical picture.

H. L. WEHRBEIN.

THE PRACTICE OF MEDICINE. By A. A. STEVENS, A.M., M.D., Third edition. Octavo of 1150 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, \$8.00.

The appearance of this book in its third edition, entirely revised, and considered among the best additions to medical literature, in the last decade, is now ready for the student and practitioner, with all the important controversies in general medicine condensed and deleted of any speculative theories.

Thirty-five sections are entirely rewritten. Particularly interesting are the references made for the first time, and all in one volume of the following conditions: Psittacosis, toxoid prophylaxis of diphtheria, immunization to scarlet fever, immunization to measles, antitoxin treatment of erysipelas, acute polynuronitis, vaccinal encephalitis, chronic duodenal stasis and obstruction, massive collapse of lung, hypoglycemia of endogenous origin, hyperparathyroidism, hypoparathyroidism, lipoid-cell splenomegaly of Niemann-Pick, spontaneous subarachnoid hemorrhage, family and hereditary atrophy of optic nerve. Post vaccinal encephalitis, several cases of which have been reported in this country, is now being investigated by the Public Health Service of the United States Government. Immunization to measles and infantile paralysis with whole blood from parents is discussed. The bronchoscopic treatment of massive collapse of lung conditions and all other interesting topics with the latest therapeutic applications are presented in a comprehensive way and should prove of inestimable value to every physician.

The text-book compares favorably with the time honored Osler's "Principles and Practice of Medicine," and Dr. Stevens has carried on where his master left off.

The publishers are to be commended for the excellent way in which the book is presented. The type of paper and print makes it easily read.

In conclusion, one can only use superlatives in reviewing this book.

M. J. DATTELBAUM.

AIDS TO MEDICAL TREATMENT. By J. T. LEWIS, M.D., B.Sc., and T. H. CROZIER, M.D., D.P.H. 16mo of 244

pages. New York, William Wood and Company, 1931. Cloth, \$1.50. (Students Aids Series.)

This is a small book presenting the principal methods of treatment in a very concise form intended principally for medical students approaching their final examination. For a book so small it contains a good deal of information which is well presented.

W. E. MCCOLLUM.

THE DIAGNOSIS AND TREATMENT OF VENEREAL DISEASES IN GENERAL PRACTICE: The Routine Management of Syphilis and Gonorrhoea Employed in the St. Thomas' Hospital Venereal Diseases Department. By L. W. HARRISON, D.S.O., M.B. Fourth edition. Octavo of 567 pages, illustrated. New York, Oxford University Press, 1931. Cloth, 25/. (Oxford Medical Publications.)

This, the fourth edition, contains much new matter, particularly along the lines of treatment and contains over 500 pages of text.

The style of the work has special appeal for the clinician, in that the various cutaneous lesions, also the deeper lesions and visceral changes are grouped by regions, including the complete differential diagnosis in each instance. This method should simplify the problem of a given case for the practitioner. The author emphasizes that no physician is equipped for the proper diagnosis of a primary lesion of lues without a dark-field microscope.

All regions of the body are considered, each in turn, in a given chapter both for gonorrhoea and syphilis and their differential diagnosis. A brief chapter is devoted to venereal diseases in women, and one in children. There is much valuable information to be gained from the chapter on collection and preparation of specimens for diagnosis. A chapter concerning the interpretation of laboratory reports is also useful and helpful.

All the up-to-date accepted modes of therapy are presented. An informative and lengthy chapter on the medico-legal relations of venereal diseases is appended by Dr. F. G. Crookshank. This contains valuable information for those handling venereal problems.

While the work is an excellent guide for physicians concerned in the diagnosis and treatment of venereal disease, it is the humble opinion of the reviewer that no practitioner should undertake treatment of cases, without at least having had a practical working-knowledge of the many problems, gained only by actual experience in venereal disease clinics.

AUGUSTUS HARRIS.

DYNAMIC RETINOSCOPY. By MARGARET DOBSON. Octavo of 56 pages, illustrated. New York, Oxford University Press, 1931. Cloth, \$2.50. (Oxford Medical Publications.)

This is a pithy little brochure of 44 pages. It collects the essentials of the subject and presents them in a clear and concise manner. One is struck by the interrelation which this branch of examination has with other forms of study. There is no doubt that as an objective method of examination dynamic retinoscopy should have a place in the routine of every ophthalmologist. It is capable of disclosing evidence under certain circumstances which prevents the use of subjective methods. For instance the author points out that dynamic retinoscopy is the only objective method of measuring presbyopia.

The work is well worth while.

JOHN N. EVANS.

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This volume presents one of the most comprehensive and exhaustive treatments of its subject yet published. Although arranged in three parts, each of which has been written by a different author, the work is well joined and demonstrates few of the discrepancies and contradictions so often found where the responsibilities of authorship are divided.

Part I by Coca deals with the theoretical and many of the practical aspects of human and animal hypersensitivity. These two conditions, better known as allergy and anaphylaxis, are compared and contrasted. A critical review is presented of the outstanding experimental studies that have influenced the development of our idea of hypersensitivity. The hypersensitivity of infection of the tuberculin type has been considered in a separate chapter. Of considerable practical importance is the chapter devoted to a description of the preparation of extracts and solutions for use in the testing and treatment of human hypersensitivity.

Part II, upon asthma by Walzer, has as its two most outstanding features, its chapter upon the Pathology of Bronchial Asthma and its chapter by Bowman and Walzer, upon Atopias and Other Excitants. In the former chapter, there have been collected the autopsy findings in detail upon 33 cases of asthma with clinical data representing all the more complete reports to be found in the literature. In the latter chapter there is a most comprehensive study of the various excitants of asthma (inhalants, "ingestants," contactants) with a description of their varied and numerous uses in the arts and trades in food and drugs. This chapter will be welcomed by all workers in allergy.

Part III, by Thommen upon Hay Fever contains a remarkably complete section upon the botanical considerations of the plants causing and suspected of causing hay fever. There are many drawings and photomicrographs of pollens and plant structures. An important chapter upon surveys of the hay fever flora of different sections is most instructive. An absorbing chapter upon the history of hay fever is given.

Upon first contact with this volume one is impressed and somewhat bewildered by the wealth of information gathered therein and although there is a degree of justice in the criticism that the volume is somewhat unwieldy yet the authors are certainly to be congratulated upon doing what they set out to do—to create a work that would be a necessity to every worker in the field of clinical hypersensitivity. WILLI C. SPAIN

the most part inadequate. In regards to treatment the author is very incomplete and over emphasizes manipulative procedure which in some instances anatomically cannot produce motion or correction of the affected joints. K. T. YOUNG

MEDICAL JURISPRUDENCE By ALFRED W. HERZOG Ph.D., A.M. Quarto of 1051 pages Indianapolis The Bobbs-Merrill Company, 1931 Cloth \$15.00

This work when viewed from its legal aspect shows an immense amount of work in compiling the cases and decisions under the different headings.

The medical aspect of the work is certainly very weak, especially the sections devoted to neurology and psychiatry. ARTHUR C. BRUSH

TEXT-BOOK OF PHYSICAL THERAPY By WILLIAM BENJAMIN SNOW, M.D. Volume I. Octavo of 708 pages illustrated New York Scientific Authors Publishing Company, 1931 Cloth \$10.00

It is with a feeling of appreciation and reverence that the reviewer approached this volume. In the recent death of the author physical therapy has lost its greatest exponent and father. It is rather fortunate for medicine that the volume should have been completed before his untimely demise. From our knowledge of the author this book is really an autobiography of Dr. Snow's life and teachings.

It is impossible for one to discuss or summarize all of the topics in this volume because it covers the entire field of medicine still each phase is so important that one does not know what to eliminate. It is only possible to give a general impression of the highly important work. It is a well written and highly interesting volume covering all phases of physical therapeutics. The armamentarium of physical therapy is thoroughly discussed. Also the various modalities as produced by every form of apparatus. Their action, indication, dosage or modes of administration. The applications of their various forms of therapy are properly illustrated with case reports.

The only criticism that can be directed towards this work is the lack of the author's appreciation regarding periodicity of disease. A good deal of credit is taken to the form of therapy applied and too little given to the natural reactions that occur during the course of many diseases mentioned. But this criticism also applies to the enthusiast in other forms of therapy.

In short this volume can be classed as a system of medicine with special regard to therapy.

B. KOVEN

INTERNATIONAL CLINICS Edited by HENRY W. CATTALL, A.M. M.D. Forty first Series Volume III. Octavo of 326 pages illustrated Philadelphia and London J. B. Lippincott Company, 1931 Cloth \$3.00

There are many excellent articles in this volume which in part is devoted to honoring one of the nation's ablest clinical lecturers—Lowell S. Franklin Barker—on the occasion of his sixty fourth birthday. A foreword is written by W. S. Thayer and in appreciation is presented by Fielding H. Garrison. Clinical lectures are given by Barker at the Harvard Medical Society and ward rounds in the Peter Bent Brigham Hospital are made by him illustrating the methods of procedure in diagnosis.

In addition able clinical papers are presented on the heart and abnormalities of the blood. Abnormal conditions in the lungs are presented especially one on chronic non-tuberculous basic disease of the lungs. There are valuable papers on conditions in the central nervous system. This volume contains much valuable information and upholds the excellence of the other volumes of these clinics. HENRY MONROE MOSES

COLLECTED PAPERS 1904-1929 By EDWIN BEHR, M.D. Octavo of 827 pages illustrated New York Paul B. Hoeber Inc. 1931 Cloth \$7.50

Eighty nine articles written by the author and embracing practically every branch of surgical endeavor have been collected into one volume of 800 pages.

This book therefore does not only furnish a great mass of detailed information on various subjects gathered by one man in his vast experience but it also portrays the mental stature of the author so well known to all American surgeons. GEO. WERN

BACKACHE By JAMES MENNELL, M.A. M.D. Octavo of 199 pages illustrated Philadelphia P. Blakiston's Son and Co. Inc. 1931 Cloth \$3.00

The monograph is over two thirds devoted to history taking and examination. These two subjects are complete and well arranged. It is very fully illustrated with diagrams.

In this monograph pathological consideration of the diverse entities are only lightly touched upon and are for



OUR NEIGHBORS



THE MICHIGAN JOURNAL

The minutes of the meeting of the Council of the Michigan State Medical Society held on January 8, the Secretary, Dr. F. C. Warnshuis, discusses the Journal as follows:

"Last year I estimated advertising revenue of \$8,500—our revenue was \$8,849.23. An estimate of \$8,000 for 1932 is conservative. Our Journal Cost was estimated at \$11,500 and was \$10,187.52. In estimating \$10,000 for 1932, I have not taken in consideration a printing saving of some \$500 to \$600 that will accrue from reduced contract price.

"The business affairs of the Journal are in a satisfactory condition. An advertising income of \$8,849.23 for the year exceeded our expectations when so many business firms have been curtailing advertising expenditures. One is, however, unable to foretell what our experiences will be this coming year. Our contacts cause us to believe that if present financial conditions continue we will encounter at least a 33 1-3 per cent decrease in advertising income. The cancellation of several contracts during the past sixty days is indicative of added curtailment on the part of advertisers.

"An increased advertising income of at least \$5,000 is obtainable if the Council and all our members would but subscribe cooperative support by patronizing our Journal advertisers. Firms advertise for the purpose of securing business, as well as to impart information pertaining to their products. They do not purchase space solely to make a contribution to our publication. Many of the advertisements contain coupons and others contain offers of samples, and literature Contracts are continued when business returns are received. When such returns are not received, contracts are cancelled. If our members would peruse the advertising pages of each issue and spend a few cents for postage, each month, to reply to advertisers, satisfactory proof of the advertising medium value of the Journal would be established and enlarged revenue would accrue. While not urging a boycott, it is recommended that, other things being equal, members limit their business to our advertisers. There are several Michigan firms who are valued patrons of the Journal. Give them preference in placing orders. Tell the salesman who calls on you that you are placing your business with Journal advertisers. If this cooperation and response is exhibited, our advertising income will be maintained and increased.

"Our business relationships with the Bruce Publishing Company have been exceedingly pleas-

ant and satisfactory. Their typographical work is beyond criticism. The fullest degree of cooperation is constantly evidenced. Expressive of their interest and integrity, the President voluntarily advised your Secretary that the printing cost would be reduced thirty-five cents a page during 1932 and if further cost reductions were attainable a still greater reimbursement would be made. This gratifying proposal will produce a printing expense reduction for the year of from \$500 to \$600.

"An added Journal cost has been encountered in the increased number of changes in addresses involving the making of new addressograph plates.

"No charge has been made against the Journal account for correspondence and postage expense incurred in the Secretary's office in discharging the work entailed in the business management of the Journal."

The secretary makes the following recommendations:

"That book reviews in the Journal be limited to publishers who advertise in the Journal. At present publishers receive valuable space at an annual expense to the Journal of approximately \$200 to \$250 per year. Were this space paid for at advertising rates, the annual income would be about \$1,500."

The NEW YORK STATE JOURNAL OF MEDICINE conducts its book reviews as items of scientific information, totally divorced from every business consideration. Every book is reviewed on its merits only, and is condemned if it does not come up to the highest modern standards of practice and literature.

Concerning illustrations in the Journal, the Publication Committee reports:

"The 1931 volume contained 104 half-tone illustrations and 77 line drawings. The cost of these has been borne by the contributors. The editor has drawn attention to instances in which illustrations have consisted of photographs of faces in which there is a possibility of recognizing the subject and suggests that contributors should obtain permission, in writing, to use photographs for illustrations, or to disguise the features so to render identification impossible."

The support given to the editor is mentioned as follows:

"The long experience of the editor has seemed to warrant your Committee in permitting great freedom in the matter of editorial policy. He

(Continued on page 298—Adv. xiv)

ANALGESIC and ANTIPYRETIC ACTION of the CHEMICAL TOLYSIN

AN IMPORTANT COMPARISON

The tables below present important comparisons. These comparisons mark the differences between the salicylates and the chemical, Tolysin, and indicate the superiority of the latter as an analgesic and antipyretic.

THE SALICYLATES (U. S. P.)

Analgesic and Antipyretic,

A distinctive and unpleasant taste,

Cause of nausea and gastro intestinal irritation,

Lacking in definite anti-plastic or anti-inflammatory effect,

Produce less favorable analgesic effect upon muscle, tendon, and joint pain,

Therapeutic range, in the case of aspirin at least, is less than that of Tolysin, (aspirin has one-sixth the therapeutic range of Tolysin in dogs)

Frequently the cause of albuminuria,

Lack of strong uric acid eliminating effect.

Summary Effective analgesic and antipyretic action but frequency of nausea, vomiting and other unpleasant by-effects make desirable the use of an improved treatment, especially in children (as for example, Tolysin, which is rarely accompanied by unpleasant by-effects common to the salicylates).

TOLYSIN (The Chemical)

Analgesic and Antipyretic,

Tasteless,

Neutral — Tolysin is the ETHYL ESTER of PARAMETHYL phenylcinchoninic acid, a neutral chemical,

Practically non-irritant — Tolysin rarely produces nausea or vomiting,

Relatively non-toxic with a wide therapeutic range — six times (in dogs) that of aspirin,

Exerts a definite anti-plastic or anti-inflammatory effect,

Semi specific analgesic action upon pain involving the muscles, tendons, joints or their appendages in contrast to the more general analgesic action of the salicylates,

Does not harm the heart or kidneys,

Gives a uric acid eliminating effect

Summary Tolysin is indicated especially in acute rheumatic fever, infectious fevers, colds, and gripe, as an analgesic in chronic arthritis, and for pain and fever in children and old people. Its use provides relief practically without the discomforts and by-effects often traceable to the salicylates

Tolysin is one example of the construction by The Calco Chemical Company of definite chemical compounds which eliminate the disadvantages of older drugs while retaining and adding to their advantages. It is suggested that Tolysin be tentatively prescribed in two or three cases and the improvement in results noted.

Calco

REG. U. S. PAT. OFF.

TOLYSIN

(ethyl ester of paramethylphenylcinchoninic acid)
ANTIPYRETIC and ANALGESIC

Pharmaceutical Division

THE CALCO CHEMICAL COMPANY Inc., BOUND BROOK, N. J.

A Unit of American Cyanamid Company

American Manufacturers of Dyestuffs, Chemicals and
the Basic Intermediates for the wide field of
Organic Chemistry

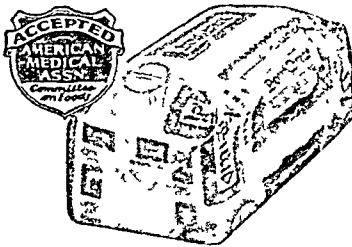
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STEENBOCK

Vitamin-D Units

in each

24 ounces of bread



1. Vitamin-D is the scarcest of vitamins in ordinary table foods, according to leading nutritional authorities. (Names and references on request.)

2. Sunshine vitamin-D Bond Bread now richly provides this valuable food element in the diet. (Journal American Medical Association, July 4, 1931.)

3. This improved bread is sold at no extra price.

4. There is no change in the taste or the delicious flavor of the bread.

5. Toasting in no way impairs the sunshine vitamin-D content. (Paediatric Research Foundation.)

Be sure your own family gets wholesome Bond Bread regularly, to build and maintain strong bones and sound teeth. For further information, address Dr. J. G. Coffin, Technical Director.

Bond Bakers

GENERAL BAKING COMPANY

420 LEXINGTON AVE., New York, N.Y.

(Continued from page 302—Adv. xviii)

enumerates seven reasons for its opposition to the bill as follows:

"1. The Sheppard-Towner Maternity and Infancy Act, as passed originally and later modified, failed to materially speed up the decline in the maternal mortality rate during the time of its operation, and there has been no increase in mortality from this source since the law was repealed.

"2. The re-enactment of this measure would, in our estimation, add unjustifiably to the burden already borne by federal and state taxpayers. This would seem not to be the time to increase federal expenditures for any but the most necessary purposes, and who is there who can say that this purpose is necessary at this time, particularly in the face of the united if not unanimous opposition of the largest and most influential group of physicians in the world?

"3. If this type of legislation continues to grow in popularity, the time will soon arrive when some of our states will find it exceedingly difficult if not impossible, to match Federal funds.

"4. The measure represents a most insidious but certain approach to state medicine, so-called, of the most reprehensible type, reprehensible in that it invades, indirectly and, in prospect, directly, the practice of medicine in states, counties and municipalities, all under federal direction and control.

"5. The medical profession is opposed to the socialization of medicine rather because of the anticipated ill effects upon the dependent public than upon the welfare of its own members.

"6. The legislation provides very practically for Federal control of a broad scope of activities in the state, at the expense of both state and federal taxpayers.

"(a) A Federal board is created, comprising the Surgeon General of the U. S. P. H. S., as chairman (doubtless designed to relieve the apprehension of those interested in public health matters), the Chief of the Children's Bureau of the Department of Labor, and the Commissioner of Education of the Department of the Interior,—two to one in favor of lay control.

"(b) The board is given the power to 'approve or disapprove of all plans for cooperative work between the United States and the several states under the Act,' which is equivalent to saying that the Board may direct these activities, for all practical purposes.

"(c) The purpose of the measure is declared to be two-fold, first (so placed as good psychology) to enable the Public Health Service, 'under the general supervision of the Board' to 'co-operate with the state agencies of health in the development of local health units or organizations for the prevention of disease and the promotion of health among the rural population'—second, the purpose of 'enabling the Children's Bureau, under the general supervision of the Board (al-

(Continued on page 305—Adv. xxi)

*Fills the need for a dependable
antacid mineral water*

VICHY CÉLESTINS

This long renowned naturally alkaline mineral water assists in neutralizing excess acid and in regularizing functions of the digestive tract.

Bottled at the Spring in Vichy, France, under Government supervision, it meets the great need of the physician for constancy of composition.

Sole U. S. Agents: AMERICAN AGENCY OF FRENCH VICHY, INC.
503 Fifth Avenue, Rooms 200-212, New York, N. Y.

(Continued from page 304—Idv rx)

ways) to cooperate with the state agencies of health promote the health and welfare of mothers and children'

"(d) The element of coercion is carried by the terms of the appropriation. It is provided that no funds appropriated under the Act shall be made available to the states until an equal sum shall have been made available by the state first for the promotion of the first purpose of the bill and, second for the promotion of its second purpose, both of which we have just recited. But that is merely the foundation. Any state desiring to avail itself of the benefits of the appropriation authorized by the measure must secure the approval of its plan for carrying out the purposes of the law, in addition to appropriating one half of the cost of the entire work.

"(e) Apparently the author of the measure has anticipated and disarmed the opposition of such organizations as christian scientists, antivaccinationists and the like by requiring that the plans for the states shall provide that 'no official or agent, or representative of the state in carrying out the provisions of this Act, shall enter any home or take charge of any child over the objection of the parents or either of them'

"(f) The Children's Bureau, it is provided,

shall withhold allowance to states for maternity and child welfare work under this measure, 'upon request of a majority of the Board'

"7 Finally, let it be understood by all who would know, that in opposing the legislation under discussion the medical profession departs not one jot or tittle from its traditional concern for the health of the public'

MEAT INSPECTION IN MISSOURI

The February issue of the Journal of the Missouri State Medical Association discusses editorially the relation of the St. Louis Medical Society to meat inspection, as follows

"It was long known to the members of the St. Louis Medical Society that the City of St. Louis had no effective ordinance for inspecting local packing houses. The Society's committee on health and public instruction viewed the situation and decided to recommend a campaign to establish municipal meat inspection. The committee was composed of Drs. Charles E. Hyndman, Jerome E. Cook and Robert Vinyard and instructed the executive secretary, Mr. Elmer H. Bartelsmeyer, to make an investigation and report the result to the committee. Mr. Bartelsmeyer

(Continued on page 306—Idv rxii)



THE DAILY PRESS



RELIEF OR DOLE

Legislators and administrators from township trustees to United States senators are divided into two schools of thought as they wrestle with the problems created by the world-wide financial depression. The two schools are alike in proposing gifts of money either directly, or indirectly; but they differ in regard to the name of the donation—one calling it an honorable relief fund, and the other, a dole. The arguments of the two schools are illustrated by a description of a two-hour debate in the United States Senate reported in the *New York Herald Tribune* of February eleventh. The bill appropriating \$375,000,000 was under debate, and the following dialogue occurred:

Speaker No. 1: "That is the opening wedge to the dole."

Speaker No. 2: "A government which will not protect those who protect it is flying a flag which is a dirty rag, contaminating the air in which it flies."

Speaker No. 1: "If we leave this relief problem in the hands of the politicians, God help America."

Speaker No. 2: "We are simply undertaking to control a crisis. Thousands are unable to take care of themselves. There is not a semblance of a dole here. If this is a dole, then Illinois, Pennsylvania and other states are paying a dole. I am convinced there is widespread and terrible suffering in this country. Thousands and millions of homes have not had a day free from care in eighteen months. Disease has visited homes and is taking the children. I sometimes doubt if the great war itself entailed greater misery, more agony of heart and mind than this crisis. True

the armies left their dead and dying, but who cannot paint a picture of desolation and ruin and blasted hopes behind this army of unemployed."

Speaker No. 1: "I am opposed to the Federal government entering on this relief program because when it does there will be no end. It will be progressive. It is not the length of the first step that is dangerous. It is the direction. There is not a city in the country that can't take care of its unemployed."

Speaker No. 2: "Suppose the local community had carried on its relief work for two years and its means of continuing were exhausted."

Speaker No. 1: "I would send some one like the Senator from ——— to investigate."

Speaker No. 2: "Meanwhile babies would die and mothers would starve."

Speaker No. 1: "And that in a civilized community?"

Speaker No. 2: "I am not sure about civilization since I heard the Senator."

Speaker No. 1: "It is not in the general welfare to destroy every fiber of American government by this proposition of giving money away."

Speaker No. 2: "Men who voted to take money out of the Treasury to revive business are now unwilling to take money to save human lives. The issue is materialism against humanity."

Speaker No. 1: "You propose to have the government support the people, instead of the people the government."

Speaker No. 2: "The theory that the people support the government passed away with the revolution."

In the meantime physicians are giving relief to the sick without words or other fuss.

MONDAY SICKNESS IN LONDON

London doctors seem to consider Monday to be their busy day, although this is probably not true in America. The *New York Times* of January 22 makes the following comment on "Monday, the Doctors' Day":

"To many physicians in London the Monday after Christmas brought a rush of patients. Many had barely time 'to pause for a cup of tea.' The celebrations and feasting for Christmas and Boxing Day were doubtless responsible.

"But Monday is regularly a busy day for doctors, they told an inquiring reporter. Week-end parties are often responsible for late hours and over-indulgence in eating and drinking, with their

attendant ailments. For reluctant schoolboys a Monday illness, real or imaginary, means an added day of freedom. For people who contemplate consulting a doctor, there seems to be an 'unaccountable psychological urge' to make the appointment for Monday—perhaps because Monday is proverbially 'blue.'

"London's after-Christmas ills last year were not largely due to over-eating. A suggested explanation was that the keen public interest in diet caused a curtailing of Christmas menus. It is possible that business conditions may have had something to do with the decline in holiday gormandizing."

ACQUIRING HEALTH

A favorite argument put forth by educators to inspire the children of the land to take exercise is that certain men, sickly in their childhood, have achieved the front pages of our daily newspapers

because of their vigor induced by their attention to diet and exercise. James J. Montague, writing in the *New York Herald Tribune* of February 10, reports his experience as follows:

WORSE THAN THE DISEASE

"From my youth I have envied the people
Who suffer no physical ills,
Who, through year after year, are immune to the
fear
Of druggists' and specialists' bills.
I was born with a frail constitution,
Yet I managed to muddle along
Till I made up my mind that I'd go forth and find
The means to grow healthy and strong.

"So I studied the subject of diet;
Ate only prescribed kinds of food,
Till I learned the right fare, after which I took
care
That each bite should be thoroughly chewed.
But still I was nervous and feeble
And often confined to my bed
With shuddery quakes and with brain-racking
aches,
Which threatened to wrench off my head.

"So I took up gymnastics and boxing,
Ran a mile before breakfast each day;
I golfed and I bowled till I caught a bad cold,
Which sapped all my vigor away.
Next I put in hard grueling efforts
A heavy canoe to propel,
And my biceps grew strong as I paddled along;
However, I failed to get well.

"Today I am shattered and shaky
And barely can walk down the street;
Little food I can touch, and I don't care so much,
For but very few things I can eat.
I have long given up all ambition
To gain either wisdom or wealth,
But at last I've found out, past a shadow of
doubt,
Getting healthy has ruined my health."

A MODERN BAD BOY

The execution of Francis Crowley, aged 20, for murder was the occasion for the newspapers to discuss the modern bad boy, and the influences which produced him. Physicians will be interested in the following article in the *New York Times* of January 22:

"The life of Francis Crowley epitomized from first to last the career of the petty thug, youthful and ruthless, who has sprung up in our modern cities. Undersized, underchinned, underwitted—he never could learn to read and write in any but the crudest fashion and he never developed beyond the mental age of ten and a half—the world would never have known he existed if he had not turned to crime. And, having vanity, he turned to crime."

Crowley was an illegitimate child who was brought up on a baby farm.

"He never could learn at school. He ran away when he could and so gradually fell in with the hoodlum gangs from which he derived the only sense of values he ever knew. He worked at times as a delivery boy and learned to drive automobiles. They fascinated him. One of his favorite crimes in his last two years was stealing them."

He participated in two or three shooting affairs, and acquired the nick-name "two gun," and gloried in the prestige which it gave him in dance halls and among thugs.

After being sentenced to death he made one more appearance in public, as he testified in a hold-up case, trying to save the prisoner for his own personal glory:

"Crowley, flanked by prison keepers, came down from the death cell to testify. With nothing to lose he played the part of the bad man to the hilt. He chewed gum, snarled, boasted, twitted and flaunted the attorneys and went back to his death cell with a final "best regards" to the district attorney. The jury did not believe Crowley and O'Brien was convicted again."

A prominent police officer said: "He was a fake bad man with the soul of a rat. He fought when he was cornered as a cornered rat will fight. He was dangerous when he got the draw, but he never really shot it out with any one"; but this referred to the fully developed mental disease or defect. The problem from a medical and sociological point of view was the preventive treatment of the boy before his perverted ideas became fixed.

BOOK REVIEWS

GONORRHEA IN THE MALE AND FEMALE. A Book for Practitioners. By P. S. PELOUZE, M.D. Second edition. Octavo of 440 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, \$5.50.

The second edition includes new chapters on gonorrheal arthritis and ophthalmia, and a new part on gonorrhea in the female. In all these the author is leaning on others and merely adds his criticism condemning in the main the too strenuous methods of therapy in vogue.

The other parts taken over from the first edition are as splendid as ever; even in rereading they are enjoyable and stimulating. This seems to be the only book on gonorrhea which is not written like a cookbook and which is in the best sense iconoclastic. It might be well to point out again that the author's concept of gonorrhea rests entirely on the theory of tissue response. At the present time this seems to be not only the most logical viewpoint, but it also helps a great deal in clarifying an otherwise often baffling clinical picture.

H. L. WEHRBEIN.

THE PRACTICE OF MEDICINE. By A. A. STEVENS, A.M., M.D., Third edition. Octavo of 1150 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, \$8.00.

The appearance of this book in its third edition, entirely revised, and considered among the best additions to medical literature, in the last decade, is now ready for the student and practitioner, with all the important controversies in general medicine condensed and deleted of any speculative theories.

Thirty-five sections are entirely rewritten. Particularly interesting are the references made for the first time, and all in one volume of the following conditions: Psittacosis, toxoid prophylaxis of diphtheria, immunization to scarlet fever, immunization to measles, antitoxin treatment of erysipelas, acute polynuronitis, vaccinal encephalitis, chronic duodenal stasis and obstruction, massive collapse of lung, hypoglycemia of endogenous origin, hyperparathyroidism, hypoparathyroidism, lipoid-cell splenomegaly of Niemann-Pick, spontaneous subarachnoid hemorrhage, family and hereditary atrophy of optic nerve. Post vaccinal encephalitis, several cases of which have been reported in this country, is now being investigated by the Public Health Service of the United States Government. Immunization to measles and infantile paralysis with whole blood from parents is discussed. The bronchoscopic treatment of massive collapse of lung conditions and all other interesting topics with the latest therapeutic applications are presented in a comprehensive way and should prove of inestimable value to every physician.

The text-book compares favorably with the time honored Osler's "Principles and Practice of Medicine," and Dr. Stevens has carried on where his master left off.

The publishers are to be commended for the excellent way in which the book is presented. The type of paper and print makes it easily read.

In conclusion, one can only use superlatives in reviewing this book.

M. J. DATTELBAUM.

AIDS TO MEDICAL TREATMENT. By J. T. LEWIS, M.D., B.Sc., and T. H. CROZIER, M.D., D.P.H. 16mo of 244

pages. New York, William Wood and Company, 1931. Cloth, \$1.50. (Students Aids Series.)

This is a small book presenting the principal methods of treatment in a very concise form intended principally for medical students approaching their final examination. For a book so small it contains a good deal of information which is well presented.

W. E. MCCOLLOM.

THE DIAGNOSIS AND TREATMENT OF VENEREAL DISEASES IN GENERAL PRACTICE: The Routine Management of Syphilis and Gonorrhœa Employed in the St. Thomas' Hospital Venereal Diseases Department. By L. W. HARRISON, D.S.O., M.B. Fourth edition. Octavo of 567 pages, illustrated. New York, Oxford University Press, 1931. Cloth, 25/. (Oxford Medical Publications.)

This, the fourth edition, contains much new matter, particularly along the lines of treatment and contains over 500 pages of text.

The style of the work has special appeal for the clinician, in that the various cutaneous lesions, also the deeper lesions and visceral changes are grouped by regions, including the complete differential diagnosis in each instance. This method should simplify the problem of a given case for the practitioner. The author emphasizes that no physician is equipped for the proper diagnosis of a primary lesion of lues without a dark-field microscope.

All regions of the body are considered, each in turn, in a given chapter both for gonorrhœa and syphilis and their differential diagnosis. A brief chapter is devoted to venereal diseases in women, and one in children. There is much valuable information to be gained from the chapter on collection and preparation of specimens for diagnosis. A chapter concerning the interpretation of laboratory reports is also useful and helpful.

All the up-to-date accepted modes of therapy are presented. An informative and lengthy chapter on the medico-legal relations of venereal diseases is appended by Dr. F. G. Crookshank. This contains valuable information for those handling venereal problems.

While the work is an excellent guide for physicians concerned in the diagnosis and treatment of venereal disease, it is the humble opinion of the reviewer that no practitioner should undertake treatment of cases, without at least having had a practical working-knowledge of the many problems, gained only by actual experience in venereal disease clinics.

AUGUSTUS HARRIS.

DYNAMIC RETINOSCOPY. By MARGARET DOBSON. Octavo of 56 pages, illustrated. New York, Oxford University Press, 1931. Cloth, \$2.50. (Oxford Medical Publications.)

This is a pithy little brochure of 44 pages. It collects the essentials of the subject and presents them in a clear and concise manner. One is struck by the interrelation which this branch of examination has with other forms of study. There is no doubt that as an objective method of examination dynamic retinoscopy should have a place in the routine of every ophthalmologist. It is capable of disclosing evidence under certain circumstances which prevents the use of subjective methods. For instance the author points out that dynamic retinoscopy is the only objective method of measuring presbyopia.

The work is well worth while.

JOHN N. EVANS.

ASTHMA AND HAY FEVER IN THEORY AND PRACTICE. By ARTHUR F. COCA, M.D., MATTHEW WALZER, M.D., and AUGUST A. THOMMEN, M.D. Quarto of 851 pages, illustrated. Springfield, Charles C. Thomas, 1931. Cloth, \$8.50.

This volume presents one of the most comprehensive and exhaustive treatments of its subject yet published. Although arranged in three parts, each of which has been written by a different author, the work is well joined, and demonstrates few of the discrepancies and contradictions so often found where the responsibilities of authorship are divided.

Part I, by Coca, deals with the theoretical and many of the practical aspects of human and animal hypersensitiveness. These two conditions, better known as allergy and anaphylaxis, are compared and contrasted. A critical review is presented of the outstanding experimental studies that have influenced the development of our idea of hypersensitiveness. The hypersensitiveness of infection of the tuberculin type has been considered in a separate chapter. Of considerable practical importance is the chapter devoted to a description of the preparation of extracts and solutions for use in the testing and treatment of human hypersensitiveness.

Part II, upon asthma, by Walzer, has as its two most outstanding features, its chapter upon the Pathology of Bronchial Asthma and its chapter, by Bowman and Walzer, upon Atopics and Other Excitants. In the former chapter, there have been collected the autopsy findings in detail upon 33 cases of asthma with clinical data, representing all the more complete reports to be found in the literature. In the latter chapter there is a most comprehensive study of the various excitants of asthma (inhalants, "ingestants," "contactants"), with a description of their varied and numerous uses in the arts and trades, in food and drugs. This chapter will be welcomed by all workers in allergy.

Part III, by Thommen, upon Hay Fever, contains a remarkably complete section upon the botanical considerations of the plants causing, and suspected of causing, hay fever. There are many drawings and photomicrographs of pollens and plant structures. An important chapter upon surveys of the hay fever flora of different sections is most instructive. An absorbing chapter upon the history of hay fever is given.

Upon first contact with this volume one is impressed and somewhat bewildered by the wealth of information gathered therein; and although there is a degree of justice in the criticism that the volume is somewhat unwieldy yet the authors are certainly to be congratulated upon doing what they set out to do—to create a work that would be a necessity to every worker in the field of clinical hypersensitiveness. WILL C. SPAIN.

COLLECTED PAPERS, 1904-1929. By EDWIN BEFR, M.D. Octavo of 827 pages, illustrated. New York, Paul B. Hoeber, Inc., 1931. Cloth, \$7.50.

Eighty-nine articles written by the author and embracing practically every branch of surgical endeavor, have been collected into one volume of 800 pages.

This book, therefore, does not only furnish a great mass of detailed information on various subjects gathered by one man in his vast experience, but it also portrays the mental stature of the author, so well known to all American surgeons. GEO. WEBB.

BACKACHE. By JAMES MENNEL, M.A., M.D. Octavo of 199 pages, illustrated. Philadelphia, P. Blakiston's Son and Co., Inc., 1931. Cloth, \$3.00.

The monograph is over two-thirds devoted to history taking and examination. These two subjects are complete and well arranged. It is very fully illustrated with diagrams.

In this monograph pathological consideration of the disease entities are only lightly touched upon and are for

the most part inadequate. In regards to treatment the author is very incomplete and over emphasizes manipulative procedure which in some instances anatomically cannot produce motion or correction of the affected joints. K. T. YOUNG.

MEDICAL JURISPRUDENCE. By ALFRED W. HERZOG, Ph. B., A.M. Quarto of 1051 pages. Indianapolis, The Bobbs-Merrill Company, 1931. Cloth \$15.00.

This work when viewed from its legal aspect shows an immense amount of work in compiling the cases and decisions under the different headings.

The medical aspect of the work is certainly very weak especially the sections devoted to neurology and psychiatry. ARTHUR C. BRUSH.

TEXT-BOOK OF PHYSICAL THERAPY. By WILLIAM BENHAM SNOW, M.D. Volume 1. Octavo of 708 pages, illustrated. New York, Scientific Authors' Publishing Company, 1931. Cloth, \$10.00.

It is with a feeling of appreciation and reverence that the reviewer approached this volume. In the recent death of the author, physical therapy has lost its greatest exponent and father. It is rather fortunate for medicine that the volume should have been completed before his untimely demise. From our knowledge of the author this book is really an autobiography of Dr. Snow's life and teachings.

It is impossible for one to discuss or summarize all of the topics in this volume because it covers the entire field of medicine, still each phase is so important that one does not know what to eliminate. It is only possible to give a general impression of the highly important work. It is a well written and highly interesting volume covering all phases of physical therapeutics. The armamentarium of physical therapy is thoroughly discussed. Also the various modalities as produced by every form of apparatus. Their action, indication dosage or modes of administration. The applications of their various forms of therapy are properly illustrated with case reports.

The only criticism that can be directed towards this work is the lack of the author's appreciation regarding periodicity of disease. A good deal of credit is taken to the form of therapy applied and too little given to the natural reactions that occur during the course of many diseases mentioned. But this criticism also applies to the enthusiast in other forms of therapy.

In short this volume can be classed as a system of medicine with special regard to therapy. B. KOVEN.

INTERNATIONAL CLINICS. Edited by HENRY W. CATTELL, A.M., M.D. Forty-first Series, Volume III. Octavo of 326 pages, illustrated. Philadelphia and London, J. B. Lippincott Company, 1931. Cloth, \$3.00.

There are many excellent articles in this volume which in part is devoted to honoring one of the nation's ablest clinical lecturers—Lewellyn Franklin Barker—on the occasion of his sixty-fourth birthday. A foreword is written by W. S. Thayer and an appreciation is presented by Fielding H. Garrison. Clinical lectures are given by Barker at the Harvard Medical Society and ward rounds in the Peter Bent Brigham Hospital are made by him, illustrating the methods of procedure in diagnosis.

In addition able clinical papers are presented on the heart and abnormalities of the blood. Abnormal conditions in the lungs are presented, especially one on chronic non-tuberculous basic disease of the lungs. There are valuable papers on conditions in the central nervous system. This volume contains much valuable information and upholds the excellence of the other volumes of these clinics. HENRY MONROE MOSES.



OUR NEIGHBORS



THE MICHIGAN JOURNAL

The minutes of the meeting of the Council of the Michigan State Medical Society held on January 8, the Secretary, Dr. F. C. Warnshuis, discusses the Journal as follows:

"Last year I estimated advertising revenue of \$8,500—our revenue was \$8,849.23. An estimate of \$8,000 for 1932 is conservative. Our Journal Cost was estimated at \$11,500 and was \$10,187.52. In estimating \$10,000 for 1932, I have not taken in consideration a printing saving of some \$500 to \$600 that will accrue from reduced contract price.

"The business affairs of the Journal are in a satisfactory condition. An advertising income of \$8,849.23 for the year exceeded our expectations when so many business firms have been curtailing advertising expenditures. One is, however, unable to foretell what our experiences will be this coming year. Our contacts cause us to believe that if present financial conditions continue we will encounter at least a 33 1-3 per cent decrease in advertising income. The cancellation of several contracts during the past sixty days is indicative of added curtailment on the part of advertisers.

"An increased advertising income of at least \$5,000 is obtainable if the Council and all our members would but subscribe cooperative support by patronizing our Journal advertisers. Firms advertise for the purpose of securing business, as well as to impart information pertaining to their products. They do not purchase space solely to make a contribution to our publication. Many of the advertisements contain coupons and others contain offers of samples, and literature Contracts are continued when business returns are received. When such returns are not received, contracts are cancelled. If our members would peruse the advertising pages of each issue and spend a few cents for postage, each month, to reply to advertisers, satisfactory proof of the advertising medium value of the Journal would be established and enlarged revenue would accrue. While not urging a boycott, it is recommended that, other things being equal, members limit their business to our advertisers. There are several Michigan firms who are valued patrons of the Journal. Give them preference in placing orders. Tell the salesman who calls on you that you are placing your business with Journal advertisers. If this cooperation and response is exhibited, our advertising income will be maintained and increased.

"Our business relationships with the Bruce Publishing Company have been exceedingly pleas-

ant and satisfactory. Their typographical work is beyond criticism. The fullest degree of cooperation is constantly evidenced. Expressive of their interest and integrity, the President voluntarily advised your Secretary that the printing cost would be reduced thirty-five cents a page during 1932 and if further cost reductions were attainable a still greater reimbursement would be made. This gratifying proposal will produce a printing expense reduction for the year of from \$500 to \$600.

"An added Journal cost has been encountered in the increased number of changes in addresses involving the making of new addressograph plates.

"No charge has been made against the Journal account for correspondence and postage expense incurred in the Secretary's office in discharging the work entailed in the business management of the Journal."

The secretary makes the following recommendations:

"That book reviews in the Journal be limited to publishers who advertise in the Journal. At present publishers receive valuable space at an annual expense to the Journal of approximately \$200 to \$250 per year. Were this space paid for at advertising rates, the annual income would be about \$1,500."

The NEW YORK STATE JOURNAL OF MEDICINE conducts its book reviews as items of scientific information, totally divorced from every business consideration. Every book is reviewed on its merits only, and is condemned if it does not come up to the highest modern standards of practice and literature.

Concerning illustrations in the Journal, the Publication Committee reports:

"The 1931 volume contained 104 half-tone illustrations and 77 line drawings. The cost of these has been borne by the contributors. The editor has drawn attention to instances in which illustrations have consisted of photographs of faces in which there is a possibility of recognizing the subject and suggests that contributors should obtain permission, in writing, to use photographs for illustrations, or to disguise the features so to render identification impossible."

The support given to the editor is mentioned as follows:

"The long experience of the editor has seemed to warrant your Committee in permitting great freedom in the matter of editorial policy. He

(Continued on page 298—Adv. xiv)

ANALGESIC and ANTIPYRETIC ACTION of the CHEMICAL TOLYSIN

AN IMPORTANT COMPARISON

The tables below present important comparisons. These comparisons mark the differences between the salicylates and the chemical, Tolysin, and indicate the superiority of the latter as an analgesic and antipyretic.

THE SALICYLATES (U. S. P.)

- Analgesic and Antipyretic;
- A distinctive and unpleasant taste;
- Cause of nausea and gastro-intestinal irritation;
- Lacking in definite anti-plastic or anti-inflammatory effect;
- Produce less favorable analgesic effect upon muscle, tendon, and joint pain;
- Therapeutic range, in the case of aspirin at least, is less than that of Tolysin; (aspirin has one-sixth the therapeutic range of Tolysin in dogs)
- Frequently the cause of albuminuria;
- Lack of strong uric acid eliminating effect.

Summary: Effective analgesic and antipyretic action but frequency of nausea, vomiting and other unpleasant by-effects make desirable the use of an improved treatment, especially in children (as for example, Tolysin, which is rarely accompanied by unpleasant by-effects common to the salicylates).

TOLYSIN (The Chemical)

- Analgesic and Antipyretic;
- Tasteless;
- Neutral — Tolysin is the ETHYL ESTER of PARAMETHYL phenylcinchoninic acid, a neutral chemical;
- Practically non-irritant — Tolysin rarely produces nausea or vomiting;
- Relatively non-toxic with a wide therapeutic range — six times (in dogs) that of aspirin;
- Exerts a definite anti-plastic or anti-inflammatory effect;
- Semi-specific analgesic action upon pain involving the muscles, tendons, joints or their appendages in contrast to the more general analgesic action of the salicylates;
- Does not harm the heart or kidneys;
- Gives a uric acid eliminating effect.

Summary: Tolysin is indicated especially in acute rheumatic fever, infectious fevers, colds, and grippé, as an analgesic in chronic arthritis, and for pain and fever in children and old people. Its use provides relief practically without the discomforts and by-effects often traceable to the salicylates.

Tolysin is one example of the construction by The Calco Chemical Company of definite chemical compounds which eliminate the disadvantages of older drugs while retaining and adding to their advantages. It is suggested that Tolysin be tentatively prescribed in two or three cases and the improvement in results noted.



TOLYSIN

(ethyl ester of paramethylphenylcinchoninic acid)
ANTIPYRETIC and ANALGESIC

Pharmaceutical Division

THE CALCO CHEMICAL COMPANY Inc., BOUND BROOK, N. J.

A Unit of American Cyanamid Company

American Manufacturers of Dyestuffs, Chemicals and
the Pacific Coast Division for the U. S. and Canada



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is assured
of dependability
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OF DIGITALIS.

PHYSIOLOGICALLY
STANDARDIZED

Send for sample and literature

DAVIES, ROSE & CO., Ltd.
Pharmaceutical Manufacturers
BOSTON, MASS.

(Continued from page 296)

has, however, submitted for review most of his contributions, and all of those of which he has had the slightest doubt.

"During the several years that Dr. Dempster has edited the Journal, the cover page has been devoted to a paragraph dealing with some phases of medical practice. Formerly this was written by members of the profession but more recently by the editor himself. The exigencies of the times compel your Committee to recommend the discontinuance of this feature and the utilization of this space for advertising."

TREATING THE INDIGENT IN MICHIGAN

The February number of the Journal of the Michigan State Medical Society contains the text of an agreement for the care of the indigent sick of Muskegon County, located on the west side of the lower peninsula. It is a comparatively rural county, and its county medical society has 68 members. The preamble to the agreement states:

"WHEREAS, the County of Muskegon has been sending to the University Hospital at Ann Arbor, Michigan, for medical, surgical and hospital care persons who are deformed who need operative attention, pregnant women and persons who are ill, none of such persons having funds of their own to secure such treatment and care, and

"WHEREAS, the County of Muskegon has been paying large sums of money for the various items that go with the care of persons so afflicted, and for such other items as transporting the patients to and from Ann Arbor, Michigan, and

"WHEREAS, certain members of the Muskegon County Medical Society did present to the Board of Supervisors of Muskegon County, at its October, 1931, session, a plan that they in co-operation with the two hospitals in the city of Muskegon, Michigan, would take over the care and treatment of such indigent persons as have been heretofore sent to Ann Arbor for treatment."

THE MEDICAL PROTECTIVE ASSOCIATION: Medical service is to be given by an organization known as the Medical Participating Association which is formed under the auspices of the Muskegon County Medical Society, and is composed of those doctors who desire to enter into a contract with the county officials.

THE COUNTY OFFICIALS: The County of Muskegon agrees to pay to the Medical Participating Association the sum of \$10,000 per year for the treatment of 200 indigent cases referred to it by the Probate Court of the County, or if a greater or lesser number than 200 is referred, then the amount to be paid shall be in proportion that the actual number treated bears to two hundred. This money shall be in full payment of all medical and surgical services which the patients may

Modern diets often lack minerals

To-day, authorities are stressing the importance of the essential mineral salts. In addition to building sturdy bones, and blood rich in hemoglobin, these mineral elements aid metabolism and contribute to nervous stability.

Yet many modern diets cannot be depended upon to furnish the proper quota of minerals, and therefore millions of people suffer from the effects of demineralization. Cooking destroys a variable amount of the mineral value of foods—in some instances as high as 76 per cent.

To correct this loss and to remedy demineralization—with its attendant symptoms of nerve fag, neurasthenia, lowered vitality and loss of energy—a tonic rich in mineral salts is needed.

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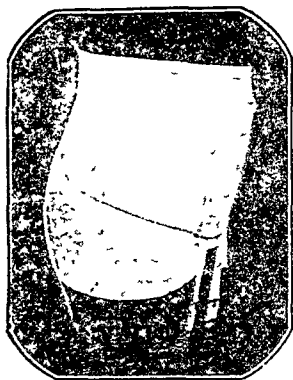
Suggested dosage: A teaspoonful in half a glassful of water three or four times daily.

FELLOWS' SYRUP

OF THE HYPOPHOSPHITES
CONTAINS THE ESSENTIAL MINERALS
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One of three distinct types and there are many variations of each. “STORM” belts are being worn in every civilized land. For Ptois, Hernia, Obesity, Pregnancy, Relaxed Sacroiliac Articulations.

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A statistical study of a series of over 9000 cases showed a morbidity reduction of over 50% when Mercurochrome was used for routine preparation.

Write for Information

Hynson, Westcott & Dunning, Inc.

Baltimore, Md.

(Continued from page 298—Adv. xiv)

require, whether given in the hospital or the dispensary or the home of the patient.

HOSPITALS: The treatments shall be given in two hospitals, the Hacklay and the Mercy Hospitals. The hospital charges shall be \$4.50 per day for bed patients, and fifty cents per day for dispensary cases, to be paid by the County to the hospitals.

DIRECTOR OF MEDICAL SERVICES: The physicians, called the party of the second part, also make the following agreement:

“The party of the second part further agrees that they will appoint a Director and an Assistant Director who shall see all patients admitted to the Muskegon Hospitals and assign said patients to such physician or surgeon as his or her case may require. The party of the second part further agrees that the said Director will keep a record of all patients so admitted to the Muskegon Hospitals by the Probate Court of Muskegon County. The said party of the second part further agrees that the Director will watch the progress of the treatment of cases in the hospitals, with the object of securing additional treatment if necessary, and with a further object of not keeping patients in the hospitals longer than their condition warrants.

“The said party of the second part further agrees that its members will not order any extra service or medicine not covered by the day rate with the hospitals without first obtaining the written consent of the Director or the Assistant Director of the Association.

“The said party of the second part further agrees that when a patient leaves the hospital and is in need of further care then the member thereof having the patient in charge in the hospital will attend said patient in the out-patient department of the hospital in which said patient was confined, and in case of surgical patients who are not able to come to the out-patient department, that then the member having such case will visit the home of the patient to give care and treatment until such patient is able to come to the out-patient department of the hospital in which such patient was confined, without additional charge.”

The plan of the Muskegon County Society may be compared with the New York Welfare Law, which imposes on a county welfare commissioner the duty to provide medical service to those who otherwise would be unable to procure it.

COUNTY HEALTH DEPARTMENTS

Dr. F. P. Foard, Assistant Surgeon of the U. S. Public Health Service, discusses the history of County health departments in the February number of *Colorado Medicine*, as follows:

“The first full time county health department to be organized in the United States—or in the

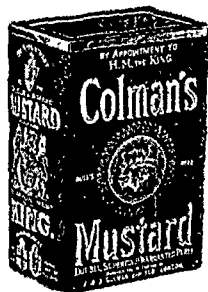
(Continued on page 302—Adv. xviii)

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Grip . . .

Influenza



BEST AVAILABLE RECORDS show a morbidity of 83% in these conditions each winter. Many of your patients will suffer from these common catarrhal and respiratory disorders.

For centuries mustard has been used advantageously in their treatment, but its effectiveness depends upon its content of glucosides. Hydrolysis liberates their volatile oils which produce mustard's well-known counterirritant, stimulant, and revulsant effects.

COLMAN'S MUSTARD is grown and ground under conditions designed to preserve these active elements. Prescribe it by name and your patients will be assured the greatest therapeutic effect of bath, poultice or plaster.

Colman's

PHILLIPS' Milk of Magnesia

THE IDEAL LAXATIVE-ANTACID

The name "PHILLIPS" identifies The Original and Genuine Milk of Magnesia. It should be remembered because it symbolizes unvarying excellence and uniformity in quality.

Supplied in 4 oz., 12 oz., and 3 pt. bottles.

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CHEMICAL CO.**

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PHENO-COSAN Promptly Relieves Skin Troubles

PHENO-COSAN was primarily formulated for the treatment of eczema. In this condition, clinical reports show consistent success.

In addition, physicians report gratifying results in psoriasis, tinea and certain other skin conditions.

PHENO-COSAN has a vanishing base and requires no bandages. Contains NO MERCURY and is of special value in infant cases.

It is regularly supplied to U. S. Government, State and Civic hospitals.

Interesting literature free to physicians.

Whitney Payne Corporation
GWYNEDD VALLEY PENNSYLVANIA

(Continued from page 300—Adv. xvi)

world—was organized in Yakima County, Washington, on June 1, 1911. North Carolina followed with the second on July 1 of the same year. Progress was slow, however, in having the different states adopt the county unit plan and comparatively few were organized until after the close of the World War. The county unit plan has been fostered by the Rockefeller Foundation and the United States Public Health Service through financial assistance extended to those counties desiring such organizations; and on January 1 of this year there were 557 counties in the country which were conducting efficient and highly satisfactory local health departments. The average annual increase has been fifty-two counties each year for the past five years. Considering that there are still about three thousand counties in the United States which have no efficient local public health programs, the progress is still slow; yet it is faster than appropriations are being made by Congress to meet the demands for cooperation. The states leading in the number of counties having full time county health units are Alabama first, with 54; Ohio second, with 46; Kentucky third with 43; Tennessee fourth, with 42; North Carolina with 39; Georgia, Virginia and Mississippi all have above thirty, and the other southern states have slightly fewer in number. In the west, California has 13, Washington, 8; New Mexico, 8; Oregon, 8; Arizona, 6; Montana, 4; while several of the western states and many of the New England states have none. New York, however, has recently submitted a law which if passed will make it compulsory for every county in the state having a population of more than forty thousand to maintain a full-time county health unit.

"Tennessee, one of the poorest states in the Union from the standpoint of assessed valuation of rural property and per capita wealth, has one of the most efficient, if not the most efficient, state health departments in the country."

FEDERAL MATERNITY LEGISLATION

The principle of Federal aid to the States in public health work, embodied by Congress in the Sheppard-Towner Act, was in practical operation for a number of years until the Act was repealed by Congress June 30, 1929. Since that time attempts to pass a similar law have been made by its proponents in every Congress. The present bill was introduced in the Senate by Senator Jones of Washington and by Representative Bankhead of Alabama. The *Texas State Journal of Medicine*, with other State Medical Journals, is actively opposing the bill, although Mr. Sheppard, the author of the former bill, is senior senator from Texas. The leading editorial in the February number of the *Texas State Journal of Medicine*

(Continued on page 304—Adv. xv)

The
emotional
factor
in
high blood pressure



EMOTIONAL STRESS—worry, anxiety and care—is considered a prominent factor in causing and maintaining high blood pressure.

In addition to regulation of the patient's mode of life, with special reference to an appropriate diet and adequate rest, the use of **THEOMINAL** has proved eminently serviceable in controlling hypertension and in reducing mental irritability.

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HOW SUPPLIED—Bottles of 25 and 100 tablets.

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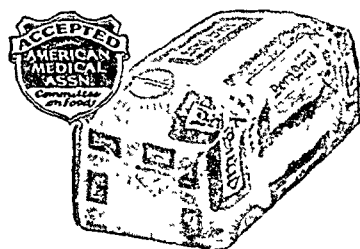
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*in each**24 ounces of bread*

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2. Sunshine vitamin-D Bond Bread now richly provides this valuable food element in the diet. (Journal American Medical Association, July 4, 1931.)

3. This improved bread is sold at no extra price.

4. There is no change in the taste or the delicious flavor of the bread.

5. Toasting in no way impairs the sunshine vitamin-D content. (Paediatric Research Foundation.)

Be sure your own family gets wholesome Bond Bread regularly, to build and maintain strong bones and sound teeth. For further information, address Dr. J. G. Coffin, Technical Director.

Bond Bakers

GENERAL BAKING COMPANY

420 LEXINGTON AVE., New York, N.Y.

(Continued from page 302—Adv. xviii)

enumerates seven reasons for its opposition to the bill as follows:

"1. The Sheppard-Towner Maternity and Infancy Act, as passed originally and later modified, failed to materially speed up the decline in the maternal mortality rate during the time of its operation, and there has been no increase in mortality from this source since the law was repealed

"2. The re-enactment of this measure would, in our estimation, add unjustifiably to the burden already borne by federal and state taxpayers. This would seem not to be the time to increase federal expenditures for any but the most necessary purposes, and who is there who can say that this purpose is necessary at this time, particularly in the face of the united if not unanimous opposition of the largest and most influential group of physicians in the world?

"3. If this type of legislation continues to grow in popularity, the time will soon arrive when some of our states will find it exceedingly difficult if not impossible, to match Federal funds.

"4. The measure represents a most insidious but certain approach to state medicine, so-called, of the most reprehensible type, reprehensible in that it invades, indirectly and, in prospect, directly, the practice of medicine in states, counties and municipalities, all under federal direction and control.

"5. The medical profession is opposed to the socialization of medicine rather because of the anticipated ill effects upon the dependent public than upon the welfare of its own members.

"6. The legislation provides very practically for Federal control of a broad scope of activities in the state, at the expense of both state and federal taxpayers.

"(a) A Federal board is created, comprising the Surgeon General of the U. S. P. H. S., as chairman (doubtless designed to relieve the apprehension of those interested in public health matters), the Chief of the Children's Bureau of the Department of Labor, and the Commissioner of Education of the Department of the Interior,—two to one in favor of lay control.

"(b) The board is given the power to 'approve or disapprove of all plans for cooperative work between the United States and the several states under the Act,' which is equivalent to saying that the Board may direct these activities, for all practical purposes.

"(c) The purpose of the measure is declared to be two-fold, first (so placed as good psychology) to enable the Public Health Service, 'under the general supervision of the Board' to 'co-operate with the state agencies of health in the development of local health units or organizations for the prevention of disease and the promotion of health among the rural population'—second, the purpose of 'enabling the Children's Bureau, under the general supervision of the Board (al-

(Continued on page 305—Adv. xxi)

*Fills the need for a dependable
antacid mineral water*

VICHY CÉLESTINS

This long renowned naturally alkaline mineral water assists in neutralizing excess acid and in regularizing functions of the digestive tract.

Bottled at the Spring in Vichy, France, under Government supervision, it meets the great need of the physician for constancy of composition.

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503 Fifth Avenue, Rooms 200-212, New York, N. Y.

(Continued from page 304—1dv rrr)

ways) to cooperate with the state agencies of health promote the health and welfare of mothers and children'

"(d) The element of coercion is carried by the terms of the appropriation. It is provided that no funds appropriated under the Act shall be made available to the states until an equal sum shall have been made available by the state first for the promotion of the first purpose of the bill and second for the promotion of its second purpose both of which we have just recited. But that is merely the foundation. Any state desiring to avail itself of the benefits of the appropriation authorized by the measure must secure the approval of its plan for carrying out the purposes of the law, in addition to appropriating one half of the cost of the entire work.

"(e) Apparently the author of the measure has anticipated and disarmed the opposition of such organizations as christian scientists, antivaccinationists, and the like by requiring that the plans for the states shall provide that 'no official, or agent, or representative of the state in carrying out the provisions of this Act, shall enter any home or take charge of any child over the objection of the parents or either of them'

"(f) The Children's Bureau, it is provided,

shall withhold allowance to states for maternity and child welfare work under this measure, 'upon request of a majority of the Board'

"7 Finally let it be understood by all who would know that in opposing the legislation under discussion the medical profession departs not one jot or tittle from its traditional concern for the health of the public"

MEAT INSPECTION IN MISSOURI

The February issue of the Journal of the Missouri State Medical Association discusses editorially the relation of the St. Louis Medical Society to meat inspection, as follows:

"It was long known to the members of the St. Louis Medical Society that the City of St. Louis had no effective ordinance for inspecting local packing houses. The Society's committee on health and public instruction viewed the situation and decided to recommend a campaign to establish municipal meat inspection. The committee was composed of Drs. Charles E. Hyndman, Jerome E. Cook and Robert Vinyard and instructed the executive secretary, Mr. Elmer H. Bartelsmeyer to make an investigation and report the result to the committee. Mr. Bartelsmeyer

(Continued on page 306—1dv rrr)

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New "Master" Elastic Stocking



TRADE MARK

Made with boot strap at top only (full length tape, of course, if desired).

Made in colors which have been scientifically worked out so as not to show through thin silk hose.

Made with no tape on back, but woven together with a practically invisible seam.

And — Each Handwoven to measure.

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(Continued from page 305—Adv. xxi)

carried out these instructions and made a detailed report. He found fourteen plants in St. Louis whose products entered into interstate commerce and therefore enjoyed Federal inspection but he also found forty-eight plants whose products were sold wholly within the State and therefore had no supervision either by the Government or by the City of St. Louis. Approximately 50 per cent of the meat and meat products consumed in St. Louis were not inspected or were very inadequately inspected.

Indicative of the danger to the public health Mr. Bartelsmeyer submitted the following figures: During the fiscal year ending with June, 1930, there were 1,750,855 cattle, calves, sheep, goats and swine slaughtered in St. Louis plants under Government inspection; of these 3,862 carcasses and 25,794 parts of carcasses were condemned because of a diseased condition and 79,210 pounds of meat and meat products were condemned for improper handling. In comparison, the report pointed out that 521,604 animals were killed for state consumption in plants without Government inspection and with no record of carcasses or parts of carcasses condemned on account of disease or improper handling.

"Growing out of the work begun by the committee the packing establishments having Government inspection sponsored a meeting at which a civic committee of ten, the St. Louis Committee on Inspection of Meat, was appointed by the group at large. On this civic committee was Dr. T. B. Pote, St. Louis, United States Bureau of Animal Industry, and the executive secretary of the St. Louis Medical Society."

The editorial describes some of the difficulties met and obstacles overcome in securing an effective ordinance on meat inspection, and a system of its enforcement. The editorial concludes:

"The establishing of meat inspection is of prime importance to anyone interested in the people's health. But aside from the forward stride in community health there is another angle that is gratifying. The public in St. Louis demanded meat inspection. The story of the passing of the ordinance is that of a small group, the committee on health and public instruction of the St. Louis Medical Society, making the public conversant with the facts that they were not getting inspected meats and that inspected meats were healthier and could be had. It is also the story of the wisdom of a medical society employing a layman as an executive secretary."

SECTIONAL MEETINGS IN MINNESOTA

An editorial in the October number of *Minnesota Medicine* defends sectional meetings of the physicians of groups of counties as follows:

(Continued on page 307—Adv. xxiii)

(Continued from page 306—1st. xxi)

"More than eighty practitioners of Medicine registered at Hibbing and attended the fine day's session of the Northern Minnesota Medical Association. Despite the depression and oppression, the attendance from such a wide area was, as ever, a fine indication of most doctors' zeal for instruction and organization, and enjoyment in fraternizing with their fellows.

"No one can see in such amplified sectional meetings, or what are virtually yearly assemblages of contiguous county society groups, any interference with the purposes or prerogatives of the State Association. It seems necessary at times to reiterate this opinion because the notion abounds that defections, through hospital staff meetings, special groups, or the great colleges detract interest and support from the official groups leading up to the American Medical Association. This notion is not denied by those who neither attend hospital staff meetings nor like them, men who are supposed to remain away from state and American Medical Association meetings because they ingest medical pabulum to satiety at home. Go to all these meetings, and you will find the sturdy veterans in the benches at all the good meetings. To locate the rest for present or future, is not the purpose of this editorial."

BUDGET OF WEST VIRGINIA

The February issue of the West Virginia Medical Journal carries the following comments on the budget of the West Virginia State Medical Association which was adopted by the Council on December 29, 1931 —

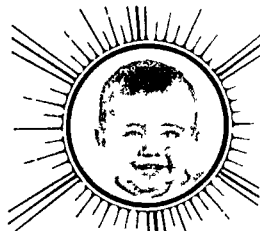
"The item of salaries includes the salary of the executive secretary, the stenographer, the treasurer, and also provides for additional stenographic help if needed. The item for legal services is the amount of the annual retainer paid to the Association attorney. The item for traveling expense covers such expenditures of councilors and officials who make trips on official business for the Association.

The complete budget as adopted on December 29 follows:

Salaries	\$5 400 00
Library	150 00
Rent	480 00
Telephone Telegraph	170 00
Postage	250 00
Traveling Expense	300 00
Convention Expense	400 00
Legal	100 00
Office Supplies	200 00
Office Maintenance	150 00
Stationery	150 00
Miscellaneous	250 00
Total	\$8 000 00

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SECRETARIES' CONFERENCE IN MINNESOTA

Many states now hold annual conferences of their county secretaries. That of Minnesota is described in the February issue of *Minnesota Medicine*, as follows:

"The three major events of the morning program included discussions of fee collection methods led by Mr. Albert Wilson of St. Paul; a recital of the work of the joint cooperating committees of the Minnesota Editorial and the Minnesota State Medical Association by Mr. Roy J. Dunlap, Managing Editor of the *St. Paul Pioneer Press and Dispatch*, and J. A. Watson, chairman of the Medical Association Committee, Minneapolis; and a symposium on Medical Care of the Poor under the chairmanship of Dr. Theodore Sweetser, Minneapolis, chairman of the State Health Relations Committee. W. C. Andrews, Frederic, Wisconsin, president of the Polk County Medical Society; Mr. Vernon D. Blank, Des Moines, general manager of the Iowa State Medical Society, and Dr. Harold M. Camp, Monmouth, Ill., secretary of the Illinois State Medical Society, reported on the systems in use in their respective states. The Hon. Henry Benson, Attorney General, commented upon possibilities of introduction into Minnesota of the contract system in use in Iowa and elsewhere for the care of the poor.

"The luncheon address on the subject, 'The County Society Turns the Tide Against State Medicine,' was made by Mr. H. Van Y. Caldwell, Cleveland, executive secretary of the Cleveland Academy of Medicine, with a discussion by Mr. Theodore Wiprud, executive secretary, Milwaukee County Medical Society.

"The afternoon program was devoted exclusively to Periodic Medical Examinations and Medical and Hospital Care for Veterans, the latter occupying the major portion of the time."

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MEDICAL CARE OF INDIGENTS IN IOWA

The care of indigents in Iowa by contract of County Boards of Supervisors with their County Medical Societies has been described in this Journal several times, as in that of March 15, 1930, page 368. The February number of the Journal of the Iowa State Medical Society summarizes the development of the plan to date as follows:

"The completion of three new county medical society contracts for the care of the indigent sick brings to nineteen the total of such contracts in Iowa. The recently completed contracts are in Crawford, Monroe and Tama counties. In each of these counties the project has been in process of formulation for nearly three years and the successful consummation is a source of satisfaction to all concerned. In the smallest of these, Monroe county, the contract is for \$1,000 a year, in Tama county the sum is \$2,000, and the Crawford county contract is for \$2,500.

"Reports already received indicate that the sixteen counties previously having contracts have renewed them for 1932, some with increases. The Muscatine county contract has been increased to \$3,600, and the Webster county contract has been increased from \$3,000 to \$3,615. The Scott county contract remains at \$15,000. Final reports have not been received from the remaining counties but preliminary indications are that renewal at previous figures have been effected in Black Hawk, Boone, Clinton, Hardin, Jefferson, Lee, Louisa, Mahaska, Marion, Marshall, Pottawattamie, Washington, and Wright counties. The Iowa plan is receiving attention in other States. The attitude of Michigan is indicated in an abstract printed on page 298 of this Journal. What a County Medical Society may do will depend largely on its state laws.

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HEALTH INSTRUCTION THE BEST SOCIAL INSURANCE*

By RAY LYMAN WILBUR, M.D., SECRETARY OF THE INTERIOR, WASHINGTON, D. C.

YOU and I are units in a great living mechanism we call civilization. Our lives are particles in a flowing stream of human energy which goes on indefinitely, but to each of us is granted but a brief period in which we must pass through infancy, adolescence, maturity and senescence. Whether we go through the whole individual cycle or drop out by the way, whether we contribute or are carried along depends upon the inherent vital forces with which we are endowed by birth and the incidental happenings which come our way. Health is a term we use to express a state of well-being and a capacity to do. It means more than the absence of evident disease. The presence of health in mind and body determines the height to which individuals may climb and nations aspire. Each conscious person has the day to day task of living in a certain physical frame. He can not transfer to a new one. He can not be sent back to the factory for new and up-to-date parts. The surgeon gets along better taking things out than putting them in. Each person must work with what he has in the way of body equipment. By understanding his own body, and by knowledge of pertinent facts, it is possible for each to steer a course with the minimum of friction and the maximum of results. Organized groups of individuals either as families, communities or nations, may likewise use facts in going forward. We no longer consider ourselves mere creatures responsive to gods and demons requiring propitiation. The entrails of animals tell us today the hard facts of science, and guide us in the control of living organisms which are harmful to us. We no longer look to them for an augury of good or evil.

Through centuries of patient and clear-eyed study we find ourselves custodians of information that has made a new world possible. The grip of terror that has held man tight since the dawn of life has been loosened for what we call civilized peoples, but it has by no means been eliminated. We have many of our enemies classified and

named, but in each of us lurks the savage with his fears and credulity. The label on a patent medicine bottle is as soothing as the advertisement is provocative. We want to believe that a few ground up husks in a handsome carton will give us health for a few cents instead of earning well-being by care, sane conduct and the use of expert information.

In the forefront in the advance of science has been the physician seeking to use each new discovery for the relief of the pain and distress of those calling upon him for help. Discovery has been added to discovery. With well digested experience and a multitude of clinical observations, there has been an astounding growth of fact knowledge for the guidance of society in the domain of sickness and health. In the unraveling of the tangled and confused manifestations of disease we were fortunate enough to find certain weak spots subject to mass attack. Instead of permitting a community to acquire immunity to the typhoid bacillus through the tragedy of illness, we destroy that organism in drinking water with chlorine and control it by heat and measures of cleanliness in milk and other food products. We destroy the mosquito that gives us malaria, we let the calf provide us with vaccine to control smallpox, and meet and conquer natural enemies in a thousand fields. Each year there is a growth of this fact knowledge with a constant change in emphasis and in method as we learn more and more.

In spite of the prodigious progress in the field of public and of private health, in spite of anaesthesia and modern surgery, we find a considerable number of our people refractory to the opportunities given them by science. Our organization for the application of knowledge to the immediate needs of an individual or of a community is still inadequate and has never been founded on a sound basis of economics. Besides, in each of us there still remains some remnant of the old belief in magic and in a certain number, magic completely replaces science.

If society is to advance through the advance of

* Address to the Sixty-seventh Convocation of the University of the State of New York, at Albany, New York, October 15, 1931.

health, we must prepare the minds of our boys and girls so that they will know not only what to expect but be able to distinguish the genuine from the false. This can be done through the teaching of health and hygiene. This is an easy phrase to say, but it describes one of the most difficult forms of education. Each human being is a law unto himself. There is a great variation in the topographical anatomy of the body, in the physical resistance to disease, to drugs and to narcotics, in the tone of the muscular system, and in the power of the nervous system to control the body and to handle itself. For each, many of the lessons of health and hygiene must be separately learned. There are, of course, many conditions which are practically universal, which are favorable or unfavorable to the health of the body. The removal of unsatisfactory and dangerous conditions in environment, the development of sound health habits, the understanding of proper body nutrition, all can be taught with confidence and success. Hygiene is no longer a series of don'ts. It now must be lived as do's. It must be positive, not purely negative. The wide margins which the body possesses so that it will have the capacity to undergo strain, must be understood, but must not be taken advantage of. Knowledge must replace precept. Physiology must be simple and understood. One does not need to become conscious of everything that his body does, nor to develop into a hypochondriac but he should know the whys and wherefores of ill health so that he can avoid sickness and build up natural strength.

The community can well arrange to have a health survey of all of the facilities that it provides and also of the health condition of each of its citizens. Whether this is brought about by volunteer effort, through industry, or through the public school or all working in unison, is not so important as it is to have a complete physical examination of the community and of each of its citizens at various intervals. This examination, if properly handled and interpreted, is the best source of health education. The Health Department can constantly educate the community by the way in which it does its work and by the publicity given to it.

We have come a long way from the period when the nose was considered the best way to discover the source of disease, but ignorance is still the greatest opponent of sound personal and public health. If in our public school we can teach the facts of health, we can see a new generation facing with understanding the problems of the body and free from those fears that have haunted the human race throughout the ages. Health education should be approached from the standpoint of health rather than from that of disease. Fortunately, we can rest on basic scientific discoveries; we can get down to fundamentals. I am reminded of the story that came out

of the State of New York at the time of the Food Administration in Washington. In one of the debates before a committee a man from upstate New York who tired of voluminous but somewhat vague discussion said: "Up in our part of the State we have a theory that the man who sleeps on the floor can not roll out of bed." I think it is about time for us to get down to the floor on this topic which we are discussing. That there are firm foundations is not appreciated by all. Too many of our people become mentally fuzzy in their discussion of health problems; too many of them consider themselves experts, since they have had the experience of living with and operating an active living unit for a certain number of years. They feel that their experience can be a universal guide. But science is a better one.

As I have already said, the great variability between individuals makes it necessary to deal in broad terms and in averages in connection with much health instruction, health advice and health services. We can look into the past and see how the physician has steadily risen on the backs of thousands of men like Franklin, Pasteur, Koch, Jenner and Edison until today he can look out over much conquered territory in spite of the blurred horizon where our research workers are busy. We no longer need to speculate and guess in many fields of health. We know, for science has taught us. It is true that we must present an even changing front as new information comes in. Most important of all is it, that our children shall get a biological viewpoint in looking at life.

Probably our greatest difficulty is that there is no way to account for much of human behavior. There is no way to tell what a human being will do the next minute, or what he is going to do in the future. Each action is a creation of the moment. Health becomes then not a study of the mathematics of structures, but of the control of forces. This applies not only to the individual but also to the social organism. Perhaps the best contribution that can come from health instruction is associated not only with the receptivity of the prepared mind of which we have spoken, but the ability to see and to understand.

From the standpoint of public health, there is much that can be done for the public. There is though, much that the public alone can do for themselves. How much the public will do depends upon how much they know. How much they will be able to absorb of the existing knowledge depends upon the kind of training they have had in schools. Unless they have learned to recognize the significance of fact it is not likely that they can be guided in the right channel. It is true that through the law and public health administration we can use the method of "don't" or "verboten" in handling many health problems, but that way is only partially effective. The control of units, whose actions are individual and

under the steering power of but one will can be brought about only by a true understanding of facts. In other words, we can say that where "George can do it," public health is well done, but where the person must do his share the problem is and will remain one of great difficulty.

Looking at the various forces operating in our country for the improvement and advance of our society we naturally turn to education as the most dependable method to get results. We are grasping the fact that education is not a mere transfer of information from one mind to another, but that it is a manifold process by which a growing person learns how to operate under his own power and will. Particularly in the sphere of health, we must learn by doing, and what we do must be

done with understanding. It is impossible to picture what might come to us as a race if we could take full advantage of all that is now known and useable in the control of public health and in the promotion of personal health and well being. It is inevitable that we will drag along a considerable remnant of past thinking, of old fears and inhibitions, but with widespread health education this residue need not be the controlling factor in public health activities.

Reason, example, experiment, observation in the field of nature study and biology will lay that solid basis for health which is needed. Society can get greater dividends in happiness, comfort, security of home and community from applied health knowledge than in any other way.

MEDICAL RESEARCH*

By FREDERICK G. BANTING, M.D., TORONTO, CANADA

WHEN I received the kind invitation to address this Convocation, the fact that it would give me an opportunity of visiting the ancient and historical city of Albany greatly influenced me in accepting. Albany has occupied a unique position in the mutual history of United States and Canada. It has been associated with the romantic episodes of early exploration since the time of Hudson. It seemed to me therefore, that the field of exploration in which I am most interested namely, Medical Research, could be fittingly discussed in Albany.

Most of you are acquainted with the outstanding results of Medical Research. Pasteur, Lister, Ehrlich, Flexner and Minot are well known names and the results of their work have had a profound effect on the daily life of people of all civilized countries. As a result of Medical Research, diseases one by one, are being controlled, treated and cured. Smallpox, typhoid, scarlet fever, diphtheria, diabetes and pernicious anemia are no longer to be dreaded.

The lives of the outstanding men of Science are an inspiration to us today. The results of their work are being applied in our every day life to preserve the health of humanity. The scientific truths discovered by them are the foundations on which our Science of today is built.

There are still many problems to be faced by the Medical and Scientific world. The greatest interest of the moment is not what has been accomplished but in the task of the future. We still have many diseases which baffle the medical profession. Advancing civilization with its in-

dustrial development is introducing new problems which must be solved.

The greatest need of Medical Research at any time is men. We need have no fear of a situation if we have man power and brain power to meet it. It is my purpose today to speak to you about the "Research Worker."

Research men are born, not made. The research man is fundamentally inquisitive—not about things that everybody knows, but about things which nobody knows. The child starts out in life with an inquisitive mind but the average child is satisfied and contented by the answer given by an adult. The child soon loses that inquisitive quality if he is suppressed. As a child grows older it is not always in his best interests to answer his questions but he should be encouraged to answer them himself as far as possible. In 1923 I visited the City of Washington and had the pleasure of meeting an eminent physician of that city. He told me that every Saturday morning he took his two boys, of 6 and 8 years for a walk. On one occasion the two boys plied their Daddy with questions until he became displeased and told them that they must not ask so many foolish questions, but that they must think before asking. When they arrived at the zoo they went to see the lions and after some time the older boy asked "Which is the daddy lion?" His father told him that it was the one with the mane. On thinking it over the child said, "I don't think you are quite right about that, Daddy. Mother's hair is longer than yours." I would like to follow the career of that child, for he has the making of a research man. His answer also involved a fundamental principle in Research—the

* Address to the Sixty-seventh Convocation of the University of the State of New York at Albany, N. Y. October 15, 1931.

challenge of authority. He did not accept without due consideration the explanation given to him.

There is no doubt that many children who have natural research minds lose the gift by improper training or lack of cultivation. Our modern school system with the large number of children placed under the care of one teacher, and the standardized course of training does not permit of encouraging originality, but great care should be taken not to suppress it.

People who have not an investigative mind will never make research workers. They may be useful and accurate in routine work but they seldom have a worth-while idea.

Research workers must have imaginative minds and natural powers of observation. The essential qualities to be looked for in a Research man are honesty, common sense, balanced enthusiasm, self-confidence, tenacity, system and method in keeping notes and in planning and carrying out experiments, and unreserved devotion to the problem in hand. If a man is not honest he may deceive himself and be led to draw conclusions from false results which will not stand repetition by other workers. If a man lacks common sense he is liable to be easily side-tracked, and is led to do foolish things in the name of Research. If a man does not possess enthusiasm, he very soon becomes lazy and gambles away his time, but if he becomes over-enthusiastic, he may become carried away and arrive at conclusions too hastily. If he lacks self confidence, he can never convince himself or others of the value of his work. The young worker must not become discouraged even if the trend of experiment goes against theory. If he has not the tenacity to continue he will often miss out and, because of incompleteness, his work will fail. The Research man who lacks method and system is like a ship without a rudder. The young worker who has not an unreserved devotion for his work is not likely to succeed. I am a firm believer that if a person tries hard enough and long enough, he will achieve whatever he reasonably sets out to do.

A man's worth in Research should not depend on his personality but it does become a very important factor, because cooperation with other workers is essential in most research problems. The young worker who is adaptable has a great deal in his favor for he will get more assistance from other workers and they in turn will come to him for advice.

There are many applicants who present themselves to a department of Medical Research, and it is of the utmost importance, especially if means and facilities are limited, that the best should be selected. It is an advantage to inquire into the history and school record of the candidate. As a rule the man who has been head of his class is not the most desirable. Such a student has usually a "memory" mind. He has a highly trained

memory and can reproduce lectures and textbooks at the examinations in a literary style that delights the teacher. He is equally good in all subjects for they are all one to him. The Research man is more apt to come about one-third of the way down the list in his class standing. He is outstanding in one or two subjects and in the others he has secured a pass. There is in a certain laboratory a brilliant and most promising Research student whose record is an example of this type. During the three years at the Agricultural College he was considered a very mediocre student. The College required a thesis on some farm topic during the third year. This student selected "Wool" as his subject. When he produced his thesis it was of such outstanding quality that no professor felt sufficiently acquainted with the subject to assay its true value. The thesis was sent to a practical wool authority and he said it was the best article he had ever read on the subject, for it contained much information new to him. The boy was sent for and questioned as to the source of his knowledge and under cross-examination he told of his experiments and observations. His thesis had marked him as a true Research man and he was given every opportunity to develop his talent. Through the kindly influence of his professor, he has taken up Research for his life work.

On the other hand another student came to the laboratory a short time ago and wished to do Research. There was no special problem in which he was interested and he was quite indifferent to several that were suggested to him. He had graduated in Medicine two years ago and had held a Research scholarship in Clinical Medicine since that time. His class standing throughout the Medical Course had been high. As far as I was able to learn, his Research Work had consisted in pure routine analysis. Research scholarships are wasted on students of this type. They may do excellent work in some other field but high standing alone does not qualify them for Research work.

As I said before, I believe that Research workers are born, not made, but I also believe that proper training can help a great deal. Possibly the greatest thing that a teacher can give a student which will help him in after-life is inspiration. There are teachers who impart to their students the love of the subject and an interest which they carry beyond the school-room. A great number of Research men are produced in the high school where some kindly, inspiring teacher stimulated their imagination, aroused their curiosity and trained their powers of observation. The teacher in the high school can advise the student what subjects are essential for his training for future usefulness. When the student begins his study of the Sciences—Mathematics, Physics and Chemistry, he is apt to neglect the Languages. Every student should ob-

tain a reading knowledge of French and German in high school. German is the most important to the Research man because so many scientific articles are written in German.

The majority of scientific workers have had the Research talent awakened at the university. Of all the courses in the university the Medical Course provides the best training in the powers of observation, deduction and recording of findings. The Medical Course not only teaches Medicine but tends to produce an all round training which may be well applied in other walks of life. For this reason we have outstanding sculptors, artists, poets and authors among the alumni of the medical schools. The Medical Course tends to develop the best that is in the man and tends to stimulate his creative instincts. Towards the final year the undergraduate who has the Research mind usually selects subjects which are of most interest to him. Very often this interest has been stimulated by his admiration for the professor as much as by the subject itself. In my own case it was a teacher on the Surgical Staff of the University of Toronto who instilled in me the desire for post-graduate work in Surgery. It is in post graduate work that the real training for the Research man is obtained. The student who remains for a year as a junior in any department of the university is usually given a small amount of teaching but his major work in such departments as Physiology, Pathology or Biochemistry is a Research problem. It naturally follows therefore that the manner in which the student is treated in his first actual taste of Research will be important all through his life. The professor who allots a day's work to his post-graduate students and comes around the following morning to collect the results is doing great harm to his student. I have in mind an eminent professor who has had from 4 to 8 undergraduates under him every year for 20 years and who never produced an outstanding Research man. On the other hand he has produced routine technicians.

I believe that the student should be allowed to work on his own problem if he has one, or if a problem is given to him he should make it his own. He should be given every assistance in the working out of the problem but he should be made to plan his own experiments, draw his own conclusions and consult the professor for suggestions or advice. The reading of the literature on the subject should be left in the student's hands but he should be warned to read all scientific articles in the most critical and analytical fashion. Too much reading of the literature is not to be advocated. Too thorough a review of the literature, before beginning work, is inadvisable for there is scarcely a subject in medicine on which there is not a wide diversity of opinion and confusion of thought. After completing the Research work the student will be able to evaluate the experimental results that are related to

the problem. When the work is completed the young Research student should write his own report, giving his results and any conclusions that may be drawn. If the paper is published, it should be published in the name of the worker or if it is reported at scientific meetings the paper should be given by the worker. In this way the student learns that he will get out of his work advantages in direct proportion to the energy which he puts into it.

At the present time there is a vogue for obtaining post-graduate degrees. In every laboratory there are M.A. and Ph.D. students engaged in Research. The student believes that the Ph.D. degree gives him a rank and standing which will enable him to better his position. Since almost all universities prescribe Research work in their Ph.D. degree these students present themselves to the laboratory. Many of this type of student have not the qualities to make them Research men. Much time is wasted in the effort to try to make them something that they are not. Possibly one of the worst features of the post-graduate degree is the thesis which is frequently published.

The young Research man can be assisted by training him in observation, in the careful and accurate recording of his results, and a careful supervision of the methods in his work. He should be encouraged to put down his ideas in a note-book so that he can refer to them and think about them before trying experiments. The young worker should be given as much latitude as possible in his work, but he should feel that he can discuss his problem with the professor at all times. He should not be laughed at and his ideas should be treated seriously, however foolish they may be and as far as possible, he should be made to answer his own questions. The young Research worker will greatly be helped by discussing his problem in perfect confidence with some person in whom he has absolute trust. The mere telling about it often clarifies the idea itself.

This was my own experience as a post-graduate student under the late Professor C. L. Starr. It is impossible to describe in words what he gave to me, but I know of no man of whom it may be more truly said, "What you are speaks so loudly that I cannot hear what you say." I always got encouragement and inspiration from Dr. Starr and never left his presence without feeling stronger and better able to carry on. He was an idealist and unconsciously imparted this idealism to those who were associated with him. I recall at least a dozen outstanding surgeons who owe much of their success, both in practice and Research to the influence of the late Dr. Starr. I can give no better advice to the ambitious Research man than that he should seek out such unselfish leadership.

The teaching departments of a medical school may be equipped with good teachers who are not

necessarily good Research men. It is unfortunate that these two qualifications are not always combined. We still have with us teachers who have a mind like an encyclopedia and who have the idea that knowledge is power. These men demand that the student memorize facts and place a premium on memory rather than on originality. The head of a department who is not interested in Research should not have contact with students. No matter how excellent a teacher may be, if he does not instil into his students the desire for investigation he can never be a success. The greatest need of our colleges is men with Research minds. Teachers often make the excuse that they have not time for Research but such an excuse is invalid. The person who wants to do Research will always be able to find time. The head of a department may not have time to do all the technical work necessary for his problem, but if he is the proper sort he will either provide himself with a technician or interest his students to carry on such work under his direction.

The ideal place for carrying out Medical Research is in a medical college, for there are very few problems today which do not require laboratory facilities. Most of the larger problems in Medicine involve special knowledge of more than one subject and it is an advantage to be able to consult and exchange ideas with the heads of the various departments in a medical school. Cooperation is the keynote for successful Medical Research. The work on Insulin was started in the department of Physiology; the department of Biochemistry assisted in the chemical work on depancreatized dogs; the Connaught Laboratories took up the manufacture; methods of administration were investigated in the department of Pharmacology, and later the department of Medicine carried on the clinical investigation.

Research in its broadest terms is the search for truth. The truth in Science can be found only by trial or experimentation; but before the trial is made there must be a reason for its execution. This is to be found in an idea. The idea is the most valuable thing in Research. Ideas never come to a man who accepts everything he hears without mental reservation. They never come to the careless nor to those who never ask why. They never come to the man who is satisfied with Science as it is today. Ideas come only to the man who asks why and who tries to answer his own questions. They come to the man who thinks about the facts that he reads and observes. It is not the man who has knowledge alone who becomes the Research man, but rather the man who is able to utilize the knowledge which he has. Knowledge alone is not power. Thinking is power. Ideas cannot be forced or called forth at will. There must be some influence which stimulates thought. Human disease is a constant challenge to the Research man in Medicine.

There is inherent in the Research man the desire to overcome obstacles, desire for achievement and the desire for the betterment of Science. Competition must not be underrated as a stimulus to thinking. Some of the world's greatest thoughts have been the outcome of criticism from an enemy.

My personal experience has been that ideas come in the quiet hours of night when one is free from outside disturbance. It is true that there are moments free from work during the busy day, but there is no possibility for continuity of thought when one does not know when an interruption may occur. Ideas come when one is in familiar surroundings, free from the distraction of the newness of things. One does not have ideas if one is physically or mentally tired. On the other hand, quietude, restfulness and peacefulness of the occasion will not produce thoughts without the stimulation for the desire of personal accomplishment. Even if the surroundings are conducive to thought there is no guarantee that quiet thinking will produce a constructive idea. I do not think it is possible to make a habit of thinking but very often one idea leads to another. New facts give further food for thought.

Important ideas often come as strange coincidences: for example, on the night of October 30, 1920, I was preparing a lecture on the Physiology of the Pancreas, during the early part of the evening. It occurred to me that there was a possibility that it was the external secretion of the pancreas which destroyed the internal during the process of extraction. Before retiring I read an article by Moses Baron describing the damage produced in the pancreas by the obstruction of the duct by gall stones. This article pointed out that similar damage could be produced by tying the pancreatic ducts. It has always been my habit to ponder over and critically analyze an article. It suddenly occurred to me that the external secretion could be got rid of by tying the ducts and the internal secretion would thus be separated. It was a coincidence that the two articles were read at the one time; otherwise they might not have been co-related and the idea which was the beginning of the experimental work on Insulin might not have been produced.

Once the idea has been formed the next step is to experiment to prove or disprove it. In some cases it may not be possible to begin this experimentation for some time, but if the idea is worthwhile, delay will only increase enthusiasm. Work was not begun on Insulin for five months after the idea was obtained. During this period further reading and further thought enabled me to crystallize the idea into experimental form.

Once the work was commenced there were no new major ideas until the first idea had become a fact. It required from April until August to

prove that there was an internal secretion of the pancreas and that it could be extracted.

The second idea in connection with the development of Insulin arose under the following circumstances: It required seven weeks and the life of one dog to provide enough Insulin to keep a depancreatized dog alive for one day. Best and I had a dog to which we had become very attached. This dog was at the point of death for want of insulin. All the available source of insulin from duct-tied dogs was used up. Unless we could get insulin from some other source the dog would die. In response to the seriousness of the situation I sat down alone in the middle of the night and with the new knowledge gained from our experiments I began to think of related facts. An old class-room experiment was recalled to my mind and I immediately concluded that by the long continuous injections of secretin, which is made from the intestinal mucosa, the pancreas might be exhausted of its supply of external secretion. The following morning this experiment was carried out. It was a great satisfaction to Best and myself that the extract produced in this way restored our pet dog to normal once more. Further efforts to make extract in this manner were not so satisfactory, but the knowledge gained from this experiment was of an advantage in providing additional proof of the original hypothesis.

During the next two months serious obstacles arose which obstructed our progress. It became necessary to either stop the work or procure some new means of obtaining insulin. While reading some notes made the previous winter I found an article which had no application to the earlier work but which proved of great value at this time. An anatomist by the name of Laguesse had stated that there were more islet cells in the pancreas of the new born than in that of the adult. This observation represents the value of fundamental research. It had had no practical application for 10 years but it became the starting point for a chain of ideas which were essential in the development of insulin. Within twenty-four hours of re-reading the article we had an abundant supply of insulin made from the pancreas of foetal calves which were obtained free at the abattoir, and it was not long until we were able to extract insulin from the whole adult beef pancreas. Insulin is an example of the application of fundamental research on practical problems. In all research the fundamental must be first, and although the world at large attributes honor and

fame to the worker who contributes to the practical welfare, it is to the quiet research worker on fundamental problems of science that we owe the most.

Many valuable ideas are lost because they are not carried far enough in quiet thought to be resolved to experimental basis and then worked out. When work is commenced on any problem the new experimental data give rise to new ideas, further experiments and further work. The more one works on a particular subject the more one finds to do. It is like education—there is no end to it. Pasteur was one of the hardest workers the world has ever known. He lived, moved and had his being in his laboratory and all other interests were secondary to his work. Once when he was a guest at the palace of Napoleon III, he was expected at a tea given by the Empress. When the guests had all assembled Pasteur was missing. He was found in his room engrossed in the microscopic study of the Royal wine. Pasteur never failed to advise young students to work. Addressing a group of Edinburgh students he said, "Ever since I can remember my life as a man, I do not think I have ever spoken with a student for the first time without saying to him 'work perseveringly'; work can be made into a pleasure, and alone is profitable to a man, to his city and to his country."

Through the ages there has been accumulated a vast amount of knowledge. Facts have emerged from fiction by trial and experimentation. Never has there been such an impetus to Science as at the present time, and never before has there been so much hoped for and expected of Medical Science. Too frequently we judge the prosperity of a country by its trade and commerce, but to my mind there is no better barometer of national progress than Science and Research. Dumas, the eminent French chemist and teacher of Pasteur said, "The future belongs to Science; woe to the nations who close their eyes to this fact." Pasteur resounded the same chord when he said, "Science has no nationality because knowledge is the patrimony of humanity, the torch that gives light to the world. Science should be the highest personification of nationality because of all the nations, that one will always be foremost which shall be first to progress by the labors of thought and of intellect. Let us therefore strive in the peaceful field of Science for the preeminence of our several countries. Let us strive, for strife is effort, strife is life when progress is the goal."

DIAGNOSIS AND TREATMENT OF SYPHILIS

(FROM THE VIEWPOINT OF THE GENERAL PRACTITIONER)

By A. B. CANNON, M.D., NEW YORK, N. Y.

This address was delivered at the headquarters of the Bellevue-Yorkville Health Demonstration in New York City in connection with the Syphilis and Gonorrhea Campaign conducted during October, November and December, 1930, by the Bellevue-Yorkville Health Demonstration in cooperation with the New York City Department of Health, the New York Tuberculosis and Health Association and the American Social Hygiene Association.

DIAGNOSIS OF SYPHILIS FROM INITIAL LESION

REGARDLESS of his particular specialty every physician frequently has to exclude syphilis as a possible diagnosis. There are few diseases which affect so many different organs of the body as does syphilis, and few which simulate so great a number of other diseases.

While most of us are able to recognize a typical initial syphilitic lesion when it appears on the genitals, sometimes the sore is without appreciable infiltration and so small and superficial that we are unable to state positively that the lesion is luetic until after we have made a dark-field examination. The diagnosis may be rendered more difficult also by complications with gonorrhea, chancroid, herpes, or granuloma inguinale, and, occasionally, tuberculosis.

When we recall, though, that the initial lesion of syphilis more often appears on the prepuce, is especially common at the frenum, that it is usually hard with a central erosion or ulceration, and that it is very often associated with glandular enlargement,—we feel justified in making a diagnosis of syphilis in the presence of these symptoms.



FIGURE 1

Typical chancre showing hard swelling with superficial erosion.

Every initial lesion in syphilis is a productive growth or tumefaction, whereas every tertiary gummatous lesion is essentially a destructive or necrotic process. Usually the incubation period of syphilis is approximately 21 days. A week after the appearance of the chancre the glands draining that sore become enlarged, and by the end of the fifth week, those on the opposite side are involved. After the sixth week there is often a pharyngitis and a secondary macular eruption on the trunk and flexor surfaces. Oftentimes, from the character of the secondary skin eruption—macular, papular, grouped or follicular, one can calculate the approximate date of the patient's exposure, a point which may be of considerable importance in finding the source of infection and in making a prognosis.

While it is rare for one to have high fever with secondary untreated syphilis, I have known cases with a temperature fluctuating between 101 to 105 degrees.

Not infrequently a patient will present himself with a hard phimosis and a characteristic gonorrheal discharge in which gonococci can be demonstrated. Such a phimosis is very suggestive of a syphilitic infection complicating the gonorrhea, and when it is associated with an inguinal adenopathy of a non-suppurative type, one can be practically certain that the patient has a syphilitic infection. The diagnosis usually can be confirmed by making a dorsal incision or circumcision, and a dark-field examination from the probable ulcer underneath or from the sclerotic foreskin. One may also aspirate one of the enlarged inguinal glands and make a dark-field test from the material obtained. Cases showing enlarged inguinal glands usually have positive Wassermanns, while those in which sufficient time has not elapsed for the glands to be affected, have negative ones. We believe that 95 per cent of the cases showing a non-suppurative type of inguinal adenopathy are syphilitic, irrespective of the clinical appearance of the penile lesion.

The diagnosis of syphilis may further be obscured by chancroidal infection. Not only may the penile lesion have every characteristic of a chancroid, but not infrequently it is also complicated by ulcerating buboes. In such cases, syphilis may not even be considered until the appearance of a secondary syphilitic eruption, pharyngitis, alopecia or some other form of secondaries. It is necessary in such cases to do frequent dark-field tests and, in addition, to take weekly Wassermanns.



FIGURE 2

Chancre (mixed infection) and chancroid. Note the erosions of glands and the sclerosis of the prepuce and the enlarged inguinal gland.

When she returned to the same clinic a week later, the sore was larger, but after a consultation with two other doctors, she was again reassured and told that the lesion was only an aggravated fever sore.



FIGURE 3
Chancre of lip.

It is much more difficult to diagnose a chancre in a woman than in a man, especially where the sore appears on the cervix or the vaginal wall. In fully 95 per cent of the female patients at the City Hospital suffering with early syphilis the diagnosis was not made until after the appearance of secondaries, or the finding of a four-plus Wassermann. The syphilitic chancre, when located on the cervix, may show only a red swelling or a superficial erosion.

The extragenital chancres have in the main the same physical appearance as genital chancres; but because of their location on other mucous or skin surfaces, their true nature is not suspected until the occurrence of secondaries. They are apt to be larger and often more tumor-like, as are also the glands which drain these lesions. While the lips are the most frequent sites of extragenital chancres, we see them on the tongue, tonsils, fingers, face, rectum and suprapubic region.

A few years ago, a man presented himself at the Vanderbilt Clinic with an initial lesion at the bend of the elbow. It was found that he worked in a candy factory on an eight-hour shift, and that two other men carrying the same candy bucket had similar lesions in which spirochetes were demonstrated.

A young woman, aged twenty-five, called to see me a few months ago with a large indurated sore on her lip. I found the submaxillary gland draining the sore the size of a lemon, hard but not painful. There was also a maculo-papular eruption over the body, and a sore throat. The young woman was a child's nurse. Two weeks previously she had gone to a clinic, where she had been assured that the lesion was a fever sore.

To be on the safe side, we should consider every enlarged non-suppurative gland draining a sore—irrespective of the character of the sore—syphilitic until we prove by a dark-field examination and blood Wassermans that it is not.

DIAGNOSIS FROM SECONDARIES

We pass now from chancre to secondary manifestations. The physician knows—as pointed out previously—that the earliest form of syphilitic skin eruption is a macular rash usually appearing on the forearms and the sides of the abdomen, where the skin is most tender; and that as the disease becomes more advanced, the lesions grow papular, scaly, grouped, and sometimes pustular or follicular. Later on, the lesions diminish in number, and group themselves on the extensor surfaces or on surfaces where there is friction. These changes are brought about through blood-vessel involvement.

Macular syphilis usually has to be differentiated from pityriasis rosea. The latter disease has a "bathing-suit" distribution; the lesions are arranged along the lines of cleavage of the skin, but the macules are usually finely scaly; there is often an initial plaque, and the eruption is slightly pruritic.

Papular syphilis sometimes resembles lichen



FIGURE 4

Secondary syphilitic eruption showing macular and papular eruption.

planus, but the latter usually occurs on the flexor surfaces; it is a very pruritic disease; the papules are violaceous in color, flat-topped and shiny.

Any papular eruption involving the soles, the palms, the forehead, around the mouth, and the labio-nasal junction is suggestive of syphilis.

One late manifestation of secondary syphilis is a grouped, follicular and papular type usually appearing about six months after the initial sore, on the trunk and especially on the back, simulating lichen scrofulosus, a tuberculous condition. The primary sore and the glandular enlargement have most often disappeared by this time, but the skin eruption is diagnostic.

Another manifestation diagnostic of late secondary syphilis is the condyloma latum. While, as you know, this may manifest itself on any portion of the cutaneous surface where there is heat and friction, it is usually found in the folds of the buttocks or in the groin, and appears as a raised, flat plaque or a moist papule. This is to be differentiated from the condyloma acuminatum, the elevated warty lesion occurring in the same locations. Spirochetes are easily demonstrated in the secretions taken from condylomata lata.

TREATMENT

Having established the diagnosis of primary or secondary syphilis with the aid of the dark-field examination and the positive Wassermann reaction, we immediately put the patient on one of

the arsphenamines, mercury, or bismuth. I should suggest beginning with an injection of arsphenamine. A healthy strong man may be given 0.25 or 0.3 gm. of neoarsphenamine and one grain of mercury salicylate. I should repeat the neoarsphenamine injections every other day for the first six doses, then at three, four, five, and six-day intervals, making a total of ten doses, the last four of which should consist of .4 gm. each. The mercury is repeated at five to seven-day intervals, until fifteen injections have been given, being continued after the completion of the arsphenamine course. At the end of each full course, a Wassermann test should be made. Then the arsphenamine is begun again, the first six doses being given at semi-weekly intervals and the remaining four at weekly intervals. At the completion of the foregoing course, the patient is given fifteen more injections of mercury followed by another course of arsphenamine, continuing in this way until he has had 30 doses of arsphenamine and 45 of mercury—all without a rest period. During the time that the patient is receiving the mercury injections, I usually prescribe 30 to 90 grains of potassium iodide daily by mouth. Following the second course of arsphenamine, a spinal fluid examination should be made.

It is necessary to give at least one full course of 10 arsphenamine and 15 mercury injections after one has obtained a negative Wassermann. In early syphilis, the Wassermann is usually negative after one full course of treatment. Provided the foregoing outline is strictly adhered to, the Wassermann usually remains negative and the patient is free from symptoms.

After treatment is discontinued following a negative Wassermann, the patient is asked to return for a blood test three times at two-month intervals, then twice at three-month intervals, then once every six months for three years. Following that, as a precaution, a complete physical examination and a blood test should be made once a year. I also recommend that each patient have an x-ray picture of his heart made before beginning the treatment and after its completion.

To return from treatment to diagnosis: Nearly all tertiary lesions of the skin, as well as those involving the mucous membranes, are deeper and more infiltrated than secondary lesions, and are oftentimes ulcerated. The tertiary lesions are also fewer in number, and when appearing on the skin, usually involve the extensor surfaces.

A man forty-one years old consulted me because of a large, red pustular nose condition of a year's duration. He had been treated for acne rosacea with twelve x-ray exposures, colonic irrigations and vaccines without appreciable change. We noticed on examination that many of the papules were fleshy, extended into the mucous membranes of the nose, and on to the upper lip. There was a tender swelling over the lower third

of the anterior surface of the left tibia. An x-ray picture of this swelling showed periostitis. The patient also had an aortitis and a four-plus Wassermann of the blood. The nose lesions and the periostitis cleared up under antisyphilitic treatment.

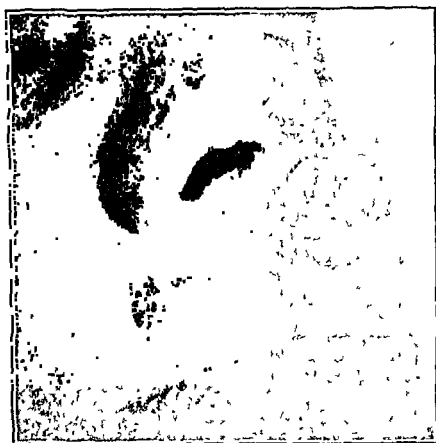


FIGURE 5

Tertiary syphilis of nose previously diagnosed as acne rosacea.

Another interesting case was that of a white man, age 65, builder, who came to me complaining of multiple ulcerations. He had been unusually healthy, not having had occasion to consult a doctor for forty years. His wife was well. He had two healthy grown children, and grandchildren. He stated that the lesions had begun on his right shoulder as red, raised, ulcerated areas, gradually creeping over most of the trunk and the extremities; as they healed in the center they spread at the margins. Within the past three months an ulcer on the right leg had become so deep and so annoying that he had to seek medical advice.

Examination showed a ruddy-faced man, well developed and well nourished, and appearing not more than fifty-eight to sixty years of age. There was marked scarring involving practically the entire upper right side of the body and about three-fourths of the left side. On the right buttock was a large horseshoe-shaped dark-red ulceration, the central portion consisting of scar tissue. The right lower extremity markedly enlarged appeared about twice the size of the left, and presented rather hard scarred tissue with a verrucous formation around the ankle, dorsum of the foot, and lower third of the leg. Even these warty areas were ser-piginous in outline. On the inner and upper aspect of the right knee and invading the thigh

was a deep oval ulceration, whose diameters measured about four and five inches respectively. The central part of the ulcer was composed of irregularly-shaped, bleeding, dark-red granulations. The margins were elevated, hard in some portions and moth-eaten in others. Heart, lungs and abdomen were essentially negative. Blood pressure 158/84. Pupils and deep reflexes were equal and normally active. A clinical diagnosis of multiple gummata was made, but inasmuch as the lesion on the inner aspect of the right knee was suggestive of carcinoma, a section was taken for histologic examination. This showed a squamous cell epithelioma. The Wassermann reaction was strongly positive by both methods, as was also the Kahn precipitation test. Part of the lesion improved to a marked degree under mercury and neo-arsphenamine injections and potassium iodide, but another part remained unchanged. A second piece of tissue was removed, and the report on this confirmed the previous one of carcinoma. The ulcer was then widely removed by means of the endothermic knife under local anesthesia; following this, the wound and adjacent portion of the thigh were treated with massive doses of x-rays. As a result, the patient has continued to improve, the ulcer having practically healed.

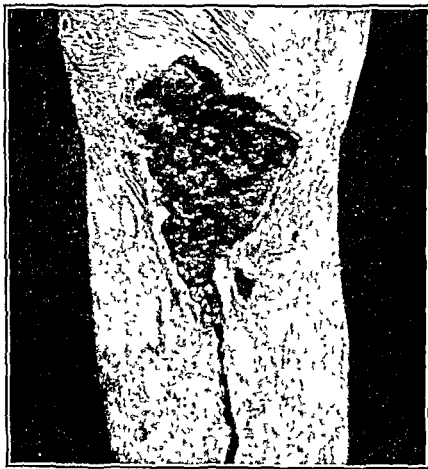


FIGURE 6

Carcinoma in a syphilitic scar

To my mind this case is of interest in that the man had no history of a venereal disease, that he went for so many years in perfect health except for the marked ulceration and scarring, and that he did develop a carcinoma on the site of irritation of a gummatous lesion.

A case showing marked destruction of soft parts and periosteum with deformities.

A woman (single, aged thirty-eight, house-work) was admitted to the City Hospital about a year ago, complaining of ulcerations of the feet, legs and forehead. During this period she had been treated by three different physicians, the last one referring her to the Hospital. She had not been able to walk for about eight months because of deformities of the feet. From examination it was noted that there was marked ulceration and scarring. The skin over the front of the legs was absent, leaving the tendons exposed. There was contraction of the toes and feet, with marked destruction of tissue. There were also several deep ulcerations of the forehead extending up into the scalp-hair. X-ray pictures showed marked periosteal destruction and an osteitis. The Wassermann was four plus. While the ulcerations gradually healed under treatment with arsphenamine, bismuth, and potassium iodide, the woman was partially crippled because of the marked destruction of soft parts and bone. It is obvious to all of us that such a condition as this case now presents could have been avoided if a blood Wassermann had been taken in the beginning and antisyphilitic treatment given at the onset.

It is the frequency with which we meet such

cases in hospital, clinic and private practice that prompts these illustrations of the advantages of considering all chronic ulcerations—especially those involving the bone as well as the soft parts—as due to syphilis until proved otherwise.

Another case illustrating the marked destruction caused by syphilis is the following:

A man aged thirty-nine years presented himself at the Vanderbilt Clinic eight months ago with a total destruction of the nose and adjacent soft parts. About a year previously he had had a small ulcer on the nose. A physician whom he consulted prescribed ointments and salves. The ulceration gradually spread. After two months the patient discontinued treatment with the physician and applied a patent medicine to the ulcer. It is hard to conceive that an American-born individual of apparently average intelligence, and speaking English as well as this man did, should allow so prominent a portion of his anatomy to be destroyed without making a greater effort to seek medical advice.



FIGURE 7

Gumma of lower extremities with marked deformity.



FIGURE 8

Gumma showing destruction of nose and upper lip.

You will recall that such a destruction of soft parts, cartilage, and bone is characteristic of a syphilitic infection; whereas tuberculous infections, with which syphilis is so often confused, produce destruction of the soft parts only, leaving the cartilage of the nose intact, and resulting in the characteristic pointed nose one sees in lupus vulgaris.

While carcinoma will cause a destruction similar to syphilis, the time required is much longer than in syphilis; besides, there is usually the foul odor, the nodular, mother-of-pearl appearance of some

part of the border, with hardness and telangiectasia.

The lesion in the case under discussion has entirely healed, and just as soon as we have obtained a negative blood Wasserman, we shall turn the patient over to a plastic surgeon

PERFORATING ULCER OF THE HARD PALATE

An American-born white man aged twenty-seven years was referred to me by his nose-and-throat specialist about a year ago for a small perforation of the hard palate of twenty-four hours' duration. He was married and had two healthy children. The family history was negative. He denied venereal infection. He said that about a year previously he had consulted his nose-and-throat specialist because of a sore inflamed throat and a small pimple on his hard palate. His Wassermann reaction was reported doubtful. A section of the lesion on the palate was diagnosed by a pathologist as tuberculosis. Some light treatment applied to the throat was followed by temporary improvement. After a short while, however, the lesion grew worse, and he was sent to Saranac, where he remained for six months. He returned to the city to all appearances entirely well. About two months later, the condition recurred, and he again consulted a throat specialist, who resumed the light treatment. His throat rapidly grew worse after the second treatment, and in twenty-four hours after the last exposure to light, a small round hole appeared in the palate.

Examination revealed a split-pea sized perforation in the mid-line of the hard palate. There was redness and swelling of the surrounding portion

of the hard palate extending to the soft palate and the uvula. I believe it is generally conceded that such a perforation of the palate is pathognomonic of syphilis. The patient's Wassermann reaction was returned four plus and his condition cleared up rapidly under arsphenamine and mercury injections. Of course there remained a hole in the hard palate. Every hour's delay in beginning treatment in such a case helps to increase the extent of the destruction, and the possibility of its leading to a perforation of the palate.

Probably it occurs to all of us that the obvious thing to have done in the beginning of this case



FIGURE 10
Gumma of tongue

was to give the patient the benefit of anti-syphilitic treatment, especially inasmuch as he had a doubtful Wassermann reaction. While it was unfortunate that the physician should have been misled by the laboratory diagnosis of the specimen taken from the throat, it is well known that both clinically and histologically, late lesions of syphilis may sometimes so closely simulate tuberculosis that a definite diagnosis is impossible without corroboration by the Wassermann reaction or a therapeutic test.

SYPHILIS OF THE TONGUE

Practically every late syphilitic ulceration of the tongue must be differentiated from carcinoma and sometimes from tuberculosis. Fully 95 per cent or more of carcinoma of the tongue are caused by inflammatory conditions due to there is



FIGURE 9
Gumma with perforation of the palate.

smooth atrophy, leukoplakia and interstitial glossitis, which constitute positive evidence of a syphilitic infection. A gummatous ulceration of the tongue is a rare occurrence, whereas carcinoma on a syphilitic basis is a common one. The evolution period of a gumma is relatively short, and the ulceration is oftentimes deep, with considerable destruction of tissue, and sinus formation, associated with a moderate amount of inflammatory reaction. There is usually very little pain. As you recall, carcinoma is a productive nodular growth, exceedingly hard and painful; where ulceration is present it is superficial and bleeds easily. Usually there is little difficulty in differentiating the hard nodules of carcinomatous growth from the gumma, but where the diagnosis is doubtful, it is far better to clip off a small portion of the growth for histological examination.

The patient with carcinoma of the tongue associated with syphilis is all too frequently given antisyphilitic treatment over a period of weeks or months, thereby losing very valuable time. As we all know, arsenic is a decided epithelial stimulant, and oftentimes hastens the growth of the carcinomatous tissue.



FIGURE 11

Carcinoma with leukoplakia smooth atrophy and interstitial glossitis.

SYPHILIS OF THE PALM SIMULATING ECZEMA

A man aged forty-three years, American-born, consulted me for an eczema of one palm and a

radium burn over the front of the wrist and adjacent portion of the palm. His family history was negative. He denied venereal infection. He stated that he had had a thickened wart-like scaly condition of the palm for three years. He had been receiving radium for one year. After the last radium treatment, two months previously, his whole hand and wrist had become swollen; the swelling was followed by a painful ulceration, which had gradually extended. He had had no other symptoms.

Examination revealed a thickened warty, scaly and fissured condition of the left palm and palmar surface of the fingers, sharply demarcated from the surrounding healthy skin. There were no papules. Over the front of the wrist and adjacent portions of the palm there was a deep ulceration one and one-half inches in diameter, necrotic, with bleeding points, and excruciatingly tender. Physical examination showed evidences of an aortitis, with widening of the aortic area on percussion, and a loud, accentuated and roughened second sound. Blood pressure: 110/45. He had Argyll-Robertson pupils. The deep reflexes were absent. The urine showed an almost solid coagulation of albumin, and an occasional hyalin and granular cast. While a unilateral, dry eczematized and sharply demarcated condition of the palms and palmar surface of the fingers is evidence in itself of a tertiary syphilitic infection, in this case—as in most instances—there was additional corroborative evidence of syphilis to be found on complete physical and neurological examination. The diagnosis made in this case was: tertiary syphilis of the palm, syphilitic aortitis, tabes dorsalis, syphilitic nephritis, and radium burn. Needless to state, the so-called eczema of the palm cleared up rapidly under specific treatment, as did also all evidences of nephritis.

SYPHILITIC PERIOSTITIS AND OSTEITIS FOLLOWING AN INJURY

A man twenty-six years old was seen by Dr. Alan DeForest Smith at the Orthopedic Hospital and later referred to the Syphilis Department of Vanderbilt Clinic for a deformity of the wrist. He said that two months previously he had been struck on the wrist by a baseball while playing. His wrist became greatly swollen, hard and slightly painful, with limitation of motion. X-ray pictures showed periostitis and osteitis. His Wassermann was reported strongly positive. The condition entirely cleared up following anti-syphilitic treatment. It is a well-known fact that gummata usually form at the site of irritation or injury. Gumma involving skin and bone is usually seen at the elbows, knees, and on the shins and buttocks. Even acute paresis and locomotor ataxia have been known to follow a severe accident or injury. Knowledge of such cases is of

great importance in diagnosis, from a clinical as well as from a legal standpoint

ANEURYSM

A white man aged fifty six years came under my observation some three years ago for a questionable diagnosis of aneurysm. He had been married for thirty years. His wife was well and they had four normal, healthy children. He stated that some twenty-five years ago, he had had a small penile lesion, diagnosed as chancroid. He had never been treated for syphilis. He had always been very active and perfectly well except for occasional slight indigestion. His symptoms had begun three months previously, following an automobile accident. He did not think that he had been badly hurt but from this day on, he had neuritic pains in his left shoulder, of a sharp, stabbing character, and shooting down his left arm to the ends of his fingers. He was treated for a few weeks for stomach trouble, without improving. An x-ray of his stomach showed a large tumor in the mediastinum. Fluoroscopic examination indicated an aneurysm of the aorta. His Wassermann test was moderately positive (two plus). He was given two injections of sulpharsphenamine intramuscularly, the first dose of 0.1 gm being followed two weeks later by 0.2 gm. After the first injection he was greatly improved. The pain and discomfort had entirely disappeared. After the second injection, however, all the symptoms recurred in an aggravated form. The pain grew worse, he began to expectorate blood and to have a slight dyspnea. A second x-ray and fluoroscopic examination showed the aneurysm to be a size larger. He was then brought to New York.

His local internist was unable to find any evidence of an aneurysm, either on percussion or on auscultation. Two well known x-ray men differed as to whether the large mediastinal tumor was an aneurysm or a new growth. We felt, however, that the history, location, and character of the pain, increase in size of the mass following salvarsan treatment, the expectoration of blood and the positive Wassermann reaction furnished sufficient evidence upon which to base a diagnosis of aneurysm, and this diagnosis was confirmed by fluoroscopic examination.

This patient was kept in bed at one of the local hotels for several months, during which he received injections of mercury and bismuth every three days, and potassium iodide by mouth. He returned home greatly improved, and after a few weeks stopped all treatment. For a period of two years he was able to go about his work and was very comfortable. Finally, while driving his car on a fifteen hundred-mile trip he ran twice into a ditch and was considerably shaken up. Two or three weeks after returning home, he had a slight hemorrhage through the mouth, remained

in bed for a week, and then returned to business. A few days later, he arose one morning, went to the bath-room, and there had another hemorrhage. This time he bled about two quarts and died within fifteen minutes after the onset of the hemorrhage.

We have seen so many similar cases, in which patients with aneurysm improved after from one to three or four injections of arsphenamine, and then suddenly became very much worse. For this reason we have discontinued the use of arsphenamine in the treatment of aneurysm, other than in exceptional cases. Instead, we rely almost exclusively on mercury, bismuth, and iodide, and—whenever possible—rest in bed. I have a record of one man with an aneurysm who was treated in this way for thirteen years, during which time he led a fairly active and comfortable existence.

CITATION OF A CASE OF NEUROSYPHILIS

Syphilitic infection of the nervous system is, as you know, one of the most serious phases of the disease, and probably one of the most interesting to diagnose and treat.

A man aged sixty two years consulted me about three years ago complaining of faulty vision, unsteady gait, impaired powers of concentration, and a general feeling of physical and mental depression. About eleven months previously he had gone swimming at Long Beach on a particularly rough day, and had been beaten by the waves. As he did not feel quite right after this experience, he went to his insurance company for a thorough examination. This was recorded normal except for a two plus Wassermann reaction of his blood. During the succeeding nine months he consulted five excellent internists, all of whom gave him written statements to the effect that his condition was normal for a man of his age, and that his blood Wassermann was negative. He continued to feel bad, however, and since he had also a great deal of difficulty in reading, he consulted an eye specialist who could find nothing wrong with his eyes.

My examination showed slight inequality of the pupils, one reacting a little sluggishly to light. All of his deep reflexes were hyperactive, the right patellar being a bit more active than the left. There was a Babinsky of the right foot. Physical examination of his heart was essentially negative. His blood pressure was 164/90.

On the basis of these slightly abnormal neurological findings, I told the man that I was sure he either had at the time an active neurosyphilis, or that he had had a syphilitic infection of the nervous system. I was not so much interested in a negative or positive blood Wassermann as I was in the results of his spinal fluid tests. My laboratory findings showed his blood Wassermann to be two plus with cholesterol, negative with the alcohol, his spinal fluid showed Cells

36, Globulin: 3+, Wassermann: 4+ to 0.5 cc., Gold Sol.: 4332110000.

I immediately began treatment, giving him 10 neosalvarsan, 8 tryparsamide, 15 bismuth, and 6 intraspinal injections. He made a remarkable improvement, both physically and mentally. His gait improved so that he was able to dance, a thing he had not done in ten years. He could think and remember much more clearly and he felt physically alert. He discussed his case with a friend, who told him that it was impossible that he should have such an infection, and advised him to consult his physician, who happened to be a well known specialist on arthritis. After being examined and having his blood tested, he was given the usual negative report, stating that he had never had syphilis. This information greatly agitated the patient. I suggested that he consult the chief syphilologist of one of our leading medical schools. He did so, with the result that he was given another letter advising him that his blood was negative and that he had no signs of syphilis. He then returned to this syphilologist and told him his entire story, including the fact that I had been treating him for syphilis of the nervous system. He was then referred to a well-known institution in this country, where, after a thorough examination, he was assured that he not only had positive signs of an infection of the nervous system, but that, although his blood was negative, his spinal fluid was positive, and his condition called for more intraspinal treatment. He returned to me with this report and resumed his treatments. I think that such a case not only shows us the fallacy of attempting to rule out a syphilitic infection without a very thorough examination, including spinal fluid tests, but also illustrates the splendid clinical and serological results that can be obtained in certain types of neurosyphilis by means of intraspinal treatment with the Swift-Ellis serum.

DISCUSSION

Q.—Apart from cases of aneurysm, do you think mercury and bismuth are better drugs to use in the treatment of cardiac syphilis?

A.—Yes; I think that both drugs are valuable in practically all forms of syphilis, especially in cases where the infection has been present for many years. In such cases, where long periods of treatment are necessary to secure a negative Wassermann, and in elderly people suffering from the disease, where arsphenamine is contraindicated, bismuth, mercury, and potassium iodide are the only remedies used.

Q.—What physical characteristics have rectal chancres?

A.—The same as any other chancre,—namely, an infiltrated or hard ulceration, oftentimes associated with fissuring, and enlargement of the inguinal glands, particularly on the side of the lesion.

Q.—Do you ever use sulpharsphenamine?

A.—No. Arsphenamine is about two and one-half times more potent than sulpharsphenamine and is less toxic. I believe that arsphenamine should be used in cases where one is unable to give an intravenous injection.

Q.—Is it justifiable to use sulpharsphenamine in aneurysms of the heart and aorta?

A.—No. Its action is just as dangerous in this type of syphilis as are the other forms of arsphenamine intravenously.

Q.—Do you give arsphenamine in cardiac syphilis?

A.—Only in selected cases and in very small doses, and where I am able to observe the case carefully.

Q.—Is mercury salicylate the best form?

A.—I think it is the best form of the insoluble mercury compound.

Q.—Is it not a fact that the pain is due to the mercury not going into the muscle?

A.—Yes; this is oftentimes the case; but it is far more frequently due to the lack of vigorous massage to the parts after the injection.

Q.—In a case of syphilis of the liver with ascites, where the abdomen fills up within a few weeks after tapping, do you think salvarsan is the drug of choice?

A.—While I believe that mercury, bismuth and iodides are the drugs of choice, I think in exceptional cases, where carefully observed, arsphenamine intravenously is beneficial. We are treating such a case at the Vanderbilt Clinic at the present time with arsphenamine, and the woman has improved considerably. A bile index, Van den Burgh, and blood chemistry are necessary before beginning, and frequently during the course of treatment.

Q.—Do you think that the gumma precedes or follows trauma?

A.—I believe that the impairment of the tissue due to injury, plus the presence of the spirochete, is the cause of the gumma.

Q.—Is a provocative salvarsan of any value in congenital syphilis where there is a definite history in the older children?

A.—I don't think so, unless the child has a gummatous lesion.

Q.—What would you advise in a family of children where the older ones have a syphilitic infection with positive Wassermans and the two younger children have negative Wassermans?

A.—If the two younger children have no stigmata of congenital syphilis, nor any other evidence of a syphilitic infection, and their Wassermann reactions are negative, I should not treat them. At least a yearly examination and Wassermann test should be made.

Q.—Do you do a spinal puncture on all of your cases of syphilis?

A.—Yes, always.

Q.—If the blood Wassermann is negative, is it necessary to do a spinal fluid test?

A.—Yes. It frequently happens that a patient has a negative blood Wassermann and a strongly positive spinal fluid. I recently saw a man complaining of a progressive deafness of a year's duration. There was no history of venereal disease, and his blood Wassermann had been reported negative by several laboratories. His physical and neurological examinations were reported normal. His spinal fluid Wassermann, cells, globulin, and gold reactions were strongly positive.

Q.—Can you make a diagnosis of syphilis of the nervous system where only the pupils are pin-point and fixed to light?

A.—Yes; only syphilis, hydrophobia, or morphine poisoning would produce such pupils.

Q.—What kind of neurosyphilis gives you large, unequal and fixed pupils?

A.—Basilar meningitis.

Q.—Where the spinal fluid is strongly positive will sufficient salvarsan reach the spinal fluid by intravenous injections to cure the condition?

A.—No. Usually, if a person has a four-plus Wassermann to 0.2 cc., no amount of intravenous treatment will affect the spinal fluid. The treatment must be by Swift-Ellis or by malaria.

Q.—In your routine treatment of syphilis, do you give mercury and salvarsan on the same day or alternate the two?

A.—For the convenience of the patient, I frequently give them the same day. In old syphilitic infections, such as tertiary, I usually give mercury and salvarsan in separate courses.

Q.—In latent syphilis, if no symptoms are present and there is only a four-plus blood reaction, do you give salvarsan more than once a week?

A.—Usually once a week.

THE CONTROL AND MANAGEMENT OF THE CARDIOPATHIC CHILD

By EDWARD L. BENJAMIN, M.D., NEW YORK, N. Y.

From the Cardiac Department of the Lebanon Hospital.

ABOUT ten years ago, in 1921, the number of cardiac children attending the Pediatric Clinic at Lebanon Hospital, increased to such an extent that we were confronted with the problem of taking care of these children in a special way. With the view of bettering their condition, the Cardiac Clinic for Children was organized—the first clinic of its kind in Bronx county. Heretofore these children attended the Pediatric Clinic at irregular periods and no organized effort at supervision had been attempted. Here was a type of child that required special supervision and a systematic control of its life at school and at home. It was found that many of these children were suffering from a cardiac involvement, with the many manifestations of rheumatic disease, had little or no follow-up care and that the supervision of their school activities and home life was insufficient, inadequate and desultory. With the view of improving all these conditions and helping these unfortunates, the Clinic was established, in conjunction with special Cardiac classes in five different schools and with the aid and cooperation of our Social Service Department. All children with cardiac defects or symptoms suggesting potential cardiac disease were referred to our Clinic by school physicians for classification and treatment. In other words, the Clinic became a sort of clearing house for cardiopathic children.

On admission these children were given a general examination and all defects and possible foci of infection, such as hypertrophied and diseased tonsils and adenoids, carious teeth, chronic

sinusitis, anemia and malnutrition, noted. They were then sent to special departments for the correction of these defects, X-ray of heart and lungs taken to determine size and shape of heart and presence of any pulmonary lesion, classified and requested to report at the clinic at regular stated intervals. They were then followed up by the Social Service nurse from week to week, and the home conditions as well as the physical condition of the child supervised. These examinations at regular periods served as an excellent opportunity to observe and study the progress of the cardiac condition, the various rheumatic manifestations, and the intercurrent infections in these children.

The classification we followed is that formulated by the Association of Cardiac Clinics, and has proven of great assistance in classifying these children. It consists of five classes:

Class I. includes children with organic heart disease who are able to carry on habitual physical activity without discomfort.

Class II. includes those with organic heart disease who are unable to carry on habitual activity without discomfort. (A) Slightly diminished physical activity. These children show fatigue, palpitation and dyspnoea on attempting ordinary physical activity. Their activities are consequently slightly diminished. (B) Greatly diminished physical activity. These children show signs of heart failure on the slightest activity and consequently their activities are greatly diminished.

Class III. includes those with organic heart disease who are unable to carry on any physical

activity. These children show symptoms of heart failure at rest and generally have an active heart infection.

Class IV. includes those who show abnormal signs or symptoms referable to the heart, but in whom the picture of heart disease is uncertain. These are classed under "Possible Heart Disease."

Class V. includes those with a predisposing history, such as chorea, rheumatism, and frequent attacks of tonsillitis. These are classed under "Potential Heart Disease."

Despite the above classification we have frequently found it necessary to deviate from it, especially when we realized that each cardiopathic child was an individual problem. And the most difficult, and by far the most important, problem was to classify a child definitely as a cardiac. Those who have been associated with this type of child can appreciate what it means to condemn one to the narrow confines of a cardiopathic life as a result of an error in diagnosis. We have found that, rather than stigmatize such a child and limit his activities forever, that it is better to err to his advantage, if the case is on the border line and indefinite. The classification and management of these cases was governed not so much by refinements of examination, but by the history and etiology in each individual case. The cardiac condition, while important, was only secondary to the many manifestations of the rheumatic condition present. Our aim was to delve into the conditions underlying or causing the cardiac damage. Children sent to the clinic with the complaint—shortness of breath, on slight exertion, and pain over precordium—even though examination revealed a systolic murmur at the apex, not transmitted—but with no history of infection or any rheumatic manifestation—were not classified as organic, and relegated to the cardiopathic class. It is the tendency of many physicians to call such cases organic, a decision, I think, that is hasty and without foundation. However, any child with a history of growing pains or frequent attacks of tonsillitis, who, on examination, shows a systolic at the apex, even though not transmitted, and with no change after exercise or position and heart sounds good—such a child should be classified as a cardiopathic, i. e., rheumatism with cardiac involvement. For this type of child, sooner or later, if not properly supervised, will show a much greater involvement and cardiac decompensation. We have observed many cases with tachycardia, dyspnoea, anemia—with a systolic at apex, not transmitted—with no rheumatic history, improve remarkably well when placed under general tonic treatment and not subjected to the regime of the cardiopathic child.

In differentiating organic from functional murmurs one should pay particular attention not

only to the kind of murmur, but to the place where best heard—the point of maximum intensity—and to the variability on change of posture. Functional murmurs are very fickle—they are never the same at all examinations—the vacillating and shifting character of them being the determining factor, in addition to the past history, in differentiating them from organic murmurs. The systolic murmur of organic disease, however—where there is a history of rheumatism, or where there is no history but a cardiac enlargement is present—generally is not shifting in character, is very definite, and is transmitted to the axilla.

There is another type of child that is brought to the clinic very frequently—the child with tachycardia—which presents a problem in diagnosis as well as treatment. This class of child enters the clinic with the diagnosis of heart disease made by his mother generally. These children are of neurotic temperament, are very easily fatigued, have precordial pain, palpitation and dizziness, are depressed, irritable and apprehensive, do not sleep well, have cold extremities, sweat profusely, and have a mottled skin. Examination usually reveals the tachycardia—which often continues for four or five minutes after rest—no irregularity, no murmurs, no cardiac enlargement, but a nervous child with poor circulation and an exercise tolerance which is far below normal. This condition frequently referred to as irritable heart is functional and may often be traced back to some contagious disease or to neurotic parentage. These children should not be classed as cardiopathic, despite the symptoms simulating those of cardiac decompensation. They represent a type of child which is seen in many children's clinics and they all show this neuro-circulatory weakness, which sometimes is the flare of hypothyroidism or tuberculosis. In following up and observing this type of child for the past few years, we have found that most of them improve remarkably well with a change in environment—convalescent care in the country—medication having no effect on their condition whatever.

As regards convalescent care for the cardiopathic child, I should like to take this opportunity to mention the wonderful co-operation and aid we have obtained through the kindness and courtesy of the different convalescent country homes—the Martine Farm, Irvington House, the Pelham Home and Nichols Cottages—in giving these children convalescent care throughout each year. These periodic recuperative stays in the country tended to improve their general health, provided them with a greater resistance to withstand the further onslaughts of the rheumatic infection, and aided them in the progressive improvement of their condition.

I should like to say a word about the various

tests devised and employed in classifying these children. The value of these exercise tolerance tests in cardiopathic children has been variously estimated. Stair climbing, dumbbells, and knee bending tests have been utilized as a basis for the measuring and the regulation of the functional efficiency. We have employed the dumbbell test in our clinic because of its ready adaptability and convenience. The swinging of dumbbells of known weight a certain number of times until maximum effort has been reached—as manifested by dyspnoea, fatigue and flushed face—has served as a good criterion in most instances to measure functional efficiency. This has also been supplemented frequently by the stair-climbing test, the result of which, of course, we had to depend upon the statement of the child and its mother. The spirometer also was utilized in measuring the vital capacity of the lungs, thus giving us additional information with reference to the functional capacity of the heart. While we were concerned with the condition of the heart and circulation, the study and observation of the changes in form, rhythm, murmurs, etc., our chief study has been that of functional response. It is interesting to note that the type of lesion, the valve involved, or the size of the heart, did not seem to have any definite relation to the exercise tolerance. Frequently children with chronic heart disease and fairly marked hypertrophy have shown a greater exercise tolerance than those with lesions of shorter duration and less hypertrophy. In our recommendation for physical activity of any kind, dyspnoea, rapid or irregular pulse, signs of lung congestion or cardiac asthma, and general muscular weakness, have determined our advice for prohibited or diminished exercise.

Many children who should carry on regular physical activity are prevented from doing so by overzealous parents. These children, who have been restricted in their activities because of the ignorance and over-sympathetic attitude of their parents, have developed a mental state which one might term an "exercise phobia"—a fear of exercise. This obsession has been overcome by examining this type of child in groups, in which are present children who are not so affected. The results have been startling and many of these cases that have suffered from this inertia for many months soon overcame it by the suggestion of "group example." There is no doubt that fear causes a diminution in morale among these children and that as soon as we make them understand that their condition is not hopeless, they become useful to themselves and of less concern and trouble to their parents.

Our roster during the past few years shows that we have had under observation and treatment about 950 children with between 70 and 80 new cases each year. With the establishment of

additional cardiac clinics in other institutions in the County during the past few years, many of the children were transferred to their own districts, many were also referred to their own physicians, and thus our case load was reduced to about 300 cases,—a comfortable and reasonable figure—to work with.

At present we have under observation and treatment 191 children with Mitral Insufficiency, Class I and IIA, 62 with Mitral Insufficiency and Stenosis, Class IIA and IIB, 16 with Mitral Stenosis, Class I and IIA, 8 with Mitral and Aortic Insufficiency, Class IIA and IIB, 18 congenital cardiacs in Class IIA, IIB and III, in addition to about 150 potential cases which are followed up in the Pediatric Clinic. Of the original number of these cases examined and classified in the past few years, 86 were transferred to other institutions in their district, 49 were discharged because of lack of cooperation, 12 died, and 116 were referred back to their own physicians. A goodly proportion of those in Class IIB were transferred to Class IIA, and those in Class IIA to Class I, after having shown sufficient improvement to warrant it. About 10% have been discharged while in Class I, after being observed for several years,—they having demonstrated such progressive improvement that they were able to carry on all the physical activities of the normal child.

As to the etiology in these cases, 189 were due to rheumatism, 68 to various infectious diseases, e.g., scarlet, pertussis and pneumonia, 18 were congenital, and 22 of unknown origin. With reference to incidence of rheumatic heart disease in these families, I reviewed the histories of 600 cases and found that there were 43 secondary cases, i.e., in 43 families two or more members of the family were suffering from an organic heart lesion due to rheumatism.

As to medication, it is our custom to use Salicylates only in cases of acute exacerbation, tonsillitis, growing pains and arthritis, and Digitalis in cases of fibrillation and tachycardia, and then with caution since many children do not stand it very well. Codein and Bromides were also used especially when pains and restlessness were persistent and continuous.

Social service contact has been of tremendous aid to these children as well as to their families. But despite the gratifying results much more could be done if this type of child was under more complete supervision. We can control and manage these children while they are ill at the hospital with some intercurrent condition or an acute exacerbation of their chronic condition or at the convalescent homes. But it is very difficult to control them in the intervals when they are at home. These periods are the most important from the standpoint of prevention of intercurrent conditions and extension of the lesions present.

We should have to begin a system of re-education with the parents—to teach them the art of protecting these lives which have been entrusted to them by nature. Many of them, surely, have not the mentality necessary to satisfactorily handle this home problem.

Most of these cardiopathic children are very sensitive and nervous. A good deal of this condition results from the lack of proper mental background. Where there are many children in the family, the others who are not ill, are not very considerate of the feelings of the cardiac, whom they consider as a cripple—as a useless member of the family, even though he be kin. Where the cardiac is the only child in the family, the oversympathetic attitude and overzealousness of the parents frequently harms the child. Peace in the household produces harmony, and discord produces nervousness in the child. Many parents think that they give all to these children when they give them food and air, but while food and air are enough for the body, the mental hygiene of these children should not be neglected.

We are frequently asked to designate the kind of work a cardiac should do, after graduation from school. This is a most difficult task and requires further study of the child's aptitude in different directions, taking into consideration his physical limitations. Many of these children come from poor families and are very ambitious despite their physical handicap, and in their zeal to help better the economic condition of their families, forget the physical limitations of their hearts. In the past few years we have been very fortunate in having the aid and cooperation of two great agencies,—the Vocational Guidance Bureau and the Cardiac Workshop—in properly advising and placing these unfortunate children. Many of these children have done splendidly under the supervision of these Bureaus, as evidenced by their condition at periodic visits to our clinic. It seems that the occupation to which they were assigned had no deleterious effect on their physical condition. Indeed, many who had had frequent exacerbations prior to their employment, rarely got them afterwards. It was interesting also, to note the change in their outlook upon life. Many had been led to believe that their condition would prevent them from doing any sort of work at any time. In many, in fact in

most instances, the disposition changed from a nervous, sensitive, heart-conscious and melancholy child to that of the happy care-free and almost normal child.

In conclusion, I desire to say that while the management of the cardiopathic child in this clinic for the past ten years has been a most difficult problem, it has been made extremely pleasant and interesting by the efficient aid of our Social Service Department under the leadership of Miss E. Fonaroff and her two able assistants, Miss I. Margoles and Miss B. Stoffberg, and by the wonderful aid, cooperation and loyalty of my colleagues, Drs. I. K. Mirkin and Leo. Rubin.

SUMMARY

1. The cardiopathic child is a type that requires special attention, study and supervision.
2. Employment of measures to improve the general health and eliminating all foci of infection, especially in the upper respiratory tract, tends to protect the heart from further damage, prevents recurrent infections and aids in the progressive improvement of the child.
3. Too much restriction on some children converts them into neuropaths and encourages a low morale, and too little restriction on others tends to further extension of the lesion present and increases the tendency to frequent exacerbations.
4. In comparison to the manner in which we treated these cases prior to the advent of a better understanding of this type of child, we now give them a better chance in life and a better outlook through attempt at regulation and management of their lives.
5. However, a more thorough, effective and ideal control and management of them can only be possible through the establishment of a Cardiac Colony—including a school—where the daily routine of these children can be observed and an intensive study of the child, his habits, characteristics, temperament and physical condition properly evaluated. The investment would be sound and the result,—a community of self-sustaining and healthier children, as a dividend,—and from the standpoint of preventive medicine, an opportunity to formulate proper and definite rules of prophylaxis, by co-relating all the facts and thus reducing the incidence of rheumatism among children.

DILATATION AND ITS INTERPRETATION*

By PAUL T. HARPER, M.D., ALBANY, N. Y.

It is with some hesitancy that there is
 ted for your consideration as com-
 topic as Dilatation. Than

condition of the cervix, there is no procedure with which the profession in general is more familiar; and there is none about which there has been more oral or written discussion.

The items to be elicited through examination are prescribed, and there are no new ones

to be added. But just how valuable the information so gained will prove to be, depends upon the use to which it is put.

For, after all, clinical proficiency is quite wholly dependent upon an analytical attitude toward all that is seen (and felt), and upon the ability to isolate fundamentals and make logical deductions therefrom rather than upon mere dexterity in carrying out the details of various therapeutic measures and operative procedures.

What follows is simply an account of individual reaction to the problem of the dilating cervix and what it tells about the probable termination of physiologically advancing labor on one hand and attendant pathological conditions on the other.

To illustrate. Balancing the dilatation found in a moderately well advanced first stage against an evaluation of the work being done by the uterus (in terms of frequency, length and strength of the contractions), one should be able to fix the hour of probable delivery with fair accuracy. The practical value of such information is at once apparent.

Again, with failure in progressive dilatation of a fully dilatable cervix in the presence of what appears to be wholly adequate contraction (it is presumed that two careful examinations have been made a matter of three or four hours apart), one is confronted with positive evidence of dystocia.

The abnormality may be one of muscular insufficiency or one of definite obstruction to advance. But, in either event, the diagnosis cannot be made too early.

Briefly set down, the various signs referable to the cervix that are to be considered are:

- 1 Length of the cervix, and length and general direction of the cervical canal (or what remains of it).

- 2 State of the internal os in terms of its gradual drawing up into and its leveling off with the musculature of the lower segment. Whether this process of elimination of the internal os is termed "obliteration" or "effacement" is immaterial.

- 3 Actual dilatation of the external os in terms of its diameter in centimeters or finger breadths.

- 4 Thickness of the cervix and lower segment (after the internal os has disappeared).

- 5 Consistence of the cervix (and lower segment) determined by palpation between the two examining fingers.

- 6 Presence of adhesions between the chorion and the decidual remnants in the lower uterine segment.

- 7 Location of the cervix as to its pelvic level as well as along the antero-posterior diameter of the pelvic cavity.

While, with examination early in labor, it would be impossible to elicit some of the signs referred to, they are all available after only moderately advanced dilatation, and, with the habit of such routine checking up acquired, the investigations can be carried out with surprising rapidity. It is at once apparent that there is much more to "dilatation" than determination of the size of the opening at the lower pole of the parturient uterus.

In what has gone before there has been no reference to information as to location of fontanelles and sutures to be palpated through the dilating cervix, and thus for the excellent reason that little if any information relative thereto is available *early* in labor, while during its *latter* part, developing caput not infrequently masks the so-called "diagnostic" sutures that the examining finger should feel.

This is especially true of the case where, in the presence of lack of progressive late first or second stage advance, one desires to differentiate between Bregma and Vertex Presentations or, on the other hand, where one wants to satisfy himself that he is dealing with an occiput posterior.

In either case, the abdominal signs are far more dependable and more easily elicited than are the vaginal.

To make practical use of the various cervical signs already referred to, each may well be considered in detail. There is scarcely one that does not present something of diagnostic, or prognostic, or therapeutic value. A few of them may be said to be pathognomic.

A Length of Cervix. The distance from the external os of a non-angulated cervix to the hemispherical lower segment offers positive information as to cervical and lower segment preparation for labor. A short cervix (1 to 1½ cms for instance) is one wherein considerable drawing upward of lower segment muscle fibres into the active uterus has already occurred and such a cervix, if primiparous, is one wherein the internal os is well along toward obliteration, and one wherein dilatation would be expected to advance satisfactorily in the presence of physiological contractions.

Such a cervix, if multiparous, can be counted upon to dilate speedily once efficient contractions are instituted. In the latter instance, the internal os has not disappeared. It and the external os commonly dilate together in multiparous labor, but the lower segment is thin. A short cervix alone in either case indicates thinning out of the lower segment (and preparation for satisfactory dilatation) even though in neither is the external os dilated sufficiently to investigate the actual thickness of the lower segment or the state of the internal os.

The practical value of a short, non-angulated cervix arises in the occasional case of accidental hemorrhage or rapidly advancing toxæmia where decision between delivery by Section and delivery by the vaginal route must be made. A short cervix offers considerable latitude in artificial dilatation therapy whereas, in the presence of a long, thick (unchanged) cervix and the necessity for reasonable haste, the risks of abdominal section might have to be unhesitatingly assumed.

Length and general direction of the cervical canal can rarely be determined directly because the mere fact that the canal persists, precludes the possibility of sufficient dilatation of the external os for the examining finger to enter it.

However, angulation of the cervix, particularly if the latter is short, invariably indicates persistence of the canal. Angulation is usually forward (for uterine ante flexion is normal) and the canal accordingly directed backward; but length of the canal and, in addition, obliteration of the internal os are measured indirectly by evaluating the length of the cervix presenting. Obviously, the shorter the cervix, the thinner the lower segment. The thinner the lower segment, the shorter the canal and the more satisfactory is the preparation of the cervix for dilatation.

Angulated cervixes are in no sense pathological. They are met where engagement is firm. Angulation results from the push of the engaged head down against the cervix, that is more or less fixed by its ligamentous supports.

B. Obliteration or Effacement of the Internal Os.

This is the cardinal step in the dilatation of the primiparous cervix.

In response to contractions (either preliminary or those of actual labor), two mechanical forces become active. They are (1) the downward and outward "push" of the intact bag of waters and (2) the outward and upward "pull" of the longitudinal active uterine-muscle fibres. Their joint effect is gradual upward displacement of cervical and lower segment muscle fibres with obliteration, or widening up, or fading away of the internal os into the progressively thinning lower segment.

There is actual displacement of muscle fibres. Before obliteration of the internal os, the lower segment near the cervix may present a thickness of 2 cm. or more. Whereas, with the internal os entirely obliterated, its thinness may be down to $\frac{1}{2}$ cm.; and it is uniform. This is most important. A cervix may present an external os that will readily admit the examining fingers and that is paper-thin; but if progressive thickening of the lower segment is encountered as the region of the fading internal os is approached, the latter is not "ob-

literated" and the cervix is not ready for progressive dilatation, be the latter spontaneous or artificial.

Cases of the kind can be gotten up to "3 or 4 fingers" under digital dilatation and anaesthesia, but no further. And when artificial advance through them is attempted, they tear extensively if moderately thinned and excessive force is used, or they hold, the lower segment acquiring defensive "tone," and foetal and maternal mortality and morbidity rates rise with the increased trauma incident to operative delivery.

Uterine muscle dystocia of the type referred to is far more important clinically, because more common and more dangerous, than is the obstruction occasioned by pelvic contraction alone.

As long as a trace of unobliterated internal os remains, advance and delivery of a full-term child may not be attempted operatively. The "size" of the forecoming head with forceps applied is inevitably increased by the thickness of the surrounding lower segment musculature; while extended arms and delay in delivery of the aftercoming head are the usual hazards in delivery by the breech.

Even though the patient has entered upon a clinical second stage with frequent, strong and actually propulsive contractions, the abnormality may not be allowed to go untreated: Contractions must be decreased to the frequency and intensity that the anatomical dilatation calls for. This means anaesthesia and, preferably, ether in olive oil by rectum. The dose should be large (4 ozs. for instance) and its efficiency in decreasing the frequency and intensity of the contractions down to the point of safety for the child alone should be considered in repeating it. The foetal hazards arising from the ether instillation are much less than those of long continued spontaneous efforts at expulsion though a non-fully-dilated, or -dilatable, cervix. They are negligible compared with those of operative interference under the same conditions.

On the other hand, with the internal os wholly obliterated and the lower segment uniformly thin, a case is deliverable (granted an emergency demands it) regardless of the dilatation of the external os.

Under deep ether anaesthesia, a primiparous cervix with the external os dilated no more than one finger, but with the internal os wholly obliterated, can be brought to full dilatation within twenty minutes and be found intact on careful post-partum examination.

Full digital dilatation of a completely prepared cervix and immediate delivery by forceps, or "version," or breech extraction, depending upon conditions as to presentation,

level of the presenting-part and the like, becomes a highly valuable therapeutic measure applicable to an extremely limited number of cases but possessed of advantages in these cases that far exceed those of expectancy.

Scant reference need be made to behavior of the internal os in dilatation of the multiparous cervix. Even before labor this cervix presents a variable degree of dilatation of the external os while the internal remains discrete, firm, and more or less tightly closed. So it remains until very late in, or throughout, labor. Internal os and external os gradually approach each other as the cervical canal grows progressively shorter with progressive thinning out of the lower segment.

It is the latter that makes relatively rapid dilatation of the multiparous cervix possible. At the same time, it is the relatively thick margin of the dilating multiparous cervix, together with descent resulting from lax pelvic floor and broad ligaments, that accounts for a common element of dystocia met late in labor and to which reference will presently be made.

C Dilatation of the External Os

This is the familiar sign, and centimeters, inches and fingers' breadths are the various standards by which it is measured. It is the simplest one to elicit, and it can be made out with approximate accuracy in the majority of instances by rectal examination. But, in itself, it is possibly the least valuable from a prognostic standpoint.

For example a primipara, external os "2½ fingers", contractions recurring every three minutes (20 to the hour) and lasting thirty seconds (10 min of dilatation to the hour), condition of the internal os and thickness of the lower segment undetermined. (As a matter of fact, a remnant of internal os persists and the lower segment increases to 1½ cm in thickness as the region of the latter is approached.) A physiological second stage need not be looked for in hours, while the time of actual delivery is even more problematical.

On the other hand, with the same "2½ fingers" but with the lower segment thin and possessed of no "tone," with the cervical rim soft between contractions, labor is advancing rapidly and with even a slight shortening of the intervals between contractions and a slight increase in their intensity and duration, onset of the second stage and delivery can be looked for within a very few hours.

D E. Thickness and Consistency of the External Os and the Lower Segment

Theoretically, the margin of the external os is reduced to paper thinness in preparation for uneventful dilatation, and the lower segment increases very gradually in its thickness as higher levels are reached. With the internal

os completely obliterated, there is no trace of it to be palpated as its original level is reached.

And the musculature of the external os and the lower segment, although its feel is definitely firm at the height of uterine contractions is invariably soft in the intervals between them. This characteristic is essential. None but a contraction applied to a soft and relaxed cervix results in maximum dilatation.

On the other hand, a feeling of firmness to the cervical musculature in the intervals between contractions is indicative of a persistence of muscle "tone" that not only retards progressive dilatation but, if sufficiently pronounced, may even put a stop to it altogether.

Cervical and lower segment "tone" between contractions is not uncommon where with membranes ruptured and contractions frequent, strong and prolonged, the entire uterine musculature applies itself to the irregularities of the foetal outline in what is aptly termed a state of general uterine retraction.

These cases need treatment, and the latter is sedative. Morphine in the first stage and rectal ether in the second are specifics. Attempt to dilate these firm—possibly "rigid"—cervices digitally may not be made. Their dilatation without anesthesia is dangerous, while, with sufficiently deep narcosis or rectal anesthesia and time, they can be counted upon to open spontaneously.

F Lower Segment Adhesions

They are the sequelae of antecedent productive inflammatory processes in the cervical and lower segment mucosa. Patients presenting them give histories of leukorrhoea and variable dysmenorrhoea.

When present, lower segment adhesions invariably retard dilatation. If definitely obstructive, they must be eliminated if labor would not be unduly prolonged.

Adhesions "hold" even in the presence of frequent, strong and highly efficient contractions for the reason that the "pull" upon them to break them up is lateral and, therefore, mechanically ineffectual.

In an interval between contractions a finger is introduced through the external os and swung completely around as much of the lower segment as can be reached. The adhesions are felt to give way in response to little force and their breaking up is accompanied by a moderate muco sanguinous "show" throughout which minute yellowish flakes are scattered.

Search for the presence of obstructing adhesions is indicated whenever a thin, soft, and apparently readily dilatable cervix fails to progress in its dilatation in the presence of highly efficient contractions.

G Location of the Cervix

Pelvic level at which the cervix is found is

determined by the degree of engagement and descent of the presenting-part. Dilatation in a "low" cervix can be counted upon to proceed with maximum speed for the simple reason that there is, in contact with it, a firm, uniformly rounded presenting-part out and up over which the lower segment can be directed with maximum ease.

Location of the cervix along the antero-posterior pelvic axis is of diagnostic as well as prognostic importance. In every *occiput-posterior*, the cervix is located well toward the rear. Such displacement is an attempt at accommodation of the long axis of the uterus, terminating inferiorly at the cervix, to the long axis of the presenting-part—the occipito-mental diameter of the foetal head—that is directed generally toward the rear.

While less valuable than the abdominal signs that are characteristic, the fact that the cervix is located posteriorly and remains well to the rear until late in dilatation should suggest a "posterior," with its attendant possibilities as to clinical course, even though on palpation and auscultation the case has been considered an "anterior."

Reference has already been made to the fact that some cervical signs are pathognomonic. There are few; but their importance lies in the fact that they indicate conditions that, on one hand, are not uncommon and that, on the other, demand early diagnosis. Early diagnosis is emphasized because, when made, treatment is at once simpler and more availing.

These conditions belong among the uterine dystocias. They are (1) uterine muscle insufficiency, (2) general uterine retraction, and (3) ring obstruction. On cervical exploration alone positive diagnosis of these abnormalities can almost invariably be made.

(1) A soft, thin, moderately dilated cervix, presenting a negligible advance in dilatation over a period of two or three hours of apparently highly efficient contractions, means uterine muscle insufficiency, or disproportion, or (as is usual) a combination of the two.

"Insufficiency" is used in preference to "inertia." The former term indicates that the contractions are simply inadequate to bring about progressive advance in dilatation. They are insufficient, but the musculature is far from inert. As a matter of fact the contractions may be unusually strong. But, regardless of their strength, when they are producing negligible results in progressive dilatation during the first stage and in advance of the presenting-part in the second, they are insufficient: help is needed: and care must be exercised lest it be too long deferred.

The insufficiency just described is Relative, and the earlier in labor it appears the less

promising is the outlook. Unrecognized and untreated, relative uterine muscle insufficiency results in true inertia, with its necessarily increased tractile efforts at delivery and its even *more serious* increased post-partum blood loss.

No less important than the diagnosis of relative insufficiency (or relative inertia) is its treatment. The latter may never be stimulative. Pituitary extract takes from rather than adds to the store of uterine-muscle energy available. Accordingly, a uterus that has already given evidence of being unequal to the work at hand may not be called upon to work harder.

The indication here is to lighten the uterine load; and careful digital dilatation in the first stage and conservative forceps extraction in the second (supplementing the still-present uterine contractile efforts) are the measures to be employed.

(2) A firm cervix, in intimate contact with a sizable caput (the membranes have almost invariably ruptured in cases of the kind) and maintaining its "tone" even in the intervals between subjective "pains," strongly suggests general uterine retraction. The diagnosis becomes positive when, on abdominal examination, the various prominences, depressions and deep furrows of the foetal outline stand out as the uterine muscle applies itself intimately to the foetus; and the entire uterine musculature imparts the same sensation of "tone" to the palpating hand that it conveys to the vaginal finger.

Treatment here is empirical. The uterine musculature must be relaxed, and intermittency made to return to the contractile efforts. Depending upon the amount of relaxation to be produced, use is made of chloral and bromide, or morphine with atropine, or rectal anaesthesia, or, in the extreme case, deep surgical ether inhalation possibly over a period of twenty or thirty minutes.

Most moderately well dilated but "rigid" cervixes are found in cases of advanced general uterine retraction. None may be dilated digitally as they are; but practically all go on to complete physiological dilatation when the sedative treatment described is started early enough or persisted in long enough.

(3) Recession of the presenting-part from contact with the rim of a previously dilating cervix, accompanied by cessation in dilatation of the external os, means the activity of some force just in advance of the bis-acromial foetal diameter. Bandl's Ring in tonic, isolated contraction gives just such signs early in its development. Recession as described demands immediate lower segment exploration under deep ether to determine the possible presence of a developing Ring.

If found (and when fully developed it will encircle the neck), the treatment is continuous anaesthesia until the Ring has disappeared. No attempt need be made to dilate it manually. With the Ring eliminated, immediate delivery following complete manual dilatation of the cervix is called for.

In cases of the kind, as well as in those of general uterine retraction, the dangers of pituitary extract medication need only to be mentioned to be thoroughly appreciated.

The following findings are not uncommon in multiparous labor. Presenting part in the low mid pelvis; contractions frequent and strong although poorly propulsive; rim of the cervix out of reach at the sides and posteriorly but a conspicuous anterior lip behind the symphysis and anterior to the head.

The anterior lip, characteristically somewhat elongated in multiparae and remaining somewhat thickened during dilatation because the internal os and the external dilate together, has become incarcerated between the firm head and the firmer symphysis. Relaxed pelvic floor and broad ligaments allow of the deep descent necessary for such incarceration.

The thick lip is a definite obstruction to advance, and it rises slowly if at all. Yet propulsive efforts be encouraged and its thickness increases. The incarcerated cervix readily becomes oedematous, and the moment of spontaneous delivery is further and further deferred.

A simple measure here is universally successful. The tips of two or three fingers displace the incarcerated anterior lip upward above the symphysis and hold it there until an efficient contraction appears. At this time, carefully withdraw the fingers, and the presenting part—its obstruction to advance removed—will be found to be delivered with surprising ease.

This procedure is so simple, so safe and promises so to minimize wear and tear on patient and those about her that it ranks as one of the most valuable of therapeutic measures.

Reference has been made earlier in the discussion to analysis of contractions as to frequency, intensity and duration for the purpose of measuring the amount of work in dilatation the uterus is doing.

Work being done can be measured. For instance, with contraction recurring at 3 min intervals, there are 20 such efforts within an hour. With each contractile effort lasting 45 seconds ($\frac{3}{4}$ of a minute), it is at once apparent that the uterus is devoting 15 minutes of each hour to dilatation. Fairly rapid dilatation would be expected.

But other factors are to be considered. They are, first, the strength of each contractile effort and, second, the condition of the cervix (its dilatability) at the time the observation is made.

Accurate measure of the strength of the contractions may be impossible, but they are manifestly mild, or moderate, or strong and an approximate evaluation of them can be made. But more definite is the information the cervix offers. With the latter thin and soft with the internal os obliterated and the external dilated three fingers for instance one can determine with fair accuracy how much more work will be necessary to bring about full dilatation. Analysis of the contractions in the manner already described offers evidence of the work the uterus is doing and the latter may be expected to be increased as the late first stage is entered upon. One should have little difficulty in fixing with approximate accuracy the hour of actual delivery.

In conclusion, a few words concerning the place of vaginal examination in the conduct of labor are not amiss.

There are those who look upon each vaginal as involving definite hazards, and who urge the substitution of rectal examination as an effective means of eliminating them. Enthusiasts claim that vaginal examination is never necessary.

Even if the various items of interest referable to cervix and lower segment could be elicited on rectal examination, vaginal exploration during labor would still have a place if for no other reason than that it is only as a result of such a procedure that artificial rupture of membranes is possible. And the indication to rupture the membranes is on occasion imperative.

But none of the finer points of cervical anatomy and physiology are demonstrable through rectal examination alone, and vaginal examination unquestionably has a place in practice.

Vaginal examination may not be eliminated. It may not be relegated even to a position of secondary importance to rectal.

Unless the case is progressing too rapidly, each parturient is entitled to a carefully conducted vaginal examination. In the interest of safety make use of rectals to check up on the subsequent progress in labor.

The latter course is not only conservative. It is informative as well. When followed none will be subjected to the acknowledged hazards of vaginal examination without definite benefits therefrom, and such advantages are possible in no other way.

THE MEDICAL PRACTICE ACT—FIVE YEARS' RESULTS

By HAROLD RYPINS, M.D., ALBANY, N. Y.

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ALTHOUGH the Webb-Loomis Bill became a law by Governor Smith's signature on November 17, 1926, the effective machinery for putting its provisions into practical operation were not fully organized until January of 1927. It should be of interest to the medical profession, who not only sponsored this legislation, but who are carrying its financial burden, to know what has been accomplished during the first five years of its actual operation.

At the time this legislation was proposed, five questions were asked in regard to it:

1. Was there any necessity for amending the Medical Practice Act?
2. If so, would the amended Act remedy the evils for which it was intended?
3. Would the benefits to the public and the medical profession be sufficient to justify the burden imposed on the medical profession?
4. Would the Act in any way jeopardize the rights of licensed practitioners of medicine?
5. Would a temporary or permanent activity be necessary?

With the completion of a five-year period of administering the Medical Practice Act, I believe I have accumulated sufficient experience and data to answer these five questions definitely and satisfactorily.

WHAT THE MEDICAL PRACTICE ACT PROPOSED

There were two major objects in amending the Medical Practice Act in 1926—first, to drive out of practice unlicensed quacks and charlatans; and second, to remove from medical practice licensed physicians guilty of improper professional conduct. To accomplish these results several things were necessary. First, it was necessary to know who was and who was not actually entitled at any given time to practice medicine in the State of New York. This required annual registration. Second, it was necessary to clarify and strengthen the penalty clauses; third, it was necessary to prohibit the unauthorized use of the title "Dr."; fourth, it was necessary to transfer legal prosecutions from the local district attorneys to the office of the Attorney General; fifth, it was necessary to establish an administrative bureau with sufficient inspectors and investigators; sixth, it was necessary to create the Grievance Committee and set up a legal procedure for its activities; and seventh, it was necessary to secure sufficient funds free from political interference to carry out the purposes of the act. This called for the annual two dollar registration fee.

The following table gives the disposition of cases of illegal practice of medicine, received during the year 1931, and also a summary of all similar cases disposed of during the five-year period, 1927-31:

RESULTS OF PROSECUTION OF ILLEGAL PRACTITIONERS		
Classification	1931	Total 1927-1931
No Cause for Action ...	131	1066
Violations Stopped		
Without Prosecution	197	1355
Prosecutions	62	274
Convictions	43	205
Acquittals	7	19
Withdrawn	5	43
Pending trial	7	7
Investigations Incomplete	237	237
Total	627	2,932

SUMMARY

No evidence of violation	1,066
Outcome satisfactory	1,560
Outcome not satisfactory	62
Incomplete	244
	<hr/> 2,932

Attention is called to the fact that during the five-year period 2,932 complaints of illegal practice have been investigated, of which 1,066, or a little over one-third, showed no violation. One thousand, eight hundred and sixty-six violations of the statute were found, of which 1,355 were stopped without the necessity of criminal prosecution. Two hundred and thirty-seven cases are uncompleted and 274 were prosecuted in the criminal courts.

Of the 274 prosecutions, 205 were convicted, 19 acquitted, 43 withdrawn and 7 are pending in the courts. Over ninety per cent of actual convictions were obtained in the cases brought to criminal trial, which is a phenomenally high record in criminal prosecutions. Particular appreciation is due the Honorable John J. Bennett, Jr., Attorney General of the State of New York, and the very able deputy attorneys general, the Honorable Sol Ullman and the Honorable Myron J. Parkinson, assigned to the prosecution of these cases, for their very great zeal and co-operation in the enforcement of the statute. The extensive experience which they have acquired in the prosecution of these cases is in no small measure responsible for their extraordinary success and testifies to the wisdom of centralizing these prosecutions in the hands of the Attorney General. The district attorneys, particularly in

New York City, have also been most helpful in cooperating with the Attorney General

The effectiveness of the Medical Practice Act, however, cannot be seen solely in the figures of criminal prosecutions, but is better shown under the caption "Violations Stopped Without Prosecution" This group is composed of minor or technical violations Frequently, the unauthorized display of the title "Dr" and similar violations are as a rule now easily stopped by a warning visit from one of the inspectors of the Department It is obvious that this is a simpler procedure than criminal prosecution, requiring a much smaller expenditure of time, energy and money The fact that these violators do not require being brought into court to stop their violations is in a large measure due to the public recognition of the effectiveness of our criminal prosecutions It is generally appreciated that the State has both the intention of and the machinery for prohibiting violations of the Medical Practice Act, that the chances of a violator in the criminal courts are very poor and the penalties severe, ranging from fines up to five hundred dollars and jail sentences up to a year, or both In other words, it has become known that the illegal practice of medicine is no longer a paying "racket"

Another type of evidence that the Medical Practice is accomplishing its object is difficult for anyone not intimately acquainted with the administration of the law to appreciate, that is, a very definite change in the character of complaints over the five-year period For the first few years a majority of the complaints received involved flagrant and serious violations, consisting of the out-and-out diagnosis and treatment of the sick without restriction, by unlicensed practitioners This type of case has been gradually diminishing, so that the majority of complaints at the present time are of a lesser and more technical nature, such as the use of ultra-violet ray in beauty shops, or the use of the title of "Dr" by licensed massage operators, chiroprodists and optometrists, who are otherwise engaged in legal practice The outright practice of medicine in open defiance of the State authorities has diminished tremendously over a period of five years, whereas, owing to the education of the public, the number of technical violations which, if not promptly stopped, would doubtless lead to more serious violations, has tended to increase The total number of cases investigated annually remains at approximately 600, though the character of these violations has definitely altered for the better

In particular, the unauthorized use of the title "Dr" by unlicensed cultists, which more than any one violation misleads and deceives the public, has now practically disappeared and its effectual prohibition has been a body blow to practitioners of the various cults

An amusing light on the effect of the enforcement of the Medical Practice Act upon cultists is contained in the reports of the Department's investigators, who state that on numerous occasions they are confronted with their own photographs, by unlicensed cultists who are in constant fear of detection Thus fear has led them to insist upon so much evidence that new patients are not inspectors that their caution has driven away most of their new patients, who naturally do not desire treatment when the practitioner not only by his actions but by his words is forced to tell them that what he may do is in violation of the law

Although it has naturally been impossible to obtain any accurate data as to the actual number of illegal practitioners in the State at any given time, all these lines of information lead me to feel justified in concluding that, speaking very conservatively, the number of illegal practitioners of medicine in New York State has been cut more than in half during these five years, and that their number is decreasing duly A comparison of the practitioner's signs displayed now as contrasted to those of five years ago fully bears out this conclusion A comparison of the present practitioners' signs with those displayed in other states will satisfy the most sceptical that illegal medical practice is under better control in New York State than anywhere else in the country, a fact testified to by no less competent a judge than Dr Morris Fishbein, Editor of the *Journal of the American Medical Association*

THE WORK OF THE GRIEVANCE COMMITTEE

The second major object of the amended Medical Practice Act was the creation of a Grievance Committee for the purpose of reprimanding, suspending, or revoking the licenses of physicians guilty of improper conduct The Grievance Committee, of which Dr Orrin Sage Wightman is the very able chairman, is composed of ten physicians, appointed by the Board of Regents from nominations of the various state medical societies The members of the Grievance Committee serve without remuneration and they have given unstintingly of their time and energy in carrying out the work of the Committee

While the original object for which the Grievance Committee was proposed has been accomplished, namely, the discipline of physicians guilty of improper conduct, the Grievance Committee also serves two other very useful purposes It has served as a court where unfounded charges against licensed physicians are heard and disposed of without the publicity and expense of the usual court procedure Perhaps even more important, the general recognition of the Grievance Committee's existence, functions, power and determination, has undoubtedly operated as a deterrent to licensed physicians whose mode of practice

borders on the questionable, so that the Committee has had a very definite effect in raising the standards of professional conduct throughout the State.

During the four years of its existence, the Grievance Committee has received 201 complaints against licensed physicians. The type of these complaints and the manner in which they were handled is shown in the following table:

COMPLAINTS AGAINST LICENSED PHYSICIANS

Sept. 1928—Jan. 1932

Complaints	Violation	Disposed of by						Regents Action	
		Secretary	Informal hearing	Formal hearing	Revocation	Suspension	Censure	Dismissed	Pending
36	Improper Advertising	18	16						1
30	Attempted Abortion	10	9	1	2	1			7
36	Aiding Illegal Practitioners	10	13	1	2	1	4		5
16	Ambulance Chasing		14	2					
25	Fraud and Deceit	6	11		2		1	1	4
18	Malpractice	11	7						
11	Unethical Conduct	4	7						
1	Narcotic Violation				1				
1	Insanity				1				
1	Arbitration		1						
26	Miscellaneous	17	7						2
		76	85	4	8	2	6	1	
201	Total		165			17			19

Reference to the table shows that of these 201 cases, 76 were disposed of by the Executive Secretary on the grounds that there was no evidence of a violation, or that the charge did not fall within the purview of the Committee, under the statute—for example, charges of malpractice. These 76 cases, together with the cases in which after informal hearing by the sub-committee, the physician complained about was exonerated, make a group of 100 cases, just one-half of all the charges received, in which the physician improperly charged with misconduct was protected by the Grievance Committee. So far as can be ascertained, not one of these cases has ever appeared in a civil court, indicating that not only the complainants but their legal counsel are satisfied that the determination of the Committee is fair and unprejudiced. These complaints seek a place to air their grievances. They appear to be satisfied, after an opportunity has been given them for a courteous hearing, to accept the Committee's decision in the matter. Before the existence of the Grievance Committee these cases usually found their way to the courts, where the physician, even though perfectly innocent of wrong-doing, was subjected to very embarrassing publicity and expense. From the point of view of the medical profession the protection afforded by the Grievance Committee to these one hun-

dred physicians of itself justifies the cost of the Medical Practice Act to the medical profession.

The remaining 101 cases against licensed physicians, on the other hand, constitute cases in which there was definite evidence of wrong-doing to a greater or lesser degree, and the Committee has been just as zealous in these cases in protecting the injured public as it was in the other cases in protecting the injured physician. Of the 84 cases heard informally, I have already indicated that in 24 cases the physician had acted properly. Subtracting the 19 cases which are still pending, and 17 cases referred to the Board of Regents for formal discipline, there were 41 cases in which the evidence indicated improper conduct on the part of the physician, but of a nature not justifying formal discipline. In these cases the physicians were warned by the Committee and advised that should they be brought before the Committee again the earlier charges would be reopened. The same action was taken in 4 cases after the hearing of formal charges, where insufficient evidence to justify reference to the Board of Regents was found, but the Committee was convinced that the physicians had not acted properly. Only 2 of these physicians have been called before the Grievance Committee a second time.

Of the 17 cases referred to the Board of Regents, 3 cases were for attempted abortion, of which 2 were revoked and 1 suspended; 7 were for aiding illegal practitioners, of which 2 were revoked, 1 suspended and 4 censured; 4 for fraud and deceit in practice, of which 2 were revoked, 1 censured and 1 was dismissed by the Board of Regents. One license was revoked for narcotic violation and another for insanity. With the exception of one case the Board of Regents has accepted the recommendation of the Grievance Committee; and the Appellate Division has sustained the Grievance Committee and the Board of Regents on appeal.

Experience has shown that the Grievance Committee can accomplish the greatest results by the use of informal hearings, and formal hearings are now held for the most part only in those cases in which after informal hearing the Committee is satisfied that the facts warrant severe discipline. The results accomplished by the Grievance Committee have attracted attention throughout the country and several states are now in the process of amending their medical practice acts to include similar disciplinary bodies.

SUMMARY

In conclusion, I believe that the data which has been presented is sufficient to answer the five questions which were raised in reference to amending the Medical Practice Act in 1926:

1. The number of cases of illegal practice found—almost 3,000 in five years, or approxi-

mately 600 a year, as well as the 200 complaints against licensed physicians, filed with the Grievance Committee—indicates that there was a necessity for amending the Medical Practice Act.

2. The results of the criminal prosecution of illegal practitioners and their steady diminution through the State, as well as the effect of the Grievance Committee, indicates that the Act, as amended, is remedying the evils for which it was proposed.

3. The benefit to the medical profession of the Grievance Committee as well as the profession's natural interest in the control of illegal practice for the benefit of the public they serve, is sufficient to justify the burden imposed on the medical profession for the Medical Practice Act.

4. During its five years of operation no single complaint has been received which would in any way indicate that any physician has felt that his rights have in any way been jeopardized.

5. The fact that after five years there is still an abundance of work to be done both in the prosecution of illegal practitioners and in the discipline of licensed practitioners indicates that a permanent and not a temporary activity along these lines is necessary.

It is my opinion that the results obtained during the first five years' operation of the present Medical Practice Act fully meet the expectations of its sponsors, and that New York State now possesses the model and most effective medical practice act of the country.

LUMBAR HERNIA WITH OVARIAN CYSTS

By JACOB SARNOFF, M.D., BROOKLYN, N. Y.

THE purpose of presenting this case report is to illustrate some unusual phases of post-operative hernias complicated by intra-abdominal growths. These growths aggravate the hernia but facilitate hernial closure after their removal because the intra-abdominal content is thereby diminished. Post-operative ventral hernias are quite frequent even to-day in spite of improved technique, because of the innumerable laparotomies performed, especially in the presence of suppuration. Problems of post-operative hernias are therefore familiar to the average surgeon. Lumbar hernias, however, are somewhat rare and as a rule are approached with greater timidity and caution.

The structures of the abdominal wall in the lumbar region are less yielding, the muscle layers having fixed points of attachment, and the underlying viscera being in close contact with them and partly extraperitoneal, such as the kidneys and colon. This region therefore, is less amenable as a surgical approach to the abdomen. Watson in his text book on Hernias has collected from the literature up to 1923, one hundred and fifteen cases of lumbar hernia out of which three were post-operative. The others were congenital or acquired, either emerging through the inferior lumbar triangle (Petit's) or superior lumbar triangle (lumbo costo abdominal triangle of Gryn-Felt.) He states that unquestionably there are many more post-operative lumbar hernias, but that a good many are not reported.

The most frequent incisions in the lumbar region are for kidney operations, such as nephrectomy, pyelotomy or ureterotomy. It is the result of such operations that a hernia sometimes develops, especially if there is a

good deal of suppuration. The structures of this region are: skin, a good layer of fat, three layers of muscle, namely, the latissimus dorsi going upwards and forwards, the external oblique going downwards and forwards, the internal oblique going upwards and forwards, the transversalis muscle going transversely across toward mid-line, transversalis fascia, preperitoneal fat and peritoneum; the erector spinae muscle posteriorly, the crest of ileum below, the twelfth rib above, and the linea semilunaris in front. The lower intercostal vessels and nerves pierce the various layers of muscle on their way downwards and forwards. During these operations these structures are at times severed. If the approximation is proper and union is primary no ill effects ensue, but if suppuration takes place, a defect may be produced which predisposes to hernia formation, especially when there is a tendency for the increase of intra-abdominal pressure such as this case illustrates.

A woman C. F. admitted to the United Israel-Zion Hospital, June 3, 1931, was 37 years of age, married 17 years, one child of 16, regular menstrual periods. Suffering from polyarthritis. Six years ago patient weighed 175 lbs. During the first three years patient complained of frequent micturition and lost 75 lbs. in weight. Was diagnosed as suffering from tuberculosis of left kidney for which nephrectomy was performed three years ago. The pathological report was caseous tuberculosis of left kidney. A good deal of suppuration with prolonged drainage continued for a number of months following the operation.

The patient sustained a severe injury to the left lumbar region by falling off a trolley car about a year following the nephrectomy.

Shortly after the injury, a swelling was noticed in the left lumbar region, at the site of the former operation, which progressively increased in size. When first noticed, the swelling was the size of a tangerine but it gradually increased until on admission it was the size of a watermelon. Her weight following the nephrectomy mounted from 100 lbs. to 234 lbs. which was her weight on admission to the hospital (Figures 1 and 2 left).



FIGURE 1

Left: Anterior view of lumbar hernia extending above from lower ribs, below to crest of ileum, behind to erector spinae, in front to linea semilunaris.

Right: Anterior view three weeks after operation, showing marked improvement in abdominal contour, general posture and facial expression.

The patient was first admitted on the Medical Service because she was suffering from polyarthrititis, having a temperature of 104°. After being in the hospital for ten days her condition improved and her temperature became normal. A surgical opinion was then requested as to the advisability of operating on the lumbar hernia. On examination the writer found the hernia partly irreducible, as it was impossible to force back the contents completely into the abdominal cavity. Such an attempt produced a great deal of distress, marked intra-abdominal tension, dyspnea, palpitation and a sense of suffocation. The hernial opening was large enough to admit two hands. Through this defect one could feel a tumor mass springing from the pelvis, suggestive of an ovarian cyst (Fig. 3).

Ordinarily the writer would feel that an attempt at reduction and closure of such an enormous hernia would prove futile for there would not be room enough in the abdominal cavity to accommodate the extruded viscera housed in the large hernial sac. This was the

opinion of his medical colleagues. However, anticipating the removal of the large tumor mass, the writer felt that reduction of the hernial contents would then become feasible. The mass undoubtedly was partly responsible for the gradual increase of the hernia and the displacement of the abdominal viscera into the hernial sac.

To insure the successful outcome, the patient was put on a non-residue diet, and subjected to thorough catharsis to minimize the intestinal volume. This, coupled with a marked relaxation of the abdominal wall produced by the spinal anæsthesia, enabled the writer to proceed with the operation without hesitancy. An elliptical incision two feet long and one foot wide was made in the left lumbar region excising a thinned out scar consisting of practically only skin and peritoneum which formed the major part of the hernial sac. To the inner surface of the sac was firmly adherent the large omentum, the descending colon and many coils of small intestine. These adhesions were probably the result of the former suppuration. The adhesions were separated and the redundant omentum removed. The entire circumference of the hernial ring together with the surrounding fascia and muscles were exposed. The hand was then introduced into abdominal cavity and a large twisted ovarian multilocular papillary cyst about the size of a watermelon was found springing from the left broad ligament, partly protruding through the hernial opening. The pedicle, about the thickness of two thumbs, was clamped and cyst removed. The pedicle was ligated with chromic No. 2.

Further exploration revealed a similar multilocular cyst of the left ovary, though much smaller. This was removed in the same manner. The writer was then able to close the defect without drainage and without any difficulty, ensuring proper and firm approximation of the different layers constituting the abdominal wall of the left lumbar region. The peritoneum and transversalis fascia were sutured with continuous chromic No. 1, the transversalis internal oblique and external oblique muscles were sutured with continuous chromic No. 2 in two separate layers. A few interrupted sutures were used to reinforce the line of approximation. Skin and fascia were sutured with interrupted silkworm figure 8 and the writer's continuous silk suture for skin.

On completion of the operation, the left side appeared quite even, symmetrical, and in fact had a better cosmetic effect than the right side. The entire procedure, requiring a good deal of tailoring, lasted forty-five minutes. Patient appeared to be in excellent condition following the operation. Had a smooth convales-

cence. Wound healed by primary union. Patient was up and about in two weeks and was discharged from the hospital as cured, in three weeks, a transformed individual both mentally and physically as evidenced by her facial expression and physical form. (Figs. 1 and 2 right).

The pathological report of both ovaries was that of multilocular papillary cyst-adenoma. The left cyst weighed nine and one half pounds and contained four and one half quarts of clear fluid. The patient now is thus minus one kidney, both tubes and ovaries, and yet at date of this writing, two months following the opera-



FIGURE 2

Left Posterior view of lumbar hernia
Right Posterior view three weeks after operation

tion, is in perfect health, despite her having been subjected to a nephrectomy for tuberculosis of the left kidney, bilateral salpingo-oophorectomy for papillary cyst adenoma of both ovaries and hernioplasty for the huge post-operative lumbar hernia. She now weighs 190 lbs, as compared to 234 lbs on the date of admission and therefore can get about with more ease and comfort.

The facts of this case bring to our mind the following:

1. Lumbar hernias are apt to result after



FIGURE 3

The left ovarian multilocular cyst weighing nine and one-half pounds, containing four and one-half quarts of clear fluid, with innumerable cysts on the surface and in the interior. The right ovary had a similar cyst but smaller.

nephrectomies, especially if there is a good deal of suppuration.

2 Intra-abdominal growths predispose to the formation of such hernias by causing increased intra-abdominal pressure, the weakest part of the abdominal wall yielding.

3 The problem of replacing huge hernias such as this one can be partly solved by thorough purgation, non-residue diet, aided by the marked relaxation obtained by spinal anaesthesia; and in cases of this type by the removal of non-desirable voluminous tenants in the form of ovarian cysts.

4. The intricate physiological and anatomical disturbances jointly, caused by the ovarian cysts and the lumbar hernia, have produced, in this particular case, marked dysfunction in the form of obesity, despondency and suffering. Following the operation (Fig. 1 right) there is a marked improvement in the patient's physiognomy as evidence by her expression of joy, alertness, vivacity and well being.

TWO CASES OF URINARY RETENTION FROM VAGINAL OCCLUSION

By JOSEPH A. LAZARUS, M.D., NEW YORK, N. Y.

ONE of the chief causes of occlusion of the vagina is a union of the epithelial surfaces of the hymen, occurring either before or after birth, a condition designated as "imperforate hymen." Congenital, or rather infantile atresia of the hymen leads to a bulging of the hymen as a result of retained secretion in the vagina. Hypersecretion of the uterus at birth is not an unusual phenomenon, and is attributed to the action of some placental agent of the mother upon the uterine mucosa of the infant. Any agent pre-

venting the escape of this secretion leads to vaginal retention. In later infantile life, the uterus remains inactive until puberty, so that in cases of acquired atresia symptoms do not appear until the onset of menstruation.

Usually the painful symptoms of menstruation occur each month with severe lower abdominal cramps and backache, but without vaginal bleeding. Cases have been reported where no symptoms appear until the collection has grown sufficiently large to produce pressure. At first, the

accumulated blood distends the vagina only. As the collection increases, the cervix dilates and the uterus fills with blood, giving rise to an hematometra. Unless relieved, the process may continue and lead to unilateral or bilateral hematosalpinx.

Radical excision of the hymen offers the only sure cure of this condition. The operation must be performed under strict asepsis, and by carefully excising the hymen, free drainage is offered and the incidence of sepsis markedly reduced.

The outstanding symptoms that suffice to clinch the diagnosis are periodic symptoms which usually accompany menstruation, the absence of blood, closure of the vagina, and the presence of a fluctuating, doughy mass in the vagina found in the course of a rectal examination.

A rare symptom is retention of urine caused by pressure on the urethra. The author wishes to report two cases of which urinary retention was the prominent symptom.

Case 1.—A. B., female, aged 12, was first seen March 12, 1929, complaining of recurrent attacks of urinary retention for 36 hours requiring catheterization. The patient had never menstruated.

Physical examination revealed a distended bladder reaching to midway between the symphysis pubis and umbilicus, and a bulging mass between the labia. Rectal examination disclosed a doughy, fluctuating mass filling the vagina and cul-de-sac of Douglas. Examination of the introitus revealed an imperforate hymen. A diagnosis of hematometra was made and operation advised.

Operation, March 13, 1929.—Under ether narcosis the vulva was prepared, an aspirating needle introduced into the vagina, and old blood obtained. The entire hymen was excised and the edges sutured. About 1,000 c.c. of old blood was evacuated and the vagina was irrigated with warm boric acid solution. After five days, the patient was discharged well.

Case 2.—H. K., a girl, aged 12, was first seen May 11, 1931, complaining of low abdominal pain and inability to urinate, of one day's duration. She had never menstruated. Twenty-four hours previously, she had felt a swelling in the lower abdomen and was unable to urinate. One and one-half quarts of urine were drawn by catheter. Six hours prior to the present consultation she again found that she could not urinate.

Physical examination revealed a well developed girl who appeared much older than her age of twelve. Save for a bladder which reached to midway between the symphysis pubis and the umbilicus, the examination was apparently negative. Due to the age of the patient and her reluctance to be examined, rectally, the examination was unfortunately omitted at this time.

The cystoscope encountered an obstruction at

the vesical neck. In order to overcome it, it was necessary to pass straight sounds, following which the cystoscope could be made to enter the bladder; but in doing so, it was necessary to depress the ocular at an angle of 45 degrees. The bladder wall was found thickened and trabeculated, while the ureteral orifices appeared normal. There was a definite elongation of the urethra. The ureter catheters passed easily to both kidneys and disclosed considerable retention. The phenolsulphonophthalein concentration was good on both sides.

Flat roentgenograms and intravenous pyelography failed to show any abnormality.

From these findings, a tentative diagnosis was made of congenital malformation of the urethra. The urethra was dilated with straight sounds which apparently gave her great relief. However, from July 16th to September 1st, she had two attacks of retention requiring catheterization. It was following the last attack that a rectal examination was insisted upon and made, revealing a large, doughy, fluctuating mass in the vagina and cul-de-sac of Douglas. A careful inspection of the introitus disclosed an imperforate hymen, thus clinching the diagnosis of hematometra.

Operation, September 4, 1931.—Under ether narcosis the vulva was thoroughly prepared, as aspirating needle introduced and old blood obtained from the vagina. The entire hymen was excised and the edges sutured with interrupted catgut sutures. About 1,400 c.c. of old blood escaped following incision of hymen, and the vagina was then irrigated with warm iodine solution. After five days the patient was discharged from the hospital well.

Acute retention of urine, though relatively common in men, especially when associated with prostatism, is of considerable interest when found in a female patient because of its rarity. This is particularly true when the cause of the obstruction is an hematometra. The rarity of this condition is attested to by the paucity of cases reported in the literature. In the first case, the diagnosis was easily made at the first examination because of the presentation of all the classical symptoms of this condition. Failure to perform a rectal examination on the second patient was responsible for the delay in making the diagnosis at the time of the first examination.

In both cases the retention of urine was due to a compression of the urethra by the retained blood in the vagina, associated with an angulation of the urethra as a result of the forward pressure of the blood-filled uterus upon the posterior wall of the bladder.

REFERENCE

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RECORDED AND RESIDENT DEATH RATES IN NEW YORK STATE

By J. V. DE PORTE, Ph.D., ALBANY, N. Y.

Director, Division of Vital Statistics, New York State Department of Health.

V—MATERNAL MORTALITY, 1927-1930

MATERNAL mortality is now generally recognized as a major public health problem. Together with the realization of the great loss of life associated with the basic process of nature came also the disquieting discovery that the risk of death in childbirth, as shown by published figures, is apparently higher in this country than in most of the other civilized countries of the world. Here it is important to consider the fact that rates of mortality from puerperal, as well as other causes, may be compared only when the original data from which they are derived are essentially similar. This, however, is not always the case, mainly because of differences in procedures governing the selection of a primary cause when two or more are given on a death certificate. If the practice of one country is to give preference to a puerperal condition over other causes, while another follows an opposite practice, the maternal mortality of the first country may, because of this reason alone, appear higher than that of the second. As an excellent illustration of this point let us consider the mortality from puerperal septicemia in the two main divisions of the same American State—New York. The vital statistics for New York City are compiled by the City Department of Health; the vital statistics for the rest of the State by the State Department of Health—the two Departments employing different methods of statistical treatment of puerperal deaths. The U. S. Census Bureau re-edits the transcripts of death certificates which it receives from all states of the Registration Area, including, of course, the entire State of New York. In 1929 the New York City Department of Health recorded 117 deaths from puerperal septicemia; the corresponding figure for New York City is given by the Census Bureau as 226. In the same year the State Department of Health recorded 188 deaths from puerperal sepsis Upstate—the Census Bureau, 201 deaths. In other words, the mere change of statistical procedure increases the recorded mortality from puerperal sepsis by 93 per cent for New York City and 7 per cent for the rest of the State. A discussion of mortality from puerperal sepsis in New York City would tell one story if the figures were culled from the City reports and give a less favorable account if the Census figures were employed. If a variation of such magnitude may exist within the confines of a single state, one can readily imagine the degree of possible divergence when conditions in dif-

ferent countries are compared. No rigid conclusions, therefore, should be drawn from international comparisons without a thorough acquaintance with the statistical practice of each country.

Another important fact in connection with maternal mortality is its almost level trend. In the State of New York the average annual death rate in the five-year period 1915-1920 (excluding the epidemic year 1918) was 53.0 per 10,000 births (including stillbirths); in 1921-1925 the rate was 54.4, and 53.8 in 1926-1930. The absence of a downward trend is a condition that is not peculiar to this State. It is generally true for this and many other countries. For example, the annual report of the Registrar General of Scotland for 1930 states that "the mortality from this group of causes (puerperal) has shown no favorable change for many years past." In 1929 the Chief Medical Officer of England and Wales found it "disappointing to be unable to report any definite tendency towards the reduction of the maternal death rate, especially as all investigation indicates that it might and should be substantially reduced." Similarly, in 1929, in New Zealand, whose low general mortality and particularly the very favorable infant mortality place it in an enviable position among the civilized countries of the world, the Director-General of Health found "the reduction of deaths from these causes (puerperal) . . . a perplexing problem."

To sum up: (1) It has not yet been *proven* that the maternal mortality rate of the United States is higher than almost anywhere else in the world; (2) It is a fact that the maternal mortality rate has not shown a downward trend, but this is also true of many other countries.

A comparison of the puerperal death rates in the various subdivisions of the State of New York (outside of New York City) is free of the fallacy pointed out above since the editing of the death certificates for this entire area is done by the State Department of Health. There is, however, another source of possible statistical error, namely, the element of residence. In order to measure the risk of mortality from causes associated with childbirth, the actual number of these deaths must be related to the number of women subject to that risk—in other words, those who were in the puerperal state during the year. This number equals the sum of live and stillbirths, abortions, and miscarriages. Since abortions

and miscarriages are not reported, the denominator of the fraction is of necessity limited to the sum of live and stillbirths; the error due to the omission is, however, comparatively small. A large proportion of births and puerperal deaths occur in hospitals and are recorded in the places in which these hospitals are located. Many of the mothers are non-residents and for this reason the recorded rates often give a distorted picture of local conditions. A correction for residence eliminates this source of error.

Main Divisions of the State, exclusive of New York City. The recorded and resident maternal mortality rates of the State, exclusive of New York City, and of its urban and rural subdivisions in 1927-1930 are shown below:

	Recorded				Resident			
	1927	1928	1929	1930	1927	1928	1929	1930
New York State (exclusive of New York City)	60.5	62.5	58.4	57.1	60.5	62.5	58.4	57.1
Urban	69.3	72.8	68.5	64.5	61.3	64.3	61.7	56.6
Rural	37.6	33.8	31.9	36.7	59.0	59.0	52.1	58.1

The allocation of births and of maternal deaths practically equalizes the rural and urban mortality. In fact, in 1930 the resident rural rate was even higher than the corresponding urban rate by 3 per cent, while the recorded urban rate exceeded the recorded rural rate by 76 per cent.

It may be of interest to quote the actual numbers of recorded and resident births and deaths in one year—for example, 1930. The number of births recorded in the urban part of the State, exclusive of New York City, was 67,983; included in this total, however, were 6,662 births to mothers most of whom were residents of rural New York. On the other hand, the number of births recorded in rural New York was 25,648, considerably less than the resident total—33,531. The recorded urban birth rate was 19.1 per 1,000 population; the resident rate, 17.2. The corresponding rural rates were 12.4 and 16.3.

The number of women who died in the urban territory from causes associated with pregnancy was 455; of these, 100 were rural residents, making 355 as the total of deaths of residents of urban Upstate communities. The relation between the recorded and resident totals in rural New York was quite opposite to that of the urban territory, the number of residents, 199, being more than double the recorded total, 97.

Cities. In each of the four years, 1927-1930, the resident rates of maternal mortality were lower than the recorded figures in practically all cities and large villages, with the exception

of the group of smaller places—from 2,500 to 10,000 population.

Below are shown the rates in 1927-1930 of Buffalo and Rochester, and of the other urban places of the State grouped according to population:

	Recorded				Resident			
	1927	1928	1929	1930	1927	1928	1929	1930
Buffalo	71.4	71.6	73.2	63.2	65.4	64.9	67.3	53.2
Rochester	52.5	77.2	47.7	56.6	42.0	68.3	46.7	53.9
Places								
100,000-250,000	65.4	64.4	59.9	64.9	54.0	49.3	51.1	57.4
Places								
50,000-100,000.	67.0	66.6	69.9	48.6	64.0	59.3	67.4	41.6
Places								
25,000-50,000..	77.4	72.6	62.4	74.3	68.5	62.3	45.1	54.8
Places								
10,000-25,000..	78.7	83.3	84.6	70.5	59.6	65.5	57.5	48.7
Places								
2,500-10,000...	64.3	71.7	67.4	67.5	66.9	71.9	77.1	71.0

Rural Area of Counties. The resident maternal mortality rates of the rural areas of most of the counties were higher than the recorded figures. Each year there were several counties whose resident rates were lower; these, however, were definite exceptions since in no single instance was this favorable relationship between the rates sustained throughout the four-year period.

In considering the rates of maternal mortality computed on the basis of residence we must stress the fact that they represent a correction for the single factor of residence. Neither the recorded nor resident rates give a mathematically accurate measure of local mortality since the recorded rates pre-suppose that *all* deaths are chargeable against the place of their occurrence; the resident rates, that they all would have occurred if the mothers had been delivered in their permanent place of residence, *none* of the deaths being the result of local environment and treatment. Nevertheless, the two sets of rates have definite value, since they enable us to see the situation from two points of view: the recorded rates tell us what is happening in geographical areas; the resident rates, what is happening in groups of population regardless of temporary change of residence.

* * *

This completes the discussion of certain recorded and resident death rates in the State of New York. Tables of these rates for individual cities and counties are published in the annual reports of the State Department of Health. In response to numerous requests these tablets have been reprinted in separate form. Requests for copies, addressed to the Division of Vital Statistics, will be gladly complied with so long as the limited supply lasts.

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Annual meeting, Hotel Statler, Buffalo, N. Y., May 23-25, 1932

COMMITTEE ON LEGISLATION

The Journal goes to press at an inopportune time for reporting the activities of the Committee on Legislation. The Legislature is scheduled to adjourn on March 11, and its closing hours are likely to be crowded with business, and unexpected situations arise in regard to the passage of bills. However, the session may properly be

classed as quiet so far as medical legislation was concerned. The compulsory county health department bill does not seem to have been considered, and cult legislation was sidetracked. A summary of medical legislation during the winter session will be published in the Journal of April first.



MEDICAL PROGRESS



The Misinterpretation of Cecal Irritation as Gastric Disturbance.—In many cases of chronic appendicitis of the "masked" form, H. A. Stappert says that the true site of the pain is concealed by absence of tenderness over MacBurney's point, and by the presence of epigastric pain. He found so many patients insisting that their pain was over the stomach, in cases that gave evidence of being chronic appendicitis, that he kept a record for a year to determine the percentage of appendicitis patients who complain solely, or chiefly, of epigastric pain, and also, how many appendix cases refer their pain to the region of the cecum. In a total of 230 cases, 177 patients complained of epigastric pain; in 158 this was the only seat of pain, and in 19 it was the principal seat. Analyzing the 177, he found upon examination that 87 were cases of appendicitis, while 90 were due to other causes. Of the 87 cases, further subdivided, 46 were proved cases and 41 probable cases of appendicitis. Accordingly 26 per cent, or one-fourth, owed their pain to proved appendicitis. If probable appendicitis is included with the proved cases, the proportion becomes one-half instead of one-fourth who complained of epigastric pain alone as the result of appendicitis. Following up the second question, Stappert found that of 60 proved appendicitis cases, only 7 referred their pain to the region of the cecum. If the probable cases are also included, only 8 of 113 patients referred their appendix pain to this region. The reason for this is not hard to understand. It is the rule for acute cases of appendicitis running a stormy course to begin with epigastric pain; not until a few hours later does the pain become localized in the right lower quadrant. According to the view of surgeons and pathologists, this is the moment at which the parietal peritoneum is attacked by inflammation. If for any reason the inflammatory process comes to a halt before this, the pain remains in the epigastric region. There are far fewer cases that follow the severe course outlined in the class-room than there are cases that run a slower course or become stationary at some stage of the inflammatory process. For the diagnosis of appendicitis not one point, but an entire field, comes in question, with processes radiating to the epigastrium. The sensitivity lies chiefly in a line drawn from MacBurney's point to the epigastrium, passing to the right of the umbilicus.—*Münchener medizinische Wochenschrift*, January 8, 1932.

The So-Called Malignant Degeneration of Benign Tumors.—Mariano Cusani raises the question whether a malignant tumor appearing as a degeneration of the elements of a previously benign tumor is really such, or is rather a purely concomitant appearance of a malignant neoplasm that has arisen in a benign tumor in just the same way that it might develop at any other site, as for example on some cicatrix. Thus two different hypotheses may be assumed: (a) That the tumor of malignant nature comes to birth, through some homogeneous stimulus or other upon benign neoplastic tissue, and as such goes through its evolutive cycle independently of any influence from the benign tumor in which it arose, just as it might develop and live through its life's span in any other tissue. (b) That the benign tumor, or rather the elements constituting it, at some moment in their existence, undergo multiple degenerative processes, as may happen in any other type of degeneration, losing their character of benignity and acquiring multiplying and infiltrating characters of aimless, atypical and disorderly proliferation, giving place to a malignant blastoma. Neither of these hypotheses can withstand all criticism. The problem is one that lies at the very bottom of the etiology of tumors. It is a question of cell biochemistry, first and foremost. Not chiefly in its morphology, but in its vital processes does the malignant neoplastic cell reveal a profound and intimate alteration, modifying its attitude with regard to the organism. When we know how and why the malignant tumor originates, we shall also know how and why it can originate upon a benign tumor. When we are able to demonstrate that even in benign tumors the cells have a biochemical behavior different from that of normal cells, one which is in fact more nearly related to that of malignant neoplastic cells, we shall be justified in affirming that the benign tumor cells, even though they may seem benignant so far as their morphology goes, are not actually so, but are possessed of biochemical attributes that enable them under some circumstance or other to explode into their true form from one minute to another. In that case we shall be able to exclude the possibility of a benign tumor degenerating into a malignant one, and to affirm the other possibility as a fact, that the malignant tumor may develop upon the benign one as a simple concomitant event.—*Riforma medica*, December 21, 1931.

Etiology and Pathogenesis of Cardiac Infarcts, of Large Plaques of Sclerosis and of Adhesive Intraventricular Coagulations—There is generally a common pathogenesis, says J Paviot, writing in the *Journal de médecine de Lyon* of January 20, 1932, of infarcts of the interventricular septum or of the wall of the cardiac muscle, and the large sclerotic plaques which often, though not always, result from them—the plaques of myocarditis, interstitial, chronic or subacute—and this pathogenesis is also shared by adhesive coagulations of the ventricle, whether spontaneous or due to parietal endocarditis. All these lesions have a common basis in a condition of the blood that favors the production of thromboses of arteries or arterioles, or within the heart itself. Two types of cases argue for this: those in which the coronaries show a state of absolute integrity with no trace of atheroma, and those in which, although infarcts are present in the lesser or the greater circulation, associated with lesions of the cardiac muscle, no particle of fibrin has been able to mobilize and start from the ventricles. Such infarcts of the lung or kidney are wrongly attributed to embolisms, when the endothelial lining of the endocardium is intact upon the surface of sclerotic plaques on areas of myocarditis of the wall. The histologic study, moreover, of these lesions of infarctoid distribution in lung or kidney reveals only a slow inflammatory focus with arteries or arterioles blocked by blood coagulations which become organized by budding of the arterial wall, the tissue where obliteration has taken place itself tending to be overrun by new formed vessels. Judging from its association with myocardial lesions that are often of long standing, the etiology shows that ganglionic pulmonary tuberculosis, more or less heurled, is frequently the cause of the thrombosis. Besides tuberculosis, there are the other great infections which bear a causative relation, and for intracardiac coagulations can cers, even those not ulcerated, may at times be incriminated. In short, those diseases which are known to be most frequently the origin of intra arterial and intravenous coagulations are found also to give rise to these great myocardial lesions, while syphilis, on the other hand, certainly does have the effect of producing arteritis.

The Problem of Agranulocytosis—According to R Kosiner, the subject of agranulocytosis is of very great interest today, on account of its hitherto extremely unfavorable prognosis. This syndrome must be clearly distinguished from the septic infections from the sympathetic leucopenias and also from aleucemia, by its overwhelming predominance in

the female sex, and by the presence of ulcerated processes in the oral cavity, subicterus, frequently enlargement of liver and spleen, with absence of hemorrhagic diathesis, and with normal red blood picture and platelet count. The idea that agranulocytosis is a special form of sepsis is no longer tenable. There is a tendency, instead, to regard this peculiar blood picture as an essential disease developing on the basis of a constitutional predisposition, and to view it as the result of a myeloid increment or of hormonal influences, on account of its predilection almost exclusively for the female sex. Kosiner reports a case in a woman of 37, which terminated in complete recovery. On admission the leucocyte count was 300, with a normal red blood picture. The characteristic condition was present in the oral cavity, and the patient gave the impression of being gravely ill. She was given a blood transfusion, and two irradiations, first of the femurs and four days later, of the upper arms, in order to stimulate the bone marrow. The response was prompt, the leucocytes rising to 22,000 at the end of a month, then gradually falling until after four months more they were 7,600. This case was atypical in the fact of an initial thrombopenia, the platelet count being on admission only 9,300, and rising under treatment to 320,000. This suggested the presence of an injury affecting two systems. That this was not a case of hormonal thrombopenia dependent on the menstrual cycle was shown by a later normal platelet count in the premenstruum. The case is comparable nosologically to those reported by Zadek and others in which the condition began as agranulocytosis and ended as aleucemia with diminution of platelet count and a hemorrhagic tendency. We do not know the factors which determine whether one blood system or several shall be affected. The successes obtained by use of irradiation bring this question into the foreground—*Deutsche medizinische Wochenschrift*, January 22, 1932.

Treatment of Acute Lobar Pneumonia by Artificial Pneumothorax—During an investigation into lobar pneumonia J J Coghlan discovered that the induction of artificial pneumothorax favorably influenced the course of the disease. He reports in detail his observations in six cases thus treated. From this experience he concludes that the most obvious clinical result is that the induction of artificial pneumothorax initiates a series of events almost indistinguishable from the crisis which normally occurs in this disease. Thus control of the pneumonic process was at first only temporary, persisting merely as long as air remained in the pleural cavity. It was found that the absorptive capacity of the pleura in

this disease is abnormally high. By adequate refills, however, this return of the disease could be forestalled, and when the artificial pneumothorax control had been maintained for a sufficient length of time (about forty-eight hours) the pathological process was definitely brought to an end. The routine procedure suggested for the average case is as follows: (1) Preliminary medication one hour before induction with $\frac{1}{4}$ grain of morphine. (2) Thorough local anesthesia with novocaine down to and including the parietal pleura. (3) Thorough asepsis during induction. (4) A preliminary fill of 400 to 600 c.c. of air, run in very slowly during the negative phase of the pressure swing cycle, and with the needle clipped during the high positive phases. (5) A second fill twelve hours later of 300 to 500 c.c. of air. (6) If the pneumonic process is not completely controlled, a third fill of 100 to 150 c.c. of air may be given in another twelve or eighteen hours. (7) Simultaneous exhibition of a suitable diaphoretic and of Felton's serum in appropriate cases. (8) Owing to the very profuse perspiration induced by this treatment, the comfort of the patient is much enhanced by warm sponging and nursing between blankets. (9) In cases in which it is deemed inadvisable to provoke deferescence by crisis, and a gradual fall by lysis is aimed at, three fills of 100 to 150 c.c. at intervals of six hours might be given and further treatment guided by results. A striking feature of all the cases was the rapidity of onset of the artificial crisis; profuse perspiration set in almost as the pneumothorax needle was withdrawn, and cyanosis and dyspnea were relieved in from fifteen to thirty minutes at the most. A fall in temperature was well established in from two to three hours.—*The Lancet*, January 2, 1932, ccxxii, 5653.

Autovaccinotherapy in Asthmatic Syndromes.—Enrico Frola, writing in the *Riforma medica* of January 9, 1932, says that in bronchial asthma we have to distinguish a local bronchial condition and a general neurotic condition of the entire system. Each of these, the first, presents a constitutional and an acquired factor. The former is represented by a sensitive diathesis at the expense of the local localization, and the latter by a sensitive diathesis, due to the effect of or become situated upon the vegetative nervous inflammatory processes which may be animal, appendicitis, notarial or autogenous toxic processes in question. In the case of bronchial asthma is the epigastrium, upon the elimination or the in a line drawn from the organism toward vago-sympathetic, and upon the correction of the epigastrium. On the basis of these facts, January 12, 1932, look up the problem

of vaccino-therapy. He prepared autogenous vaccines from the sputa of 14 patients suffering with bronchial asthma or asthmatic bronchitis, using the total bacterial flora of the expectoration in each case. He gave first a concentration of 1,000 million germs and later a second one of twice that number. In 4 cases he observed complete cure, in 8 there was marked improvement, and in only 2 were the symptoms unaffected. Nearly all were inveterate cases that had been treated by all the current methods without success. The only contraindications are those met in aged persons with reference to the use of any kind of vaccine, if their blood circulation is poor. The first 2 or 3 injections cause a mild local reaction with a circumscribed erythematous zone, but scarcely any appreciable infiltration. The general reaction had little fever, but was characterized by a slight sense of malaise and headache. This disappeared after the third injection. The method can be recommended for use in any case where the Koch bacillus is not present in the sputum, or where there are no evolutive lesions of the respiratory apparatus.

The Accidents of the Male Climacteric.—Kenneth Walker claims that it is possible to talk of a male climacteric, though it is less noticeable and less well defined than that of women. In the majority of men, during the latter part of the fifth decade and the beginning of the sixth, signs of involution may be noted, upon which the testes exert a controlling influence. The disturbance of endocrine balance is gradual rather than sudden; the male is exempt from the violent flushings of heat, the palpitations and the tachycardia that reveal thyroid dysfunction in the female. There is in the male at this time a disposition to become fat. He may not become generally obese, but accumulates fat both within and on the walls of the abdomen. If the accumulation of fat is excessive, there may be circulatory embarrassment, shortness of breath after exertion and flatulent dyspepsia. Another result of this abdominal adiposity is a liability to develop herniæ. Not infrequently, a patient whose abdominal walls have suffered as a result of over-pressure and under-exercise will complain of pain that is relieved only by lying down. This trouble can be dealt with by the use of a light truss or a well-padded belt. Psychologically a progressively smaller part is played by the active forces in the life of the individual, while inhibitions prevail increasingly. The man who had reached the climacteric becomes less audacious and aggressive, and moves in the direction of conservatism, though there are notable exceptions to this general law. The endocrine readjustments of this period show

themselves, as a rule, in nothing more marked than emotional instability, though not infrequently these disturbances have a sexual character. Most important are the changes in the reproductive system, particularly those of the prostate. This organ increases in size up to the age of 30 and then, progressing less rapidly, reaches its maximum between 50 and 60. After this, in a healthy man, it shrinks steadily to perhaps half its maximum size. The testicle also is likely to suffer. It is during this period that hydroceles are most likely to develop. Microscopical examination invariably reveals patchy fibrosis, associated with changes in the tubules and ducts. The epididymis is likely to be affected by the development of multiple retention cysts. The seminal vesicles likewise show signs of degeneration, and vesicular concretions may form. Their chief importance lies in the fact that they may be mistaken for malignant nodules. The treatment of the male climacteric consists in dealing separately with the various disturbances to which it gives rise. Walker has observed no benefit from attempts to increase the supply of testicular hormone nor from other forms of endocrine therapy.—*British Medical Journal*, January 9, 1932, i, 3705.

The Clinical Management of Movements Occurring as a Leading Symptom Complex in the Neuropathy of Childhood.—The term neuropathy is used here, says Paul Karger, to mean the totality of abnormal responses to stimuli, in so far as they are not caused by demonstrable organic nerve lesions. Movement in the form of voluntary action is dependent on the development of the intellect. A backward child is helped by passive movements of the extremities to make his own efforts, and at length the joy of having overcome difficulty becomes an urge to further development. In addition the urge to imitate becomes a powerful stimulus. This urge may, however, become perverted, and lead to disturbing habits, affected behavior, awkward gait, grimaces, etc. Here we are at the borderline of the pathologic. A habit may become so fixed in a child that he cannot break it voluntarily. Therapy lies in bringing the child's movements again under the control of will. The rational treatment of tic is along this line. The child is asked to make voluntarily the objectionable movement that he cannot overcome. He finds himself unable to imitate it, and fails so signally that the mother recognizes the produced movement as not genuine. The lightning swiftness of a tic movement is impossible to imitate at will; it is associated with a permanent track that acts independently of the will. The longer the child's attention

can be kept upon the exercise of imitating the movements, the better is the prospect of cure. At first the exercises are very fatiguing, and the sign of fatigue, the rest from movement, has the contrary effect, of driving him to take refuge in his tic movements after the exercises. One who watches the child during the exercise is impressed with the concentrated tension of the entire body musculature, even of those parts not engaged in the movement. As tic is only a part symptom of a disturbance in the nervous system, the power gained to repress these movements radiates back to other regions of the system. On this fact rests the good general effect produced in a child by instruction in gymnastics. Children are taught, for example, to carry out a 4-4 rhythm with one hand, and at the same time a 3-4 rhythm with the other, and eventually to carry 3 rhythms at once. The capacity for concentration, which is the purpose of the exercise, has a far-reaching effect on the child's behavior.—*Deutsche medizinische Wochenschrift*, January 15, 1932.

A Case of Peripheral Facial Paralysis in a Healthy Carrier of Diphtheria Bacilli.—In the opinion of Chantriot, facial hemiplegia of diphtheritic origin is less rare than is generally supposed. With Ramond he believes that most paralyzes that are labelled "a frigore" are in reality due to infection, frequently with syphilis, sometimes with grip or other infection. Too little attention has been given to Loeffler's bacillus in this connection. The case reported is that of a boy of 14, with complete paralysis of the right side of his face. When a Wassermann reaction proved negative, a culture was taken from the tonsils, and was found positive for diphtheria. It was learned from the parents that the boy had had an attack of diphtheria two years before, treated with serotherapy, and also that since his recovery no culture had been taken until this time. Chantriot gave a series of 5 injections of anti-diphtheritic serum daily for 5 days, administering 30 c.c. each time. From the time of the second injection the patient began to improve, and the case ended in complete recovery. No other treatment was given. The case shows that while it would be a mistake to suppose that diphtheria toxin is responsible for the majority of paralyzes of the seventh cranial nerve, one should not, nevertheless, always think exclusively of syphilis as the probable cause. It also illustrates the importance of making systematic cultures from the tonsils in every case of paralysis of the seventh pair of cranial nerves, since it is evident that peripheral facial paralysis may be met with in a person who is apparently healthy and yet is a carrier of the Loeffler bacillus.—*Bulletin de l'Académie de Médecine*, December 29, 1931.



LEGAL



RIGHTS AND LIABILITIES IN CONNECTION WITH BODIES OF DECEASED PERSONS

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For many years it has been the settled law that only under unusual circumstances may the dead body of a human being be subjected to an autopsy. The Penal Law in its chapter entitled "Sepulture" imposes very harsh penalties for unlawful dissection of a human body, for removing or stealing dead bodies and the like.

The law authorizes specifically dissection of dead human bodies in four cases: First, when permitted under special statutes, such as the law relative to the manner in which medical schools may obtain cadavers; second, when a coroner's inquest is authorized by law; third, when certain relatives authorize dissection to ascertain the cause of death, and fourth, when a district attorney requires an exhumation in the discharge of his official duties. It is important to note that in the second and third classes of cases the statute expressly restricts the dissection in accordance with the particular inquiry. In other words, if an autopsy is authorized for a certain purpose, those who undertake to perform the autopsy should not perform any dissection beyond the usual autopsy called for under the circumstances.

The courts have long been reluctant to enlarge upon the strict interpretation of the law dealing with dead bodies. Some years ago an application was made under one of the sections of the Code of Civil Procedure to compel a "discovery and inspection" of the body of a deceased person. The action was one to recover damages for the death of the deceased, caused by the alleged negligence of the defendant in an automobile accident. It was the defendant who made the application. The contention was that the law expressly authorized an inspection "of any article or property" within the control of the other party to the action, and it should therefore be interpreted to include the case of the body of a dead person and to permit an autopsy. The court denied the application and reiterated the well established principle that the graves of the dead are regarded as sacred and are by the Penal Laws of the State protected against desecration. The court further ruled that even assuming the law authorized an order for the production and inspection of a buried human body, there clearly would be no authority to permit its dissection. The court in its opinion said:

"These sections of the Penal Law of the State were enacted in the interests of decency, and to

protect the sentiments of sorrowing relatives from outrage. This legislation is an expression and index of our civilization. The 'night encampment' of the dead has for centuries been deemed 'God's acre,' and 'hallowed ground,' and the remains of the dead have been permitted to be disturbed only for urgent and sufficient reasons regulated by statute. * * *

"The defendant asks for permission to 'dissect said body * * * and to examine the contents thereof by microscope, culture and observations,' and it is manifest from the allegations of the petition that nothing less would answer his purposes, or be of any value in arriving at the true cause of Mr. A's death.

"If the article to be inspected were a piece of machinery, instead of a human body, the court, under the section relied on, would not be warranted, we think, in making an order permitting the machinery to be taken apart, and a part of it carried away for the purposes of further examination. Much less could the court be justified in permitting an autopsy on a human body."

The first section of the same chapter of the Penal Law already referred to reads as follows:

"Sec. 2210. *Right to direct disposal of one's own body after death.* A person has the right to direct the manner in which his body shall be disposed of after death; and also to direct the manner in which any part of his body, which becomes separated therefrom during his lifetime, shall be disposed of; and the provisions of this article do not apply to any case where a person has given directions for the disposal of his body or any part thereof inconsistent with those provisions."

By said section it is made clear that a person is entitled in his lifetime to direct the disposition of his body. He may direct an autopsy, cremation and the like, or direct certain other details as to the manner of disposing of his remains. This section likewise has been strictly construed by the courts, for it has been decided that when a deceased person in his lifetime has given the right to another to perform an autopsy upon his body, that right must be asserted promptly if it is to be availed of. This point was decided in a very interesting recent case. In that case a decedent in his lifetime had carried a policy of insurance, one of the conditions of which was that the company should have the right and opportunity to exam-

me the body of the insured and to make an autopsy in case of claim thereunder, unless forbidden by law. The insured died by drowning, and notice and proofs of death were promptly provided the insurance company. Thirteen months thereafter the insurance company contesting the claim applied for an order directing exhumation and examination of the body. The application was denied, the court saying in part:

"The law throws around the bodies of deceased human beings a protection even in their graves. *The right of Christian sepulture includes the right to have one's remains respected in his or her last resting place.* Many circumstances arise from time to time necessitating a disturbance of the repose of the dead, but it must be some controlling public reason or superior private right which would induce the court to permit that to be done which from time immemorial has been considered abstractly as a work of desecration.

"In the absence of a strict legal right, only some rare emergency could move a court of equity to take a body from its grave and permit an autopsy, if there is reason to believe, as exists here that the conscience of the deceased, were he alive, and that the conscience of the surviving relatives, would be outraged thereby, and the sentiments and usages of the religious sect to which the deceased and his relatives belong should not be wholly disregarded.

"The dead are to rest where they have been laid unless reason of substance is brought forward for disturbing their repose.

"* * * The defendant was not at liberty to wait indefinitely or for any unreasonable length of time before making a demand for an autopsy upon the body of the deceased insured. The provision in the policy granting this right called for prompt action on the part of the insurer. It was an unreasonable delay on the part of the insurer to wait for over a year after the body of the insured had been interred, and no sufficient excuse appears for this delay.

"* * * The courts have repeatedly held that in cases of accidental death the insurer must make a demand within a reasonable time for an autopsy. The defendant was not at liberty to wait indefi-

nately or for any unreasonable length of time, although no time is specified within which the permission to examine may be availed of. Still, a due regard for the sentiments of the family and friends of the deceased, even public policy required as early and immediate exercise of the option to examine as was possible. Conditions in insurance policies as in all other contracts, should be construed strictly against those for whose benefit they were reserved.

"Section 2213 of the Penal Law of the State of New York provides for only four instances where the dissection of a human body is lawful. The case at bar does not fall within any of these four provisions. Neither can there be any power vested in the court to order an examination and dissection of this body under the provisions of section 324 of the Civil Practice Act, which gives our courts power to require discovery.

"Section 2210 of the Penal Law, however, seems to recognize the right of a person to direct the disposal of one's own body after death.

"So it is seriously questioned under the authorities above cited whether the court has power to grant the relief sought in this motion and if it has the power under the terms of the policy, it certainly should not be granted at this late day where it is extremely doubtful if an autopsy would reveal anything other than putrefaction."

It will be seen that the court in ruling as it did was acting upon the principles enunciated nearly forty years ago in a somewhat similar case as follows:

"When a body has once been buried, the law, having a proper respect for the dead a just regard for the sensibilities of the living and for the due preservation of the public health has jealously guarded the grave against ruthless intrusion. Exhumation has been tolerated only upon consent of the next of kin, for substantial reasons satisfactory to the family and which appealed to the finest instincts of their nature, or upon permission of the proper municipal authority, in extreme cases, to answer the imperative requirements of justice or some urgent public necessity which overruled the apparent impropriety and made the act legal."

COUNTERCLAIM, CLAIMING FAILURE TO DIAGNOSE ILLNESS

The doctor in this case, who specialized in general medicine was called to the home of a patient, an elderly man, who was found to be complaining of difficulty in breathing.

The doctor examined him and tentatively diagnosed the condition to be asthma and sinus

trouble. Codeine and other medicines were prescribed, and as the man's condition did not improve satisfactorily, in about ten days the doctor advised the patient to enter a hospital for observation and treatment. There numerous examinations were made of his condition, including blood

tests, urine tests and x-rays, and an asthma specialist and a nose and throat man were called into consultation. The diagnosis indicated a severe case of bronchial asthma, sinusitis of the left antrum and left ethmoid and intestinal toxæmia. After four weeks during which time these conditions had improved fairly well, the patient left the hospital and went to his country home where the doctor no longer saw him.

The doctor brought suit for his bill for professional services in the Supreme Court of the State of New York, and the patient appeared, by his attorneys, denying the value of the services and interposing a counterclaim to the effect that the doctor had failed to properly diagnose the illness

and thereby caused him damages for which affirmative judgment was demanded against the doctor. The doctor's counsel sought to obtain a bill of particulars as to the counterclaim, but none was ever provided by the patient's attorneys. An order was then obtained precluding the defendant from giving any evidence at the time of trial in respect to the particulars relating to the counterclaim.

When the case was reached for trial on the calendar no one appeared for the defendant, and on motion of the attorney for the doctor the counterclaim was dismissed. A judgment was obtained for the doctor's bill including interest and the costs of the action.

CLAIMED NEGLIGENCE WITH RESPECT TO BREAKING OF NEEDLE

An employee of a linseed oil factory while engaged at his work accidentally slipped and fell upon a piece of galvanized iron, gashing his wrist. He was taken immediately to a doctor for emergency treatment. The doctor examined the injury and found an incised wound of the inner and anterior surface of the right wrist and that one of the tendons was severed. There was profuse bleeding.

The doctor in his treatment of the wound decided that three or four sutures were necessary, and as he was drawing the needle through the skin for the last of said sutures the needle broke and about three-quarters of the needle remained embedded in the wrist. The doctor made an immediate attempt to remove the broken piece by probing, but as the patient seemed to become very faint from said probing, the doctor decided that to continue his search for the missing piece of needle would be more harmful than helpful, so he dressed the wound and left it partly opened. The wound healed without any evidence of infection in about two weeks, but the patient continued to return to the doctor for treatment complaining constantly of pain. The man apparently was a malingerer and was using the slight injury as a pretext to obtain a large amount of workmen's compensation.

Some weeks later an x-ray was taken and the needle was removed from the man's wrist.

When the man was examined for the purpose of determining the amount of workmen's

compensation he was entitled to, it was observed that the motion in his wrist was slightly restricted due to the injury itself rather than the presence of the needle in the wrist.

A suit was started some time later against the doctor in which it was claimed that due to his carelessness and incompetence in treating the patient, his suturing needle broke off and remained for a long period of time within the plaintiff's wrist and that due solely to the improper treatment on the part of the doctor the plaintiff was unable to use his said hand and wrist for a long period of time.

An answer was interposed on behalf of the doctor in which a special defense was set up that the plaintiff had received full compensation for all of his injuries under the Workmen's Compensation Act. The case remained dormant for a considerable period of time and a motion was made on behalf of the doctor to dismiss the complaint for lack of prosecution. The attorney for the plaintiff appeared in court to oppose the motion on the ground that his client had disappeared and requested the court that he be given an opportunity to locate his client and proceed with the trial of the case. The court directed the adjournment of the motion for one week to give the plaintiff's attorney the opportunity he desired. On the adjourned date no one appeared in behalf of the plaintiff and the court dismissed the case, finally terminating the matter in favor of the doctor without trial.



NEWS NOTES



PHYSICAL THERAPY COURSES

The Committee on Public Health and Medical Education, in cooperation with the Physical Therapy Committees in New York and Bronx Counties, arranged for a course on physical therapy in traumatic conditions for these two counties. Beginning February 9th, the following set of lectures was given at the New York Academy of Medicine, on successive Tuesday and Thursday afternoons:

February 9th: "Indications and Contraindications," Wm. V. Healey, M.D.

February 11th: "Uses and Technic of Superficial Heat Measures," Heinrich F. Wolf, M.D.

February 16th: "Uses and Technic of Diathermy," Wm. Bierman, M.D.

February 18th: "Uses and Technic of Massage and Therapeutic Exercise," Kristian G. Hansson, M.D.

February 23rd: "Electrodiagnosis, Galvanic and Low Frequency Currents," Richard Kovacs, M.D.

February 25th: "The Compensation Viewpoint," Herman L. Reis, M.D.

Following the lecture course, practical demonstrations of the work were held at the physical therapy departments of the following institutions: Beth Israel Hospital, Hospital for Joint Diseases, Hospital for the Ruptured and Crippled, Montefiore Hospital, Mount Sinai Hospital, Polyclinic Medical School and Hospital, Reconstruction Unit of Post-Graduate Hospital, Vanderbilt Clinic.

There was great interest shown, and the average attendance at the lectures was seventy. Participants were assigned to the clinics in groups of ten for two periods during two successive weeks of the course.

COMMITTEE ON LEGISLATION

BULLETIN No. 5

February 23, 1932.

Since the issuance of our last bulletin the following bills have been introduced:

Senate Int. No. 1083—Mr. Webb has introduced the osteopathic bill which Mr. Garnjost has been carrying in the Assembly.

Senate Int. No. 1140—Thayer; would require the state to pay \$100.00 toward expense of birth and caring for health and welfare of a child born in lawful wedlock, claim to be filed with the State Health Department. Referred to the Judiciary Committee. Mr. Thayer states in the bill that one of its objects is to remove in part, at least, the economic question as a cause of birth control.

Senate Int. No. 1169 (concurrent Assembly Int. No. 1305—Coughlin)—Mr. Evans introduces a new section to the Public Welfare Law, providing for the creation of a central registration bureau of hospital clinics in each public welfare district to promulgate rules for application by persons for treatment in hospital clinics. The bill was referred to the Health Committee.

Senate Int. No. 1217—Wicks; to amend the Public Health Law by providing state aid for installation and maintenance of local clinics for treatment of venereal diseases. A mimeographed

copy of this bill is enclosed. Please read it over and at once give us your opinion of its merit. *Remember* the legislature will adjourn on Friday, March 11th, and action will be rapid from now on.

Senate Int. No. 1218—Wicks; to amend the Public Health Law by providing public health nurses must have the qualifications prescribed by regulations of the Public Health Council. Referred to the Health Committee.

Senate Int. No. 1219—Wicks; to amend the Public Health Law relative to the approval of laboratory examinations by the health commissioner, including examiners of pathological specimens.

Assembly Int. No. 1271—Mr. Wallace adds a new section to the Penal Law, making it a felony to willfully or unjustifiably interfere with, injure, destroy or tamper with any horse, mule, dog or other domestic animal used for racing, breeding or competitive exhibition of skill. Referred to the Codes Committee. We are carefully watching this bill to make certain that it will not be confused with the anti-vivisection bill.

Assembly Int. No. 1477—Mr. Robinson adds a new section to the Lien Law giving hospitals lien

tests, urine tests and x-rays, and an asthma specialist and a nose and throat man were called into consultation. The diagnosis indicated a severe case of bronchial asthma, sinusitis of the left antrum and left ethmoid and intestinal toxæmia. After four weeks during which time these conditions had improved fairly well, the patient left the hospital and went to his country home where the doctor no longer saw him.

The doctor brought suit for his bill for professional services in the Supreme Court of the State of New York, and the patient appeared, by his attorneys, denying the value of the services and interposing a counterclaim to the effect that the doctor had failed to properly diagnose the illness

and thereby caused him damages for which affirmative judgment was demanded against the doctor. The doctor's counsel sought to obtain a bill of particulars as to the counterclaim, but none was ever provided by the patient's attorneys. An order was then obtained precluding the defendant from giving any evidence at the time of trial in respect to the particulars relating to the counterclaim.

When the case was reached for trial on the calendar no one appeared for the defendant, and on motion of the attorney for the doctor the counterclaim was dismissed. A judgment was obtained for the doctor's bill including interest and the costs of the action.

CLAIMED NEGLIGENCE WITH RESPECT TO BREAKING OF NEEDLE

An employee of a linseed oil factory while engaged at his work accidentally slipped and fell upon a piece of galvanized iron, gashing his wrist. He was taken immediately to a doctor for emergency treatment. The doctor examined the injury and found an incised wound of the inner and anterior surface of the right wrist and that one of the tendons was severed. There was profuse bleeding.

The doctor in his treatment of the wound decided that three or four sutures were necessary, and as he was drawing the needle through the skin for the last of said sutures the needle broke and about three-quarters of the needle remained embedded in the wrist. The doctor made an immediate attempt to remove the broken piece by probing, but as the patient seemed to become very faint from said probing, the doctor decided that to continue his search for the missing piece of needle would be more harmful than helpful, so he dressed the wound and left it partly opened. The wound healed without any evidence of infection in about two weeks, but the patient continued to return to the doctor for treatment complaining constantly of pain. The man apparently was a malingerer and was using the slight injury as a pretext to obtain a large amount of workmen's compensation.

Some weeks later an x-ray was taken and the needle was removed from the man's wrist.

When the man was examined for the purpose of determining the amount of workmen's

compensation he was entitled to, it was observed that the motion in his wrist was slightly restricted due to the injury itself rather than the presence of the needle in the wrist.

A suit was started some time later against the doctor in which it was claimed that due to his carelessness and incompetence in treating the patient, his suturing needle broke off and remained for a long period of time within the plaintiff's wrist and that due solely to the improper treatment on the part of the doctor the plaintiff was unable to use his said hand and wrist for a long period of time.

An answer was interposed on behalf of the doctor in which a special defense was set up that the plaintiff had received full compensation for all of his injuries under the Workmen's Compensation Act. The case remained dormant for a considerable period of time and a motion was made on behalf of the doctor to dismiss the complaint for lack of prosecution. The attorney for the plaintiff appeared in court to oppose the motion on the ground that his client had disappeared and requested the court that he be given an opportunity to locate his client and proceed with the trial of the case. The court directed the adjournment of the motion for one week to give the plaintiff's attorney the opportunity he desired. On the adjourned date no one appeared in behalf of the plaintiff and the court dismissed the case, finally terminating the matter in favor of the doctor without trial.



NEWS NOTES



PHYSICAL THERAPY COURSES

The Committee on Public Health and Medical Education, in cooperation with the Physical Therapy Committees in New York and Bronx Counties, arranged for a course on physical therapy in traumatic conditions for these two counties. Beginning February 9th, the following set of lectures was given at the New York Academy of Medicine, on successive Tuesday and Thursday afternoons:

February 9th: "Indications and Contraindications," Wm. V. Healey, M.D.

February 11th: "Uses and Technic of Superficial Heat Measures," Heinrich F. Wolf, M.D.

February 16th: "Uses and Technic of Diathermy," Wm. Bierman, M.D.

February 18th: "Uses and Technic of Massage and Therapeutic Exercise," Kristian G. Hansson, M.D.

February 23rd: "Electrodiagnosis, Galvanic and Low Frequency Currents," Richard Kovacs, M.D.

February 25th: "The Compensation Viewpoint," Herman L. Reis, M.D.

Following the lecture course, practical demonstrations of the work were held at the physical therapy departments of the following institutions: Beth Israel Hospital, Hospital for Joint Diseases, Hospital for the Ruptured and Crippled, Montefiore Hospital, Mount Sinai Hospital, Polyclinic Medical School and Hospital, Reconstruction Unit of Post-Graduate Hospital, Vanderbilt Clinic.

There was great interest shown, and the average attendance at the lectures was seventy. Participants were assigned to the clinics in groups of ten for two periods during two successive weeks of the course.

COMMITTEE ON LEGISLATION

BULLETIN No. 5

February 23, 1932.

Since the issuance of our last bulletin the following bills have been introduced:

Senate Int. No. 1083—Mr. Webb has introduced the osteopathic bill which Mr. Garnjost has been carrying in the Assembly.

Senate Int. No. 1140—Thayer; would require the state to pay \$100.00 toward expense of birth and caring for health and welfare of a child born in lawful wedlock, claim to be filed with the State Health Department. Referred to the Judiciary Committee. Mr. Thayer states in the bill that one of its objects is to remove in part, at least, the economic question as a cause of birth control.

Senate Int. No. 1169 (concurrent Assembly Int. No. 1305—Coughlin)—Mr. Evans introduces a new section to the Public Welfare Law, providing for the creation of a central registration bureau of hospital clinics in each public welfare district to promulgate rules for application by persons for treatment in hospital clinics. The bill was referred to the Health Committee.

Senate Int. No. 1217—Wicks; to amend the Public Health Law by providing state aid for installation and maintenance of local clinics for treatment of venereal diseases. A mimeographed

copy of this bill is enclosed. Please read it over and at once give us your opinion of its merit. Remember the legislature will adjourn on Friday, March 11th, and action will be rapid from now on.

Senate Int. No. 1218—Wicks; to amend the Public Health Law by providing public health nurses must have the qualifications prescribed by regulations of the Public Health Council. Referred to the Health Committee.

Senate Int. No. 1219—Wicks; to amend the Public Health Law relative to the approval of laboratory examinations by the health commissioner, including examiners of pathological specimens.

Assembly Int. No. 1271—Mr. Wallace adds a new section to the Penal Law, making it a felony to wilfully or unjustifiably interfere with, injure, destroy or tamper with any horse, mule, dog or other domestic animal used for racing, breeding or competitive exhibition of skill. Referred to the Codes Committee. We are carefully watching this bill to make certain that it will not be confused with the anti-vivisection bill.

Assembly Int. No. 1477—Mr. Robinson adds a new section to the Lien Law giving hospitals lien

on any rights of action, suits, claims, etc., of any person admitted to hospital on account of personal injuries as result of negligence of any other person or corporation. Referred to the Judiciary Committee. We have talked with Mr. Robinson about having the doctors included and he said that we could not do that without adding, also, the nurses, and he stated that he hoped by limiting the lien to the hospitals, he could avoid much of the opposition that was brought against the bill the last couple of years. He suggested that if this bill could be passed, he would be only too glad to sponsor an amendment next year, adding the doctors and nurses, and he felt that there was a strong possibility of being able to accomplish our desires if we took it piecemeal. His expression was: "A half-loaf is better than none." The bill is much better drawn than in previous years and a printed copy will be sent out as soon as available.

Mr. Dickey introduced in the Assembly a resolution asking for the creation of a committee to investigate the narcotic drug problem in the state. The committee is to be a joint legislative committee consisting of two members of the Senate and three of the Assembly. It carries a budget of \$25,000.00. It was introduced last evening and tabled, but will be brought out for final action later in the week.

ACTION ON BILLS

The Westall-Gamble bill (Senate Int. No. 256, Assembly Int. No. 473), providing that the county board of health shall have three instead of two physicians, has passed both houses and will now go to the Governor.

Senate Int. No. 159—Pitcher; Assembly Int. No. 440—Jenks; relative to the commitment of certain mentally defective persons to state institutions, has passed the Senate and reached third reading in the Assembly.

Senate Int. No. 415—Pitcher; Assembly Int. No. 591—Austin; relative to licensing of private institutions for care of persons with mental disorder, has passed the Senate.

Senate Int. No. 444—Hanley; Assembly Int. No. 526—Ostertag; permitting hospitals to have

a one hundred dollar rotating fund, has reached third reading in the Assembly.

Senate Int. No. 635—Wicks; Assembly Int. No. 793—Austin; relative to requirements to practice midwifery has reached third reading in both houses.

Senate Int. No. 636—Wicks; Assembly Int. No. 792—Austin; regarding the recording of births, has reached third reading in both houses.

We have been unofficially informed that the Vaughan anti-vivisection bill was killed in committee. We are not certain what effect this action will have on the Bernhardt bill, which is identically the same, but presume that it indicates that the latter bill will receive the same fate. Today, however, a companion to these two bills was introduced in the Senate by Mr. Wicks. The Wallace bill, Assembly Int. No. 1271, was introduced in the Senate by Mr. Thompson, Int. No. 1236.

This afternoon, at the request of the Committee on Public Education in the Assembly, Dr. Lawrence appeared before them for the purpose of answering questions they might have regarding the osteopathic bill. At the same time Dr. Downing appeared in behalf of the osteopaths. The committee asked a great many questions and seemed to be thoroughly impressed with the seriousness of giving osteopaths permission to use such a large group of drugs as they have requested the privilege of doing.

Both houses have finally voted to adjourn on March 11th and all committees in the Assembly will be discharged on Wednesday, March 2nd.

HEARINGS

Mr. Austin has announced a hearing for Tuesday, March 1st, at 9:45 A.M., on Assembly bill Int. No. 1097, which relates to the powers of the Public Health Council, and Assembly Int. No. 1190, which relates to the pollution of waters by industrial waste.

HARRY ARANOW,
JOHN J. BUETTNER,
MARSHALL CLINTON,
Committee on Legislation.

LETTER TO COUNTY SOCIETY LEGISLATIVE CHAIRMEN

February 23, 1932.

Dear Doctor:

Enclosed you will find the following bills:

Senate Int. No. 967—Thompson; to amend the Mental Hygiene Law in relation to the care and treatment of veterans of all wars at Kings Park Hospital. The object of this bill is to make available to the veterans of the Spanish-American

War facilities in the hospital built by the state for the veterans of the World War. This bill was not prepared by the Department of Hospitals and we are not sure that it has the support of the American Legion.

Senate Int. No. 994—Wicks; to amend the Public Health Law in relation to board of visitors. The object of this bill is to reconstruct the board

of visitors of the State Institute for the Study of Malignant Disease at Buffalo.

Senate Int. No. 995—Wicks; to amend the Public Health Law in relation to the pollution of waters. This bill is practically the same bill which has been before the legislature for several years. The object is to give the Commissioner of Health control over pollutions other than sewage, because some drinking waters are now being polluted by industrial waste.

Assembly Int. No. 1097—Austin; to amend the Public Health Law in relation to powers of Public Health Council. Let us urge that each one of you read this bill very, very carefully, and give us immediately your reaction. It doesn't require a great deal of explanation; you can see very readily what extensive powers this would give the Public Health Council and it is for you to decide and let us know whether you think this is a good

bill. Of course, this does not apply to Greater New York and it is being sent to the chairmen of those five county Societies largely as a matter of information.

Assembly Int. No. 1165—Mr. Cuvillier has re-introduced his cancer clinic bill of last year. In our opinion, it is very unwise that this proposed legislation should be enacted, and we feel that Mr. Cuvillier will find it necessary to do an enormous amount of educational work before he can expect the state to appropriate one million dollars for welfare work of this character.

Assembly Int. No. 1167—Mr. Cuvillier's omnibus bill of former years. It is identically the same bill as he has presented in previous years.

HARRY ARANOW,
JOHN J. BUETTNER,
MARSHALL CLINTON,
Committee on Legislation.

LETTER TO COUNTY SOCIETY LEGISLATIVE CHAIRMEN

February 26, 1932.

Dear Doctor:

Enclosed you will find the following bills:

Senate Int. No. 1140—Thayer, states that it is an effort to counteract birth control by granting a mother \$100.00 to be used to defer the expenses of the birth of a child. If from this amount the physician were sure to be paid, it might be well worth our supporting the bill.

Senate Int. No. 1169—Evans; to amend the Public Welfare Law in relation to a central bureau of hospital clinics. Let us urge that you study this bill carefully. It originated in New York City, where social welfare organizations have been developing a scheme along this line voluntarily. The Albany Council of Social Agencies, in conjunction with the Albany County Medical Society, has also been discussing a similar scheme. At a meeting of the legislative chairmen of the county Societies in the western section of the state, held in Buffalo on Thursday night, the president of the Erie County Society expressed himself as heartily in favor of the bill and thought that it is most essential that a

scheme of this kind be immediately inaugurated for Buffalo.

Senate Int. No. 1218—Wicks; to amend the Public Health Law so as to make it clear that nurses appointed to do public health work shall qualify in accordance with the regulations of the Public Health Council.

Senate Int. No. 1219—Wicks, to amend the Public Health Law so as to give the Public Health Council authority to approve pathologists employed in public health laboratories.

Assembly Int. No. 1477—Robinson. This is the lien bill that we have all been looking for. Read it over very carefully and give us immediately your reaction.

Remember that the legislature has voted to adjourn March 11th and Assembly committees will be discharged from further consideration of all bills on Wednesday, March 2nd.

HARRY ARANOW,
JOHN J. BUETTNER,
MARSHALL CLINTON,
Committee on Legislation.

SPECIAL BULLETIN

March 1, 1932.

As announced, the Assembly Public Health Committee held a hearing this morning on the Austin bill, Assembly Int. No. 1097, and there appeared in opposition to the bill the president,

treasurer and three other members of the Sanitary Officers' Association; the Commissioners of Health of Buffalo and Troy; Dr. Hambrook, representing Rensselaer County; and Dr. Lawrence for the Committee on Legislation.

Dr. Lawrence's principal objection was that the bill as drawn would give the Public Health Council too extensive powers. He also objected to the vagueness of the bill; for example, the phrase on page 2, line 12, "and other health officers"; and again in lines 14 and 15, "and other professional or technical positions in state and local public health service."

Commissioner Parran appeared in support of the bill. The committee was obliged to recess before the hearing was completed. During the recess, Commissioner Parran discussed the bill with its opponents and they finally proposed the following amendment:

Beginning on line 9, after the word "officers," strike out everything to the end of line 18 and substitute the following: "county, city and deputy health commissioners and other local health officers hereafter appointed, public health nurses, directors in charge of approved laboratories, medical superintendents of public tuberculosis sanatoria, operators of water purification plants and of sewage treatment works, and county dairy and milk inspectors. The Public Health Council is authorized to establish grades for such positions."

Let us have your reaction immediately to this amendment.

Word has been received that the Regents, at their meeting on Saturday, decided to approve the osteopathic bill. We confess we are amazed that they thought wise to take this action. We wish we might understand how the Regents can so readily reverse themselves, for in 1908, when the medical practice act was adopted recognizing osteopaths as well as physicians, it was explicitly stated that the practice of osteopathy had nothing to do with drugs. The Department of Education states that at least 150 of the osteopaths practicing today were among the group granted those privileges at that time. In the meanwhile these men have made no study of pharmacology and materia medica, all of which is known by the Regents and yet they are willing to say to the public that these 150 men can safely prescribe and administer anesthetics, narcotics, serums and vaccines.

HARRY ARANOW,
JOHN J. BUETTNER,
MARSHALL CLINTON,
Committee on Legislation.

SPECIAL BULLETIN—IMPORTANT !

March 2, 1932.

The Assembly committees yesterday took action upon all bills resting with them before they were discharged. The following action is reported on bills in which we have had an interest:

KILLED

Assembly Int. No. 975—Garnjost—Osteopathy bill.

Assembly Int. No. 949—Killgrew—Physiotherapy bill.

Assembly Int. No. 625—Moffat—Occupational diseases.

Assembly Int. No. 439—Hartshorn—Peddling eyeglasses.

Assembly Int. No. 261—Vaughan—Anti-vivisection bill.

Assembly Int. No. 598—Gimbrone—Habit-forming drugs.

Assembly Int. No. 684—Esquirol—Occupational diseases.

Assembly Int. No. 464—Coughlin—Occupational diseases.

Assembly Int. No. 511—Cuvillier—Automobilists injuring dogs.

Assembly Int. No. 584—Theodore—Free choice of physician or surgeon.

Assembly Int. No. 946—Heck—Tear gas.

Assembly Int. No. 1089—Austin—Board of visitors at Cancer Institute in Buffalo.

Assembly Int. No. 1097—Austin—Powers of Public Health Council.

Assembly Int. No. 1190—Austin—Contamination of water by industrial sewage.

Assembly Int. No. 1165—Cuvillier—Establishment of cancer clinics.

Assembly Int. No. 1166—Cuvillier—Health insurance.

Assembly Int. No. 1167—Cuvillier—(Same as Int. No. 1166).

Assembly Int. No. 1587—Austin—Venereal disease clinics.

Assembly Int. No. 1495—Austin—Qualifications of public health nurses.

REFERRED TO RULES COMMITTEE

Assembly Int. No. 591—Austin—Licensing of mental hygiene hospitals.

Assembly Int. No. 604—Otto—Compensation of health officers.

Assembly Int. No. 1496—Austin—Approval of pathologists for public health laboratories.

Note that the osteopathy and physiotherapy bills were killed in the Assembly. In the Senate, however, the osteopathy bill was reported out by Senator Webb after being instructed that the bill was approved by the Regents.

This morning on third reading the bill was amended by striking out the privilege to use

serums, vaccines and antitoxins. This bill, in spite of this amendment, is still vicious so far as the public is concerned, in that it would permit men with no training to administer and prescribe the powerful narcotics, anesthetics and antiseptics. The bill as amended must be printed before considered, which means that it will not come on to the calendar before Friday or Monday. In the meantime if each chairman will get in touch with his Senator and make it a point to show him how dangerous it would be for these inexperienced and untrained men to handle

opium, morphine and codeine, also to administer intravenously arsphenamine, tryparsamide, neo arsphenamine, and acriflavine, we feel that we can kill the bill in the Senate, which would be the final blow.

May we ask that you request influential patients to write similar letters to the Senators. *It is essential that this action be taken promptly.*

HARRY ARANOW

JOHN J. BUETTNER,

MARSHALL CLINTON

Committee on Legislation

DUTCHESS-PUTNAM COUNTY

A regular meeting of the Dutchess-Putnam Medical Society was held Wednesday, February 10, 1932, at the Nelson House, Poughkeepsie, N. Y. The meeting was called to order by the President, Dr. W. A. Krieger at 8:30 P. M.

Dr. Adolph G. G. DeSanctis, Pediatrician at the Post Graduate Hospital, New York City gave a paper on "Surgical Abdominal Conditions in Children" with lantern slide demonstration.

The discussion was opened by Dr. Card, followed by Drs. Sadler, Harrington, Thomson, Cotter and Breed.

Dr. Asher Lael Baker, of Beacon, was elected to membership.

The following transfers were received:

Dr. Ralph P. Folsom from New York County,

Dr. Henry C. Storrs from Rockland County,

Dr. Ernest S. Steblen from Broome County.

The President made the following committee appointments:

Public Health and Public Relations, Dr. J. A. Card, Chairman.

Legislative Committee, Dr. J. A. Card, Chairman.

Library Committee, Dr. A. L. Peckham, Chairman, Drs. G. E. Lane, J. N. Baldwin, C. T. Cadwell, and G. J. Jennings.

It was regularly voted that a committee be appointed to be called "The Committee of the Dutchess-Putnam Medical Society for the Control of Cancer." The President then appointed the following members: Dr. Helen Palliser, Chairman, Drs. J. E. Sadler and Josiah Coborn.

The Secretary was empowered to purchase twenty automobile emblems.

There were eulogies on the life of Dr. E. M. Burns by Drs. Borst, Sadler and Poucher, who were then appointed a committee to prepare a suitable memorial.

Dr. Card moved that the meeting adjourn out of respect to the late Dr. Burns.

Present: Drs. DeSanctis, Krieger, Borst, Marks, Sobel, Card, Peckham, Cadwell, Poucher, Sadler, Neighbors, Rogers, O'Brien, Dingman, Breed, Cotter, Conger, Gosse, Roberts, Herridon, Benson, Thomson, Harrington, Carpenter, Appel, Rivenburgh, Toomey, Richard, Boyce, Mahoney, Stoller, Simon, and Mr. Whitbeck (32).

H. P. CARPENTIER, Secretary

KINGS COUNTY

The regular stated meeting of the Medical Society of the County of Kings was held on Tuesday, February 16, 1932, in the MacNaughton Auditorium of the Society Building, 1313 Bedford Avenue, Brooklyn.

The following scientific program was presented:

1. Address "Nature of Viruses"

By Thomas M. Rivers, M.D., New York, N. Y., Member of the Rockefeller Institute.

2. Address "Gynecological Conditions and

-Their Treatment in Children and Adolescents"

By Robert T. Frank, M.D., Gynecologist, Mt. Sinai Hospital, New York City.

The activity of the Membership Committee under the chairmanship of Dr. Joseph Rosenthal is seen in the fact that, at the February meeting, seventeen new members were added to our list and thirty-two proposals for membership were presented.

The membership committee has been busy dur-

DOCTOR BILLS

The doctor's side of medical economics is well set forth in the following editorial from the *New York Times* of February 23rd:

"The doctor has only one commodity to sell—his time, valuable because of his brains, training and experience. Unlike the manufacturer, he cannot go into mass production of his goods. Training in college, medical school and hospital, and the slow process of building up a practice fill the years until he is 38 or 40. In the next fifteen or twenty years—for the average life of a doctor is 60 years—he must provide for old age and his family if he is ever to do it. He has endless duties besides seeing patients. He must sit on various committees, be active in medical social service, go to distant cities to make addresses, attend medical meetings and keep up with modern medical literature, be present at luncheon or dinner conferences. He is often teaching fifteen or twenty hours a week. He must make

his living in the few hours a day that are free from outside activities.

"The very fact that the public expects full knowledge and successful treatment from any doctor who is called in is a high compliment to the profession. The patient who complains that three or four doctors were needed before one was found to make a correct diagnosis ignores the time element. Perhaps the first doctor at the later date would have been quite as accurate in interpreting symptoms. The scope of medicine and surgery has so greatly increased in recent years that a diagnosis is no longer a matter of looking at a tongue and taking a pulse. Much unwarranted criticism of physicians may be laid to the fact that each man's health is to himself 'so emotional and personal an affair' that he can scarcely judge his doctor with disinterested intelligence. A throbbing earache will warp the soundest judgment."

BRICKS THAT FLOAT

The *New York Herald Tribune* of January 17, has an editorial discussing a new kind of building brick as follows:

"When walls were three or four feet thick no heat problem arose. Conductivity of winter heat from within outward or of summer heat from outside inward was slow anyway through the thick adobe walls with which building began. As the mechanical side of building has improved and walls have grown thinner, undesired losses or gains of heat have grown more serious. It happens that the best heat insulator ordinarily available is air. That is why a wall of reasonably porous brick or wood is a better heat insulator

than one of solid stone. It is the air in the pores that does the insulating. New materials of the type displayed by Dr. Burgess differ from older ones in two ways. They have more air in their pores, which is why these bricks float in water, and these pores are not connected with one another so that air can seep entirely through them. Air entrapped in the pores inside these floating bricks is held immovably. Heat traverses such materials only very slowly, so that new houses in which such bricks are used not only will be lighter than present ones but will mark another step toward the threefold insulation against heat, light and intrusion which is a house's job."

THE CHIROPRACTIC CONVENTION

The Fifth Annual convention of the American Bureau of Chiropractic was held in the Hotel Pennsylvania, New York City, closing on January 24. The *New York Herald Tribune* of January 25, quoted one speaker as saying:

"For chiropractic to even start to live we must get the news of our work in the papers. There is no way of getting to the people except through the newspapers and the radio. Today syndicated articles on medicine are printed from coast to coast. If chiropractic could put men to work

writing for every newspaper in the country, then you wouldn't have to worry where your next patient was coming from."

A prominent chiropractor said: "The chiropractors cannot influence the Legislature to amend the medical practices act until they become more numerous. We are outnumbered thirty to one by the medical doctors. You can't go to your legislator with that weak strength and hope to have him listen to you. His job depends on votes."



BOOK REVIEWS



THE CARDIAC CYCLE By HARRINGTON SAINSBURY
OBE MD Octavo of 79 pages, illustrated New
York, William Wood and Company, 1931 Cloth, \$1 75

This small volume has been written to present some theories, which the author holds, on the effect of the cardiac cycle on the circulation. The views expressed are unorthodox and no experimental evidence is brought forward to support them. Despite the fact that the changes which are found can be better explained by other means, some points which are raised are of interest.

J HAMILTON CRAWFORD

DEMONSTRATIONS OF PHYSICAL SIGNS IN CLINICAL SURGERY By HAMILTON BAILEY, FRCS Third edition Octavo of 277 pages, illustrated New York, William Wood and Company, 1931 Cloth, \$6 50

The ability successfully to use our five senses in clinical diagnosis has been somewhat dulled by the reliance placed on data supplied by the chemical and X-Ray laboratories.

The textbook now being reviewed is excellently suited to save us from this decadence.

A wealth of physical signs and their consideration as well as methods of physical examination suitable to surgical conditions have been described and systematized in this volume. The illustrations are numerous and are well executed. This volume should be well thumbed by both surgeon and internist.

Geo Webb

COLLECTED PAPERS OF THE MAYO CLINIC AND THE MAYO FOUNDATION Edited by Mrs H M MELLISH-WILSON, RICHARD M HEWITT, BA, MA, and MILDRED A FELKER, BS Volume XXII, 1930 Octavo of 1125 pages, illustrated Philadelphia and London, W B Saunders Company, 1931 Cloth, \$13 00

As mentioned in the foreword of this volume there were 482 papers issued from the Clinic in 1930. Of these 85 are reprinted in full in this volume, 30 are abridged, 55 are abstracted and 312 are mentioned by title only.

Among the articles reprinted in full there are many of general interest dealing with surgery of the biliary tract, the colon including the neuro-surgical approach to Hirschsprung's disease, the G U system and gynecology.

Being representative of an accepted institution of learning this volume is too well known to need any special recommendation.

Geo Webb

THE CAUSATION OF CHRONIC GASTRO DUODENAL ULCERS A New Theory By J JACQUES SPIRA MRCS L.R.C.P. Octavo of 78 pages New York, Oxford University Press, 1931 Cloth, \$2 50 (Oxford Medical Publications)

This small pamphlet of 75 pages is devoted to a presentation of a theory of the causation of gastric and duodenal ulcer.

The argument is best stated in an introduction by Humphrey Rolleston "fat when introduced into the stomach regularly causes regurgitation of the duodenal contents including bile into the stomach, and bile salts, when mixed with the acid gastric contents damage the mucous membrane of the stomach. Evidence in favor of the accuracy of these various events is provided by reference to the work of others and attention

is drawn to the analogous acute damage effected in the pancreas when bile passes into its ducts. Fat inhibits gastric movements, delays digestion and though valuable from its continued vitamins is necessary in small quantities only."

In short, chronic peptic ulcer of the stomach and duodenum is caused by eating too much fat. How the author would account for the enormous increase in the number of cases of gastro duodenal ulceration in the fat-starved Europe of the war we do not ask.

J E J

A TEXTBOOK OF MEDICAL DISEASES FOR NURSES INCLUDING NURSING CARE By ARTHUR A STEVENS, A.M., M.D., and FLORENCE ANNA AMBLER, B.S., R.N. Octavo of 503 pages illustrated Philadelphia and London, W B Saunders Company, 1931 Cloth, \$2 75

In their preface to this volume the authors state "The scope of the book is complete in that it deals with the various diseases—their etiology, pathology, symptoms, diagnosis, complications, prognosis and treatment—and, in addition, their nursing care." A perusal of the book soon reveals that the authors have not overstated the case for nearly all the clinical entities that man is heir to, from measles to kala azar, are discussed in more or less detail. Following the chapters devoted to the commoner maladies the authors present an outline of the essentials of the nursing care of patients who may be suffering from the disease under discussion.

An appendix contains a description of such procedures as hypodermoclysis, Murphy drip, alcohol sponge, etc., with a list of the necessary paraphernalia and a word or two concerning the purpose of the procedure.

The reviewer feels that this splendid volume is a little beyond the comprehension of the average nurse, say for the strictly nursing portions. It might be perused with greater profit by medical students and practitioners because of its academic and practical value.

FRANK E MALLOW

THE ANATOMY OF THE NERVOUS SYSTEM from the Standpoint of Development and Function By STEPHEN WALTER RANSON, M.D., PhD Fourth edition Quarto of 478 pages, illustrated Philadelphia and London, W B Saunders Company, 1931 Cloth, \$6 50

This book, in its fourth edition, continues to maintain its well established primal position in the teaching field of neurology. The reviewer considers it to be the outstanding work on the anatomy of the nervous system. It is a marvel of clarity and simplicity. To the beginner a work of this character is of great value, stressing fundamentals, and avoiding purposefully all confusing details. Too often the subject of neurology (with an emphasis on neuroanatomy) is rendered unnecessarily complex and mysterious whereas because of the almost perfect constancy of its response, its presentation should be simple.

The book is profusely illustrated. These illustrations (341) all carefully selected, being the result of years of teaching experience by a master in this field. Dr Ranson is not only a careful scientific investigator, but an excellent teacher whose enthusiasm is communicated to the pages of his book, instilling vigor into what is often a very dry, abstract subject. It is needless to add that this book is recommended to every student of the anatomy of the nervous system.

HAROLD R. MERWARTH



OUR NEIGHBORS



COST OF MEDICAL CARE IN TENNESSEE

The February number of the Journal of the Tennessee State Medical Association has an editorial discussion on the literature sent out by the National Committee on the Cost of Medical Care, and points out some of the misunderstandings that arise from a study of the report. The editorial says:

"Figures are set up to show that a fairly large percentage of people in a certain community did not receive medical care in a certain period of time. These statements of fact are interpreted to mean that the machinery, or mechanism, by which medical services are delivered to people is at fault. Vital facts pertaining to the whole matter are left completely out of the picture. For example, the report does not show that services were sought and not obtainable. The report shows simply that services were not delivered. They leave out of consideration the fact that a fairly large number of people will not avail themselves of free medical and hospital services when available, nor do they take into account the fact that a fair number of people regard it as a sin to have a doctor at all.

"Another example of the type of thinking: An old estimate of the value of human life arrived at by some sort of statistical analysis is set up as an actual value of human life in the United States. These values are placed in round numbers. According to figures each human is worth \$10,000 and the entire human population in the United States is worth \$1,500,000,000,000.00. The human population includes criminals, the insane, decrepids, in fact, all the people who are a burden to society and not an economic asset at all. No one can dispute this valuation, even though it is many times the value of all other assets combined (placed by experts at \$329,000,000,000). I would not dispute the value of it were it three times the amount stated, because from a personal standpoint there are human values that I rate above all of it, even though their economic worth to me is nothing at all. So to use such arbitrary values as a basis for justifying expenditures is utterly ridiculous.

"We lose sight of the fact that people have sacrificed lives which they themselves would value highly to obtain the thing we call liberty, the value or price of which no one can fix.

"Another example is that one week per year is lost from work on account of illness and the value of this time is set up as a loss to humanity. The fact that there are seven millions of unemployed people ready to take the jobs of those who are

disabled is lost sight of. The disability of one will be the good fortune of another, so the public as a whole does not suffer a loss at all. One individual loses, another individual gains and the work is done.

"All such statistical analyses disregard the most vital and fundamental facts pertaining to human nature, namely, the psychology of humans. The human has ambitions, hopes, desires, prejudices, likes and dislikes, etc., which other animals do not possess. No one can place a value on each of these attributes, still these very attributes make human values.

"The man with a passion for drink is not governed by a statistical analysis dealing with the harmful influence of drink. If the passion follows other lines, figures do not have material influence. If one throws emotions and sentiments to the winds there are many things that have a value which would cease to have a value, so such valuations are nonsense to start with.

"In this report a direct criticism of the medical profession is skillfully avoided, though it is insisted that the machinery by which medical service is delivered is not what it ought to be.

"We don't suppose that anybody would insist that our facilities for medical service are just what they might be, nor can it be insisted that any other human organization in existence is perfect. It can be successfully maintained that in the last fifty years the system of medical service has given a good account of itself. Human misery has been diminished. Human life has been prolonged and some diseases have almost disappeared. All these things have happened under the very faulty system now in vogue, and even before vast sums of money were appropriated for investigations, endowments, etc.

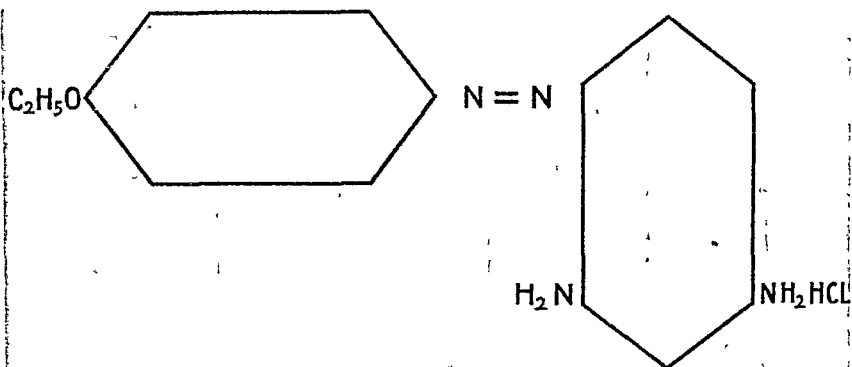
"The general public may read these reports and be misguided by them into attempting to bring about radical changes in our whole system of government, medical service included.

"We must bear in mind that there are people of intelligence now living who insist that religion is all wrong. Others insist that our entire governmental system is wrong and most of these critics are willing to set themselves up as authorities, or dictators, provided they are well financed while engaged in the activity.

"In the Constitution of the United States emphasis was placed on the 'pursuit of happiness' by the individual. A government was set up for the purpose of guaranteeing to the individual the

(Continued from page 366—adv. xii)

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THOUGHTS

ON THE PRESCRIBING OF DIGITALIS NO. 1

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- 1 International Unit = 2 grains U.S.P. Digitalis Powder
- 1 c.c. Tincture = 2 grains U.S.P. Digitalis Powder
- 1 International Unit Capsule = 2 grains U.S.P. Digitalis Powder
- ½ International Unit Tablet = 1 grain U.S.P. Digitalis Powder

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(Continued from page 364)

high privilege of pursuing happiness in his own way. The pursuit of happiness has no economic value that one can define, though it is a mighty driving force. One man cannot define for another what happiness is, though there are those who would define it and then put all others in the pursuit of the thing they have so defined. This, of course, cannot be done, but an awful tragedy can be brought about in an attempt to do it.

"Bad thinking is a dangerous thing to follow, no difference who does it."

COST OF "WISCONSIN MEDICAL JOURNAL"

The *Wisconsin Medical Journal* for February contains a report of the managing editor of the Journal, in which he says:

"A financial statement for the calendar year is attached as Addendum B. It is to be noted that the Journal loss for the year was less than \$350 which has been covered by appropriation from State Society funds. So long as the Journal continues to maintain its high standards for advertising, it seems probable that it will continue to incur loss during the current period of economic stress. This might be avoided by reducing the page content but the Board does not recommend this procedure. Over a period of the last six years the Journal has been published without cost to the Society, a record that is equalled in but one or two other states. Even with the added appropriation for improving the Journal as recommended by the Editorial Board, the costs of publication to the membership will still be under that in practically all states publishing like journals."

The editor continues in an addendum:

"The Journal, while owned wholly by the Society, maintains a separate set of books and its own financial set-up that costs of publication may be known at all times, not possible without such segregation.

"The Journal thus pays its share of the rent, of the salary of the Secretary-Managing Editor, postage, supplies, and for its own bookkeeping and annual audits.

"The present report is for the calendar year 1931.

"Income:

"Advertising (December estimated) . . .	\$9,157.09
"Subscription	100.55
"Miscellaneous	59.00
"Interest	45.00
"Publishing of Proceedings	225.00

"\$9,586.64"

(Continued on page 367—adv. xiii)

(Continued from page 366—adv. xii)

"Expenses:

"Salaries (J. G. Crownhart, \$1,200; John Huston, \$600 per year, and miscellaneous)	\$1,740.00
"Printing	6,585.15
"Mailing	453.59
"Cuts	414.00
"Rent	300.00
"Miscellaneous	163.26
"Supplies	20.90
"Sub. to other Journals for Med. Ed.	21.30
"Discounts allowed	25.80
"Depreciation of equipment	9.80
"Collection expense	14.50
"Accounting and legal	235.00

"\$9,983.30

"Appropriation from State Medical Society	\$1,000.00
"Operating loss, 1931	621.66

"\$ 378.34"

THE INDIGENT SICK IN WISCONSIN

A system of caring for the indigent sick through the County Medical Society has been tried in several states, especially Iowa. A description of a year's experience of the Polk County Medical Society, Wisconsin, is contained in the February issue of the *Wisconsin Medical Journal*, written by Dr. G. B. Larsen, Secretary of the Polk County Society, as follows:

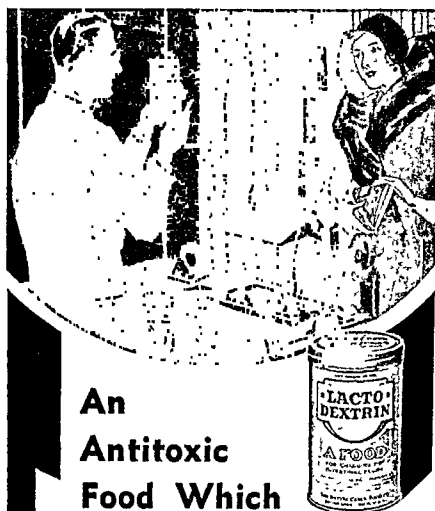
"On November first, 1931, the Polk County Medical Society concluded one year's operation under the contract system of caring for the indigent sick. We were well satisfied with the system and have no regrets. It was a worthwhile experiment.

"Prior to the adoption of the contract system in Polk County, the members of the Society were wrangling constantly with the poor relief authorities to secure authorization to care for an indigent patient. Oftentimes after procuring authorization it was very difficult to secure payment for services rendered, and if, eventually, payment were obtained, the bill was cut without thought of the services rendered.

"As a group, we have always 'bucked' every type of poor relief advanced by the laity without offering any constructive alternative. By chance we read of the 'Iowa Plan' in the *American Medical Association Bulletin* and from the material received from the Iowa State Medical Society we developed, with the aid of the legal counsel of the State Medical Society of Wisconsin, the contract which appeared in the 1931 June issue of the *Wisconsin Medical Journal*.

"We offered to care for the indigent sick in Polk County for one year for the sum of \$2,500 (the population of the county is 26,000). We de-

(Continued on page 368—adv. xiv)



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Where there is an existing putrefaction, the obvious method of changing the flora is to change the dietary habits of the patient and supply those foods upon which the normal *B. acidophilus* is known to thrive.

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Send me, without obligation, literature and trial tin of Lacto-Dextrin.

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Address

(Continued from page 367—adv. xiii)

terminated this figure in two ways: first, by taking the total amount paid for medical and surgical services during the previous year and adding to that the amounts cut from reasonable fees and disallowed bills, and second, we bartered for the highest possible figure we could secure from the committee, having in mind the type of service we were anxious to render to the indigent.

"We agreed to render medical and surgical care (obstetrics excluded) for all indigent patients sent to us by the members of the county committee. The designation of county patients was to be made by the poor relief authorities. We were protected on our major surgical cases with a clause in our contract which made the expense of hospitalization fall upon the county. This acted as a check to prevent the poor relief authorities from bringing unnecessary surgery to the members of the Society. Contrary to the expectations of some members of the Society, the poor relief committee did not ask us to render services to patients that were not worthy of charity, and patients were not urged to take advantage of this free medical service. We found the committee to be very cooperative and in many cases attempted to prevent pauperizing the people by securing some compensation for our services from the patients.

"When the contract was put into effect a schedule of prices was agreed upon by the members of the Society and all bills mailed to the Secretary conformed to the prices agreed upon in the schedule. Bills for services rendered were mailed to the Secretary immediately after the case was dismissed. At the conclusion of the contract the bills for each individual member were totaled and then a grand total of all bills was taken. This final total amounted to \$6,300. The difference (\$3,800) is evidence enough that the indigent sick were cared for well. The expenses of running the Society for the year, the members' dues for the coming year, the secretary's salary and a balance for the coming year were deducted from the original sum received. The balance remaining to be divided among the members allowed a payment of 30.5% of their bills according to the predetermined fee schedule. This was pro-rated according to the volume of work done.

"The result was that we did this work at a price far below a reasonable fee. It was an experiment to solve the question of caring for the poor and, as such, was a success. An attempt to secure a renewal of the contract with the new poor relief group with which we made the contract was discarded by the county board and a different type of county relief instituted. We

(Continued on page 369—adv. xv)

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(Continued from page 368—adv. xiv)

offered a contract for the next year at \$4,500 and later reduced the figure to \$4,000. The poor relief committee refused to go higher than \$3,500 and the members of the Society decided that they could not work for that amount.

"We have been able (through this fund) to develop a constructive public health program. The most practical accomplishment of the public health plan was a county-wide diphtheria immunization program, in which approximately 2,500 children were immunized. The Society has developed a weekly health column and secures space in practically all papers in the county. This was made possible by entertaining the editors at Society expense and discussing our problems. The school clerks, women's organizations and other lay groups have been circularized with health information by direct letters. In short, the laity has come to look upon the Polk County Medical Society as a source of medical information. It would have been impossible to have secured funds for this work by assessment of members, as assessments have a tendency to disrupt any organization rather than uniting it into a whole.

"This fund has united us into a more concrete body ready to meet oncoming problems of organized medicine. There is nothing today that is so evident in the medical profession as the lack of

organization among the county medical societies. The county societies should be so well organized that, at the command of the leaders of the State Society, we would move as a body.

"The Polk County Medical Society recommends the contract system as a means toward that unity."

BUDGET OF WISCONSIN STATE SOCIETY

The 1932 budget of the State Medical Society of Wisconsin is discussed in detail in the *Wisconsin Medical Journal* for February, describing the action of the Council as follows:

"1. Rent. The Secretary reported he had been able to secure a reduction from \$1,020 to \$840.

"2. Supplies, including stationery, postage, miscellaneous printing, telephone, telegraph, office equipment and miscellaneous purchases. The Secretary reported that this cost \$2,900 in 1931 but that \$2,400 was considered sufficient for 1932.

"3. Press Service, furnishing over 300 papers with a weekly service. The Secretary reported that \$2,750 had been budgeted for 1931 of which but \$2,462.88 had been used. The Committee suggested \$2,500. The Council voted \$2,200.

"4. Travel of Secretary and Assistant. Cost in 1931 was \$675. The Committee recommended \$600. (Continued on page 370—adv. xvi)

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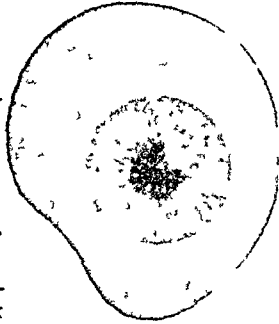
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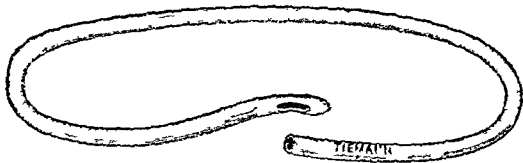
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(Continued from page 369—adv. xv)

"5. Editorial Board. This item was budgeted at \$2,500 for 1931 of which \$1,000 was used. \$1,500 was voted.

"6. Annual Meeting. \$1,831.01 used in 1931. \$1,800 suggested for 1932.

"7. Committee on Public Policy. 1931, a legislative year, expenses \$2,124.08. Committee recommends \$500.

"8. Hygeia, 275 subscriptions. Council approved continuation of \$500 for this item at September meeting.

"9. Delegates to A.M.A. Rail and Pullman fare only. \$245.01 used in 1931. Committee recommended \$240 for 1932.

"10. Secretaries' Conference. Held in April, 1931, at expense of \$819.71. To be held in connection with Annual Meeting in 1932. Committee recommends \$300.

"11. Legal advice and opinions. Expenses in 1931 were \$697.75. Recommended for 1932 is \$600.

"12. Committee and Council meetings. Expenses in 1931 were \$262.62. Recommended for 1932 is \$400.

"13. Committee on Cancer. Expenses in 1931 were \$500. No appropriation needed in 1932.

"14. Foundation Fund. Appropriation in 1931 was \$600 of which \$225 was used. Recommended for completion of work in 1932 is \$250.

"15. Special Committee to Study Distribution of Medical Services (authorized by House of Delegates).

"16. Revision of model constitution and by-laws for component county societies, \$100.

"17. Treasurer, Honorarium, \$300. This honorarium goes to the accountant who handles the work of the Treasurer. Same amount as in 1931.

"18. Miss Florence Ripley and Miss Elleanor Beck, assistants in the Secretary's office. Presently receiving \$1,680 each. Secretary and Committee recommends \$1,700 each.

"19. Miss Ruth Buellesbach, assistant to the Secretary. Under contract for 1932 at same amount as 1931—\$2,100.

"20. Mr. J. G. Crownhart, Secretary. For the years 1930 and 1931 Mr. Crownhart has received \$6,800 from the general funds of the Society and \$1,200 from the Journal, totaling \$8,000 a year. Council votes to continue salary for 1932 at same figure."

These items were adopted by the Council.

MEDICAL EXAMINERS IN COLORADO

Colorado Medicine for February contains the proceedings of the Colorado Board of Medical Examiners, with the following explanatory note:

"The Colorado State Board of Medical Ex-

(Continued on page 371—adv. xvii)

(Continued from page 370—adv xvi)

aminers has kindly offered to supply *Colorado Medicine* with a digest of such of its quarterly proceedings as are suitable for publicity, and we are pleased to present herewith the digest of the first 1932 meeting

"The Board of Medical Examiners met on January 5 and 6 and considered nine applications for licenses to practice medicine, eight applications for licenses to practice chiropractic, eight complaints for the revocation of licenses of chiropractors, and one complaint for revocation of the license of a doctor of medicine

"All of the applications for licenses to practice medicine or chiropractic were granted. Two of the medical applications were for reinstatement after revocation. All but one of the medical applicants had previously been licensed in other states and were licensed in Colorado on credentials

"Of the eight complaints before the board against chiropractors, the Board had time to take evidence in only five cases. All of these resulted in revocation of license. In four of the five cases the chiropractors had been using electric therapy in various forms, in the other case the chiropractor had been injecting an autogenous serum which he prepared from the blood of the patient, another autogenous preparation made from the urine of the patient, called the 'autobiochemic treatment,' and had been treating cancers with Koch's Cancer Cure

"The chiropractor last mentioned testified that he was assisted in his work by a doctor of medicine, who is a member of the Pueblo County Medical Society. This doctor of medicine testified that he was a medical director of two institutions in Pueblo and that his services consisted of diagnosing cancer and prescribing the treatment therefor. At chiropractor's institution he diagnosed the cancers and prescribed Koch's Cancer Cure. At the other institution he diagnosed the cancers and prescribed the proprietor's cancer paste, although the proprietor had no kind of a license to practice the healing art in Colorado. This doctor of medicine readily admitted that he did not know the formula of either remedy which he prescribed. Besides revoking the chiropractor's license to practice chiropractic, the Board ordered that the doctor of medicine who was assisting him be given a thirty-day notice of hearing at the next quarterly meeting of the Board

"The medical license of Dr. Benjamin Replogle, M.D., of Fort Collins was revoked for unprofessional and dishonorable conduct

"Numerous other matters came before the Board for consideration, some resulting in resolutions ordering licensees to appear at the next meeting for hearing on the revocation of their licenses, and others resulting in private censure without the institution of formal disciplinary proceedings

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CRIPPLED CHILDREN IN ILLINOIS

An editorial in the February number of the *Illinois Medical Journal* describes the system of clinics for crippled children conducted by the Warren County Medical Society, as follows:

"The Warren County (Illinois) Medical Society is just starting its sixth year of Crippled Children's Clinics, and the plan of operation of this successful clinic is worthy of the attention of other societies.

"The clinic is held regularly, at the City Hospital in Monmouth. All of the hospital authorities are interested in the welfare of this community, and cooperate thoroughly with the local Medical Society to see that there is no lost time, and no overlapping of effort in arranging, and conducting the clinics.

"All patients are received at the hospital, entered properly on the records, and given a number, which is not changed in succeeding clinics. The records are kept in cumulative form, each patient's records being kept in the files in a separate folder. This folder contains the history of the case, a report of the original examination, and the recommendations of the clinician. At succeeding clinics these records are ready for the clinician, with a report of the follow-up services, and eventually, a complete record of the case as seen at subsequent clinics, is a part of this cumulative record. One copy of the record is given to the family physician of each case, one copy retained on file at the hospital, and a third copy is given to the visiting nurses. Two nurses, a County nurse and Welfare nurse, a few days following each clinic, call at the home of the patients, to be sure that the instructions given were understood, and later, carried out. This is a most important feature of this routine. The Warren County Medical Society has used the same clinician for all of these clinics, and with the system which has been gradually established, it is possible to see twice as many patients now, in a day, as were seen in the earlier clinics. The family physician of each case is urged to be present, and hear the advice given to the parents, so that they will be able to give a thorough cooperation, for the best interests of the patient.

"It is not difficult to convince the people of the community that all clinics should be conducted entirely under the supervision of medically trained people, in order that they may receive the maximum benefit. How can the necessary financial assistance for clinics of this sort be arranged? For several years, it has been the custom in Warren County, for a local lodge to sponsor 'The Annual Charity Ball,' the receipts to be used for the crippled children's work. Sufficient funds have been received to more than pay all expenses, and give a decent working fund for future use.

"What has been done in Warren County, through the efforts of the local County Medical

(Continued on page 373—adv. xix)

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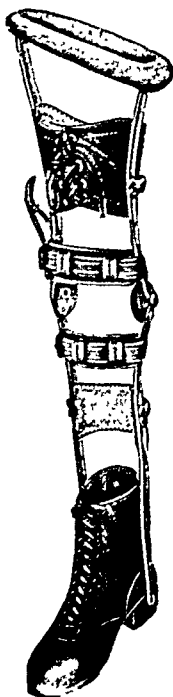
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(Continued from page 372—adv. xviii)

Society, can likewise be done in other counties in Illinois. It is our opinion that all other clinics can be arranged along similar lines, so that it will not be necessary for any Lay Organization in Illinois to assume leadership in the conduct of any type of clinics in the near future."

THREE GENERATIONS OF IOWA PHYSICIANS

The NEW YORK STATE JOURNAL OF MEDICINE has recorded several examples of three generations of physicians in families, but these examples have been surprisingly small. The February number of the Journal of the Iowa State Medical Society devotes a page to three generations of physicians in the Neal family.

Dr. Benjamin G. Neal was born in Missouri in 1825 and learned the trade of a printer. He practiced in Columbus City and Fort Madison. The article says:

"He continued to follow his vocation as printer in connection with the practice of medicine, and it is reported that he walked to Iowa City in 1850 to secure employment with the printer in setting type on the first Code of Iowa. . . . It is reported that Doctor Neal performed the first Cesarean operation west of the Mississippi River. He was intimately associated with Dr. James M. Robertson, and it stated that when sickness was very prevalent, the needs of the afflicted patients of each in their great territory extending over Louisa, Washington, Johnson and Muscatine counties, were served by alternating trips of the different routes, administering to each other's patients. He died at Fort Madison in 1898 at the age of 73 years, having completed nearly 50 years of pioneer practice in Iowa."

Dr. George P. Neal, his son, was born in 1852. "For sixteen years he practiced medicine with his father, Dr. Benjamin G. Neal. While located at Columbus Junction, Doctor Neal was editor of the *Louisa County Times* for two years, and was also postmaster under Cleveland's first administration. He moved to Fort Madison January 1, 1890, and continued to practice there until his death July 12, 1930."

Dr. Emma Jewel Neal, was born in 1878, and now practices in Cedar Rapids, and is actively interested in all forms of civic medicine.

The account concludes:

"The three generations of Doctors Neal have thus far covered a period of practice in Iowa of eighty-three years, which is indeed an enviable record."

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METRAZOL AS A STIMULANT DURING SURGICAL ANESTHESIA

Metrazol as a Stimulant During Surgical Anesthesia.—(Strasser, an-
esthetist at Deaconess Hospital, Cin-

cinnati) (*Ohio State Medical Journal*,
nal, February, 1932).

"When any of the danger signals of anesthesia, among them irregular breathing, rapid pulse, marked fall of blood pressure, and dilatation of the pupils appear, one must be prepared to act promptly. An efficient cardiac and respiratory stimulant in such crisis often spells the difference between recovery and death of the patient. No anesthetist, in fact, unless he or she were irresponsibly reckless, would dream of giving an anesthetic to a patient unless proper stimulants were at hand for any emergency which might arise. . . .

"We believe such a stimulant has been found in Metrazol (pentamethylentetrazol). It certainly gives clinical results. Its action on the patient can be seen almost immediately after subcutaneous injection. The respirations become regular and deeper—the pulse slower and the blood pressure rises. Usually cyanotic conditions are promptly relieved. Also the reaction is not over in a few minutes as with camphor, but lasts a half hour and usually longer. Several times we felt an injection of Metrazol was all that saved the patient from death. . . ."

Of the cases in which the effect of Metrazol was observed nine are given as typical of the group. Upon cardiovascular or respiratory distress during operative procedure Metrazol was injected subcutaneously or intravenously, 1 or 2 ampules, and repeated as indicated. Referring to these case histories the author writes: "These few clinical experiences may serve as examples of the value of Metrazol in our hands. We feel that in these cardiovascular emergencies we obtained better results and with greater certainty of effect with Metrazol than we had achieved previously with other stimulants used under similar conditions."—See page xviii.—Adv.

LILLY RESEARCH LABORATORIES

Lord Lister, experimenting with crude carbolic acid as an antiseptic in surgery in 1867, found that in avoiding the danger of infection he was encountering a new difficulty in superficial sloughing and death of tissues. In his paper on "The Early Stages of Inflammation" (1853) he had shown that the effects of irritation on the tissues are twofold: first, a dilatation of the arteries, developed through the nervous system; and second, an alteration in the tissues on which the irritant acts directly.

Capacity to destroy bacteria is a claim that can be made for many modern bactericidal agents even in very high dilutions. Agents that

will accomplish the desired results, however, without injury to animals and animal tissues are comparatively rare.

From the Lilly Research Laboratories comes an interesting announcement of an organic mercurial compound, Merthiolate, said to compare favorably in bactericidal efficiency with the best of germicides now available and to be particularly distinguished by its extremely low toxicity to animals and animal tissues. The literature on Merthiolate states that the product is potent in the presence of organic matter, non-toxic and non-hemolytic for red blood-cells, non-irritating to tissue surfaces, non-staining, and stable in solution. Merthiolate should find a large field of usefulness among medical men. See insert.—Adv.

AN OPPORTUNITY TO EARN \$15,000

Mead Johnson & Company announces an award of \$15,000 to be given to the investigator or group of investigators producing the most conclusive research on the Vitamin A requirements of human beings.

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Candidates for the award must be physicians or biochemists, residents of the United States or Canada who are not in the employ of any commercial house. Manuscripts must be accepted for publication before December 31st, 1934, by a recognized scientific journal. Investigations shall be essentially clinical in nature, although animal experimentation may be employed secondarily.

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The Committee on Award will consist of eminent authorities who are not connected with Mead Johnson & Company, the names of whom will be announced later.

Source of Supplies

There are no restrictions regarding the source of Vitamin A employed in these investigations.

For other details of the Mead Johnson Vitamin A Clinical Research Award, see special announcement, pages 14 and 15, in the *Journal of the A. M. A.*, January 30, 1932. See page xxiv.—Adv.

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JUDGMENT IN GYNECOLOGICAL PROBLEMS*

By GEORGE B BROAD, M D, SYRACUSE, N Y

VIRCHOW once said "Nine physicians out of ten know what to do in a given case and the tenth knows what not to do, and he is the most valuable of the ten" We may not entirely agree with the above but the implication is that judgment was used in the final decision

A word concerning judgment in general before it is applied to the subjects discussed in this paper We often speak of an individual as being a person of good judgment What do we mean? To me good judgment is possessed by the individual who has the ability to draw correct conclusions when all the facts are submitted In other words, it is not knowing facts only, but deducting proper conclusions from facts It comes close to the realm of the practical

All people are said to use one of three kinds of judgment First, impersonal judgment, which in the above sense is not judgment at all for as the term implies, it simply consists of taking the opinion of others Such a person has no opinion and, therefore, no judgment This group is not inconsiderable

The second is known as reflective judgment This again requires the person to obtain the facts and after reflection draw proper and correct conclusions It is easy to see how these two forms include many subdivisions as the individual leans toward the impersonal or reflective type

The third is the intuitive judgment which permits a decision to be reached through the sub-conscious mind, the individual using it not consciously going through a reasoning process It is used by those possessing a background and is considered the highest type of judgment The young surgeon in the beginning must use impersonal judgment As he progresses he should more and more use the reflective and intuitive types of judgment

The first subject I would like to discuss is

simple lesions of the cervix No apology is offered for bringing to your attention some of the simple and common lesions we are called upon to treat This is a period of preventive medicine and surgery It seems to me much more can be done to prevent or correct if present, the number of lacerations and extensive erosions observed Can we by early care and treatment lessen the ever increasing number of cancers of the cervix or if cancer seems remote, can we relieve many a young patient of an annoying and troublesome cervical discharge? Cancer may not be as remote as we sometimes think, for we are seeing cancers in the young comparatively frequently The prevention of lacerations belongs largely to the obstetrician, and I am glad to say we see fewer extensive lacerations in patients who have been skillfully delivered I am under the impression that more primary repairs of the cervix are being performed than ever before and properly done must result in much relief and protection to the patient I would like to quote a statement at this time from the experience of Dr J B DeLee, who advocates frequent primary cervical repairs In twenty years he has not observed a cancer of the cervix following primary cervical repair This, of course, does not mean that they have not occurred but cervical cancer must be infrequent under such conditions I am not competent, not being an obstetrician, to pass upon the universal application of this procedure, but, as a cancer prevention measure it seems effective

Not all women can be delivered by obstetricians and we will still see lacerations and erosions It is a pretty well established fact that the columnar epithelium of the cervix does not thrive when exposed to vaginal secretions Endocervicitis and erosions result from such evasions

In the young we hesitate to advise radical surgery for cervical repair when more children are likely to follow in the near future, but we have in the cautery a means of correcting many

* Read at the Annual Meeting of the Medical Society of the State of New York at Syracuse, N Y June 2 1931

of the erosion and endocervicitis problems. Not only do we lessen the possibility of malignancy but we add much to patient's comfort by stopping an annoying and troublesome discharge. When childbearing is ended, a proper cervical repair should be advised if at all indicated. This advice I am giving with increasing frequency. If surgery is not indicated, lacerated cervixes should be cauterized and made safe from future malignancies. These measures, while not new, need to be re-emphasized in the strongest terms. Who knows to what extent cervical cancer might be prevented if all cervixes were made normal following childbearing? It is possible this dread disease might be lessened to one-half or even one-third of the present number.

One word about cervical erosions in the young girl. The cause has not been fully established. Most authorities attribute such erosions to friction of cervix against the vaginal wall. A few think a low grade infection responsible. Many of these erosions occur in patients below par, the pelvis participating in the general low tone. Local treatment is not usually indicated. It seems rather too bad to submit such patients to pelvic examinations and treatment. Constitutional measures should be instituted. In case of failure to give reasonable relief, the worse cases may have the erosion gently curetted and attempts made to correct friction. I doubt if the cautery is often indicated in these young patients.

The senile cervix rarely gives trouble, excepting, of course, malignancy. Polypi are found, but no difficulties are encountered in their diagnosis and treatment. Occasionally a scant but very annoying discharge is present with itching the most outstanding symptom. The discharge consists of some secretions from cervical glands and a considerable amount of desquamated epithelium. If satisfactory drainage is established this discharge and itching can be reduced and patient made comfortable.

The atrophied cervix and the shrunken atrophic senile vagina do not stand instrumentation and treatment well. If disease is absent and drainage for secretion is established, little more should be done.

Vaginal Plastic Surgery: It has been said with much truth that the character of plastic surgery done by the gynecologist is an index of his surgical ability. Good plastic work is not easy. It requires knowledge of defects in fascial planes and patient painstaking care to correct them. If certain principles are followed results should be satisfactory. On the anterior wall, defects can usually be corrected if fascia at cervico-vesical junction be adequately secured and fascia under bladder re-

paired. It does not greatly matter whether you use the method of Ward or your own, but it must be properly done. The same principle applies to the posterior wall. It seems to me best to consider defects of the posterior wall as a true hernia and the rectal wall as far as need be secured behind a fascial repair. When this is accomplished and the repair is secure, again it does not greatly matter whether the technique of Clarke or Graves or your own is followed, but it must securely correct the defects.

One added precaution must be considered. Irregularities along posterior wall or narrowing at introitus should be avoided. Atrophy at the menopause or over correction has made many a good repair defective, causing worry to both patient and surgeon.

I would like to add one other word. In doing plastic surgery, do not hurry. I think it was Cullen who said the gynecologist who hurries with his plastic work is self-conscious. Do not be troubled if the general surgeon in the next operating room is through with his flap-splitting operation in less time than you. The result in one or five years is the real test. Many times I have seen our best gynecologists take more time with their plastic work than with an extensive abdominal operation.

Pelvic Tumors: Differential diagnosis of pelvic tumors is usually not difficult. Sometimes it taxes the skill of the experienced. This is especially true if complications exist. In small growths if the uterine body can be outlined and the pathology built up around it, the difficulties lessen. If the small tumor springs from the uterus or changes its contour, it is usually a fibroid. If it moves with the uterus even though uterine contour or size seems unchanged, consider a pedunculated fibroid. If the uterus can be surrounded and found unchanged and the tumor is at one side of uterus or behind, consider a cyst. The age of the patient helps somewhat. Please remember these simple rules do not include an attempt to diagnose disease of tubes such as hydrosalpinx, ectopic pregnancy, adenomyoma, endometriosis, etc. Fibroids are very rarely found before twenty-seven or twenty-eight; cysts not infrequently in the young. Large uncomplicated fibroids usually give but little trouble; large cysts are not quite so easily diagnosed although careful search usually reveals a uterine body pressed anteriorly on one side, overriding the cyst. Larger tumors lifted out of the pelvis should rarely cause trouble. Intraligamentous fibroids and cysts are more difficult but the same rules in the main apply. The consistency of the tumor is often helpful. A paper of this kind cannot consider complications such as torsion, infec-

tions, etc. The chief thought in diagnosing pelvic tumors is to find the uterus. If this can be done differential diagnosis will be made easier.

Management of Uterine Fibroid. Judgment in the management of fibroids must be influenced by the size and position of the growth. Other factors include the social condition of the patient, i.e., her desire for children, her general health and her age. In borderline cases, the natural tendencies of the surgeon toward radicalism or conservatism will influence decision. This is the human element, apparent not only in pelvic surgery but in all surgery where fixed standards have not been universally accepted.

The conservative gynecologist would reason something as follows: Small fibroids the size of a plum or smaller if not too numerous, should be removed by myomectomy in the young, say twenty-eight to thirty-five child-bearing function being preserved. Where fibroids are numerous and invade the uterine body, myomectomy is likely to be a futile procedure. Even under such conditions early hysterectomy in the young is not favored at this stage if no symptoms result, which is the rule if fibroids are subserous. Many a child has been born with the mother having subserous or intramural fibroids without undue risk to mother unless fibroids grow from the lower uterine segment. With submucous or interstitial fibroids near uterine mucosa, it is a different matter. The probability of impregnation is lessened in a fibroid uterus, or if it occurs, abortion is much more likely to happen. Hemorrhagia is quite likely to force treatment.

Small fibroids between thirty-five and forty-two and three should be watched. If they do not grow and are not causing symptoms they need only be watched. If they grow, change their characteristics or are causing symptoms they should be treated by methods suggested later. Small fibroids from forty-three to fifty usually require no treatment, if symptomless, although there are exceptions to this statement. It should be remembered that women with fibroids as a rule menstruate longer than women without fibroids. Later changes and degeneration can occur. This should be kept in mind and those patients treated as the individual case demands.

It is more difficult to lay down rules for fibroids as large as an orange. Possibly in young patients with but a single fibroid myomectomy might still be the proper treatment. More often a partial removal of uterine body containing fibroid if it occupy the upper part, or a hysterectomy should be advised, retaining ovaries with proper blood supply. In the

latter part of menstrual life a fibroid no larger than an orange can often be satisfactorily treated by radiation, either x-ray or radium. Fibroids larger than an orange or small grapefruit at any time during the menstrual life should be removed by hysterectomy, unless there is some definite contra-indication. This was the rule laid down by Dr. John G. Clarke and is still followed by his associates. His decision was based upon a large experience, with surgery, radium and x-ray at his command. The degenerative changes in large fibroids as well as other complications were numerous enough to make removal the conservative treatment. A recent review of the work of Drs. Norris and Keen at University of Pennsylvania in the treatment of larger fibroids, has added weight to the soundness of his teaching. An attempt has been made to discuss this question conservatively. A radical surgeon could justify a more active course. What should be done with the ovaries is still debatable. In the young I still leave them or one of them. I find myself, however, removing ovaries with greater frequency in the latter years of menstrual life. The frequency of sarcomatous change in fibroids is still in dispute by pathologists. In a series of one hundred of my own cases reviewed some time ago, there seemed to be two unquestioned sarcomas. An infected fibroid is a most serious problem, one which endangers the patient's life.

Ovarian Cysts. The general remarks made earlier on pelvic tumors cover pretty much all I wish to say concerning diagnosis of ovarian cysts. If complicated by torsion the acute symptoms usually give the key to diagnosis. Intraligamentous cysts may require differential diagnosis but this can usually be done. There is but little need for the exercise of judgment in treating ovarian cysts for they should be removed if we except the small follicle cysts. I especially wish to emphasize the need on the part of the surgeon of sufficient knowledge of pathology to act wisely for patient's best interest. He should know that the large pseudo-mucinous cysts frequently have papilloma, potentially malignant. He must appreciate that rupture of such a cyst exposes patient to possibility of transplants of papilloma if they exist. He must also know rupture of pseudo-mucinous cysts may result in a myomatous peritonitis which ends fatally. He should know that the serous cyst adenomata usually have papilloma if at all advanced and that rupture of such a cyst is a serious matter. He should know that the serous cystadenoma tends to occur bilaterally although not simultaneously, and the other ovary cannot be ignored. He should be conscious of the very irritating content of the

dermoid and the greater tendency of peritonitis in case of accident. I have mentioned enough to show the need for fundamental knowledge of pathology on the part of the operator who assumes the responsibility for doing surgery of this character.

The exercise of judgment comes into play when one finds a serous cystadenoma with extensive papillomatous infiltrate. Will one be content with simply removing the cyst, or will one remove the other ovary or even do a hysterectomy to make the patient more secure? If the pathologist reports evidence of malignancy in the papillomata there can be no question. Radical work should be done. If the patient is young and childbearing is important, in simple cases of serous cystadenoma with papilloma, the other ovary may be preserved, trusting the patient to report for observation at frequent intervals. The frequency of malignancy of ovarian cysts and malignancy of the ovary has been a source of increasing anxiety.

Uterine Displacements: Few conditions in the female pelvis require better judgment in their management than uterine displacements. This applies to uterine retroversions in particular. In the main certain principles apply. The first query is, does the displacement cause symptoms? If so, are the symptoms sufficiently severe to require radical treatment or will simple methods better serve the patient? In many cases this can be determined in the office. If the uterus is replaceable, a proper fitting pessary is a great help. This is not the time or place to dilate upon the use of the pessary. It is often misused. Its principle is fairly simple. If the pelvic symptoms, i.e., pressure, bearing down, etc., and backache, are relieved by replacement with pessary over several weeks' observation, one is justified in assuming that the displacement is causing the symptoms. Even so, shall operation be universally advised? I believe not. The age, desire for more children, social condition and whether or not the displacement is part of a general ptosis as well as many other factors should be taken into account.

Displacements of uterus in the young woman in her 20's who desires children, or more children, may well be carried along for a time with a pessary, hoping for an early impregnation. Should pregnancy occur, one may reasonably expect the uterus to be lifted from its displacement by the developing pregnancy. Rarely is manual help necessary. On occasions the knee chest position, gentle force or a pessary may be used. The responsibility after confinement shifts to the obstetrician. I have long felt much could be accomplished if special attention be given patients while

recovering following confinement, if uterus retroverts.

When the uterine displacement has been proven to be the real cause of symptoms sufficient to impair the health or happiness of the individual replacement is indicated. Surgical procedures in the main should be followed. There are still a few exceptions. Most workers in gynecology have had now and then a patient much below par in general health with a moderate retroversion replaceable. These patients with uteri held in place by a proper pessary have gained in general health and strength. We have all been gratified to find uterus remaining in place after pessary has been finally removed. While a few of these patients may be permanently well, one never feels quite safe. Should poor health or pregnancy recur, their uteri are unstable.

The surgical operations for overcoming the displacement are dependable. It does not greatly matter which operation one does if it is applicable to the case. Earlier our lists revealed a tendency to use the principle evolved by Gillman, modifying his original technique by securing the round ligaments at or near the internal ring. Several operators have their names attached to this modification. Latterly, we have more frequently used the Olshausen suspension. Whatever operation is selected, circumstances may vary its application. We have all seen the results of a suspending operation where the uterus was attached low or to a weak abdominal wall, which permitted the cervix to descend so low the results were very unsatisfactory. The selection of the proper patient for operating in cases of uterine retroversion, I wish to again reiterate is of the greatest importance. Replacement operations performed upon patients just because they have a displacement of uterus is to be condemned.

Never attempt to use a pessary where marked retroflexion is present. It is not replaceable by this means.

Backache as a symptom in uterine retro-displacement has received and deserves much attention. Low down central backache is the type of backache associated with uterine displacement. The proof of its pelvic origin is in relieving the backache by replacing uterus. Backache of the lumbar type is usually of extra pelvic origin.

Retro-displacements of the uterus are usually simple to diagnose. The condition most frequently confused by the inexperienced is a retrocession with an antelexion. This error can be obviated if the principle laid down earlier in this paper is followed, viz: locate the uterine body. If this is done, the backward bend of the cervico-corporal portion will not

mislead. After careful search the uterine body, usually small, can be found anteriorly. Retrocession with antelexion is apt to be associated with defective uterine development.

Uterine Prolapse. Uterine prolapse is easy to diagnose if at all advanced. It can be recognized in its early stages. Perhaps the term uterine descensus could more appropriately be used. In the beginning weakness of the anterior wall particularly at the cervico-vesical junction should be recognized. The uterine axis is usually in line with vaginal axis or utero retro-displacement is present. These changes with low placement of all pelvic organs are indications of impending prolapse. It has always seemed good judgment when the above physical signs are present to correct them unless there is some good reason for not doing so. Possibly the reason under these conditions for not urging repair when there are few symptoms rests in the fact that no one can tell to just what extent the descent will continue. This may be good reasoning for the time, but it is a better policy if operation does not seem indicated at once to keep such a patient under observation. If there is definite increase in descent while such a patient is under observation operation should be advised. It will be much simpler to do satisfactory plaster surgery before uterus and bladder have descended to second or third degree. The condition of the perineum has not been mentioned among early indications. At this stage it is of much less importance. A relaxed and torn perineum when descent is well under way must make it easier for all the pelvic organs to prolapse and conversely a good perineum often retards downward progress in some cases. The perineum, however, cannot be considered as playing a very important role early in uterine prolapse. Much more important is the tone and strength of the uterine cardinal ligaments. The symptoms do not need to be considered except to mention the early drag and bearing down which comes when structures of vaginal vault begin to weaken. This is again a warning. Treatment is surgical for most satisfactory results. The methods adopted depend upon surgeon's experience, ability and judgment. The plastic surgeon can obtain fair results in many cases by plastic surgery alone if he sees his cases early and he has good tissues to use. In most of the advanced cases more than this is required. Whether you do a Mayo hysterectomy a plastic with abdominal fixation or suspension or a Watkins interposition will again depend upon your experience and ability. Three years ago I reviewed one hundred cases of uterine prolapse before this section and my analysis showed I had used all four methods in this series. I tried to adopt the method best

sued to the individual case. The results in the main were satisfactory. My results were least satisfactory with the Mayo method, probably because my experience with this operation has not been extensive.

If operation is not to be considered, the Gehrung pessary is if usable, an aid in holding up the uterus and making the patient more comfortable.

Pelvic Inflammation. Pelvic inflammation is still very common and not difficult to diagnose. Its treatment is pretty well established along fixed lines. Individual judgment is still necessary in course finally followed. Early operative work can be justified only as a relief measure. Extensive exudate containing pus in moderate amount, recover better without surgery. Large amounts of pus usually need drainage. The advice after the attack carries with it definite responsibility. It seems to me one is justified in awaiting developments in a young woman if the exudate absorbs. Should the organ be bound down giving evidence of permanently crippled pelvis, not much is gained by deferring surgery after patient is ready. Should the infection relight, there is little hope of function being restored or patient returning to health. Operation under these conditions should be advised when patient is ready. The operation on tubes should be complete removal. Any attempt to save isthmus even though it seems open is usually futile. Ovaries are more resistant because of their thick tunica albuginea. Despite this the life of the ovaries is frequently very much impaired by the surrounding infection, their blood supply diminished and they function poorly. Unless some unusual reason appears for conserving them, they are best removed. This decision may not apply to the very young. At the Syracuse Memorial Hospital one of our services is again trying to transplant the good portions of the ovaries in the rectal sheath. I hope we may be able to obtain enough encouragement from this work to make it worth while. Dr. Graves believes in most cases the uterus too should be removed. I have not universally done so, perhaps less frequently than I should. My reason for leaving the uterus, especially in the young, is that it is not the seat of active infection as a rule. The gonococcus does not usually invade the endometrium. It is the bridge over which this mischief maker is carried from the cervix to the tubes. It is most exceptional to find foci of infection of g.c. type retaining virulence in the myometrium. If it seems wise to save one ovary or a part of one, menstrual function can for a considerable time be preserved. For this the young patient is usually grateful. In more mature patients from thirty-five on, if the future of the patient

is more secure, the pelvic organs including uterus may well be removed.

We are waiting longer after an acute attack before advising operation in the operable group. The patient is profiting. Our mortality and morbidity are lessening. We have better guides. Three weeks of normal temperature and normal leukocytosis should make surgery reasonably safe. Now we have red cell sedimentation to further help. A two hour sedimentation adds much to patient's security. One and one-half hours makes patient reasonably safe.

The term pelvic inflammation refers only to g.c. and not to obstetrical infections, the former producing an endosalpingitis, the latter a perisalpingitis, with a much better outlook for functioning tubes.

Uterine Cancer: Judgment in management of uterine cancer should be simple. The diagnosis of cancer of uterus is another matter. We must continue to talk in season and out of the need of having every case of irregular uterine bleeding explained. If women and family physicians could realize that probably every woman who begins to bleed after menopause has been established in all reasonableness has a beginning malignancy, many lives could be saved for we are curing, and I use the word advisedly, early cases of uterine cancer. It is a temptation to discuss what is being done in trying to separate types of cancer by cell differentiation. It may lead to help in prognosis, but, whatever the type of cell, not much can be expected when the invasion has gone beyond the reach of the remedial agent, be it radium or surgery. Most of you are well aware we are not operating cervical cancer except in very rare instances. You also know we are advising complete surgical removal of uterus in cancer of uterine body if at all operable, either before or after the use of radium. The responsibility of the family physician or the one who first sees the patient is very great. Irregular uterine bleeding is the most outstanding symptom of cancer either of cervix or uterine body. If its significance could early be appreciated, what a difference it would make. Of course, it would still be better if the very early serous discharge could be correctly interpreted. This is perhaps asking too much. Post-menopause bleeding should in every case

be considered malignant, until proved otherwise. It has been my policy in recent years to take the physician who honors me with his consultation aside, if he has made a mistake, and go over the case in detail, pointing out his error in interpretation of symptoms. I do this in the kindest way, for no doctor of my acquaintance would knowingly give poor advice to one who trusts him or her. This helpful review sometimes causes chagrin, never has it caused resentment. The not uncommon method when I began practice was for the consultant to comfort the doctor who made an error in diagnosis by pointing out some of the unusual features by which he was misled. It is poor comfort to the doctor or patient. I am sure if all consultants took time in all surgical problems where there has been delay, to help the physician to see where he could have arrived at a diagnosis sooner, it would be better for all concerned, particularly the patient.

I mentioned earlier the need for recognizing senile changes in the vagina and their careful management. I would like to comment upon changes in the vulva, largely of a senile character. The outstanding change is kraurosis vulvæ, one of the most annoying and tormenting of vulvar afflictions. It does not seem to be so troublesome in very late life as in the 50's and 60's, not infrequently in the late 40's. Atrophy, of course, is the most apparent physical sign, but itching is the symptom which drives them to the physician. It may be and probably is caused in some way by the lessened or absent secretion from the ovaries but supplying this artificially has done but little good in my hands, although Graves thinks he has obtained results at times. Kraurosis vulvæ is mentioned because of the increased possibility of malignancy. Leucoplakia must also be closely watched. The number of malignancies following this change is very disquieting. In two outstanding instances recently have I had a report of malignancy returned after removal of small atypical lesions. By early radical removal, I hope I have made more secure the future of these patients. It would seem wise to remove any area on slight suspicion doing as radical work as evidence justifies. We all know the very serious, almost hopeless outlook in carcinoma of vulva if the disease is at all well established.



VOLKMANN'S CONTRACTURE OF THE LEG

By EDWARD K CRAVENER, M D, SCHENECTADY, N Y

CERTAIN entities in medicine have become inseparable interstitial keratitis and lues, gumine and malaria, liver and pernicious anemia. Similarly, the reaction word to Volkmann's contracture is forearm.

Volkmann's contracture need not occur in the forearm alone. By its accepted etiology, it can occur in any region where the blood return can be obstructed and engorged muscles be constricted by strong fascial planes. The original articles do not confine this lesion to the forearm. Richard Volkmann,¹ writing in 1881, mentions the occurrence of this disorder in the lower extremity. Dean Lewis² mentions this condition as occurring after fractures of the lower end of the femur. Alfred Taylor³ states in discussing this condition "that only cases occurring in the upper extremity will be considered," indicating recognition of cases in other parts of the body. Meyerding⁴ in reporting one hundred and twenty-eight cases from the Mayo Clinic, mentions three contractures following fractures of the tibia and fibula. In his summary he states that over ninety per cent of these contractures occur in the forearm. Paul Jepson⁵ states "in the majority of cases, the injury is in the upper extremity."

In this short paper, no attempt is made to outline the etiologies variously ascribed for this condition. I believe the consensus of opinion, since the work of Brooks⁶, is that by pressure or some other mechanism, the return venous flow is diminished and the muscles become engorged with blood and transudated serum from the damaged capillaries. This extravasation is limited, early, by fascial planes surrounding the muscle bellies. As the condition becomes more intense this capillary oozing pushes on to involve other muscles and to surround the adjacent nerves. Later these nerves may be bound down by organization of the adventitious blood and true nerve lesions result. One author⁷ believes that an unhappy combination of circumstances, engorgement, embarrassment of the venous return and diminished arterial supply cause scarring with consequent contracture.

There is basic similarity in the anatomy of the volar surface of the forearm and the posterior aspect of the leg. In the forearm the flexor profundus and the long flexor of the thumb lie just ventral to the interosseous membrane of the radius and ulna, and are surrounded by the extension of the antebrachial fascia and overlain by the bellies of the superficial flexors of the fingers and wrist. In the calf, the posterior tibial and long flexor of the toes occupy an exactly similar position in relation to the interosseous membrane of the tibia and fibula. They, too, are surrounded by fascial extensions and are overlain

by large muscle bellies. The return blood supply of the deep flexors of the forearm is thru the deep median vein which becomes almost superficial in the antecubital space. The return supply of the flexors of the foot is thru the posterior tibial vein which passes thru a window in the popliteal fascia.

Therefore, there is no valid reason why a disorder so prevalent in the forearm, should be so rare in the leg. Perhaps the lack of specialization of the leg muscles masks the result of muscle damage. It is possible that some of the delayed functional results of fractures of the leg are due, in part, to unrecognized fibrosis of the calf group.

If we analyze critically the deformity of the forearm, it is seen that the deep flexors are the most abused. All true Volkmann's contractures present a flexion contracture of the terminal phalanges which is modified in part, by acute flexion of the wrist.² The long flexor of the thumb likewise is involved. In an analysis of all the true cases appearing in the English literature since 1916 (in which sufficient data was given from which conclusions can be drawn) it is seen that these two muscles suffer the greatest damage. This is more than a pure accident. The fact that these two muscles lie nearest the interosseous membrane and are more completely bound down than are the superficial group, leads one to believe that unrelieved congestion plays a great part in the resultant deformity. It is perfectly good mechanics to postulate distension of a deep muscle group with resistant increasing pressure thereupon from the muscles which directly overlie them. In the leg, the posterior tibial and the long flexors of the toes are similarly situated, hemorrhage into them, if no decompression of the superficial muscles occurs, should be more deleterious than that in a muscle not so tightly circumscribed.

From this, then we could reasonably expect flexion contracture of the posterior tibial muscle and a calcaneo varus deformity of the foot with marked flexion of the toes. The case which follows presents these.

Case Report Mr F H. Aged 44, not now employed but who was formerly a waiter, a clerk and a salesman, presented himself for relief of pain under the long arch of the right foot. At the age of two or three years, the patient had an open osteotomy for bilateral bowleg. (Skin scars are still present and are shown in the accompanying sketch.) The left leg healed perfectly with a curve of the condition. As near as the patient can remember (the hospital reports of 1889-90 are not available) the pain in the right leg caused the plaster cast to be removed. A long series of operative corrections followed the last treatment of

which was in 1911, when an attempt was made to correct the varus deformity by manipulation. The patient wore the cast only a short time and abandoned all attempts at cure.

The patient now presents himself for relief of long arch pain worse after exertion and totally bettered by rest. This part of the picture is probably due to foot strain.

Physical examination of the right leg and thigh reveals a bottle shaped leg, i.e., there is a very

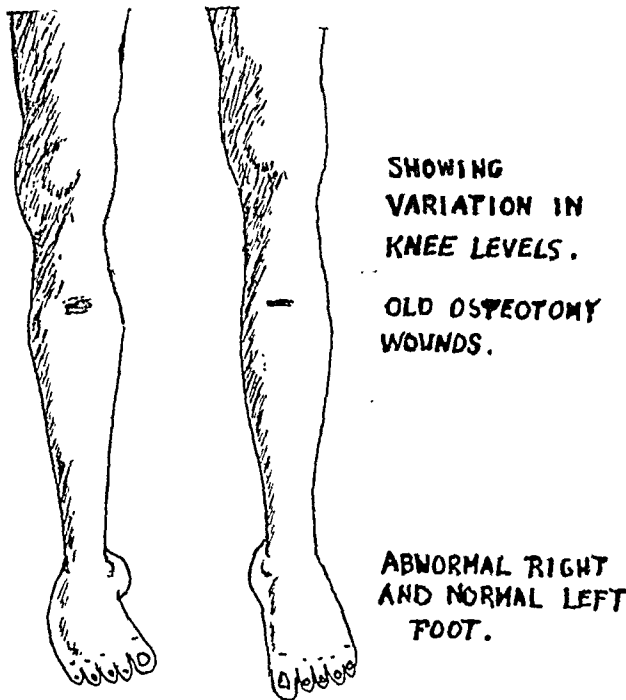


FIGURE 1

Sketch to show bottle-like deformity of leg and calcaro-cavus deformity of right foot.

definite change at the junction of the middle and upper third of the leg. Above this point, the contour is, barring atrophy, approximately normal; below this point the leg resembles an inverted bottle neck. There is a calcaneo-varus foot with moderate adduction of the forefoot. The toes are held in marked flexion. There is a very slight amount of passive motion possible in the ankle joint. The only muscles having active motion on the posterior surface are the two approximately normal bellies of the gastrocnemius above the line of demarcation mentioned before. There is no active inversion of the foot, no active eversion and a very small amount of flexion and extension of the toes due to the short flexors and extensors. There is no anesthesia, no abnormal nerve signs.

The right femur is one and a half inches longer than the left with one and three-quarters inch shortening of the right leg.

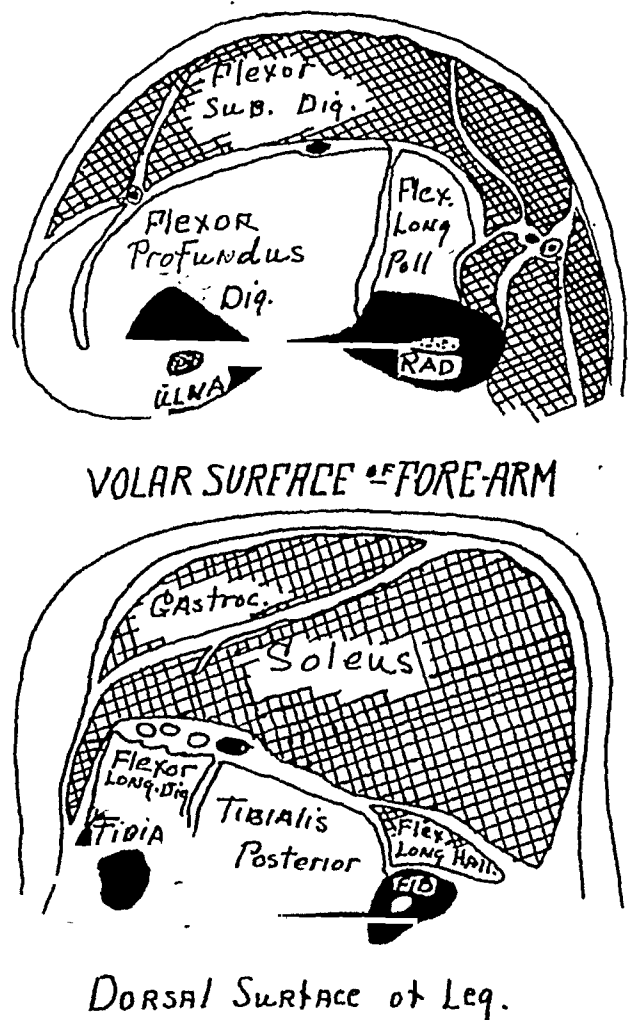


FIGURE 2

Sketches to show relations of the deep muscle groups to the interosseous membrane and overlying bellies and tendons. (Grays Anatomy, pages 473 and 530, Lea and Febiger, 1913.)

SUMMARY

A case of Volkmann's contracture of the leg is presented in an attempt to stimulate interest in this entity as applied to the walking extremity.

It is possible that unrecognized Volkmann's contracture of the leg, following fracture of the leg bones, constitutes an important factor in delayed functional cure.

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ORAL SURGERY OF INTEREST TO THE MEDICAL AND DENTAL PRACTITIONER¹

By THEODOR BLUM, D.D.S., NEW YORK, N. Y.

THE opportunity to appear before a combined medical and dental audience is always welcome, because in spite of the numerous papers and lectures on the subject of the necessity of cooperation between the two professions, the required understanding and the necessary respect have not as yet developed to any appreciable degree. The fact that the medical student does not receive instruction pertaining to the jaws, teeth and surrounding structures, and that the medical education of the dental student is not adequate at present must be largely blamed for the existing misunderstanding. With the intention and hope that it may be of interest and benefit to both, physicians and dentists, an attempt will be made to enumerate a few important conditions, which both professions should know about and are often called upon to consult each other.

The dental examination consists of much more than a casual glimpse at the teeth or gums. A complete x-ray examination consisting of at least fourteen intraoral and two extraoral films, a pulp-test of all teeth and often transillumination are absolutely necessary and should be insisted upon before anything but emergencies are attended to. Only then is the dentist or oral surgeon (who is at present most often the oral consultant or diagnostician) placed in a position to intelligently discuss a patient's condition, for instance, dental focal infection. In this connection, I wish to say that in such a case the consultation with the physician is of great importance, he will tell us when devitalized teeth, negative from the dental standpoint, must be sacrificed. But aside from this I believe that the dentist—if for no other reason than to safeguard himself—should communicate with the medical practitioner, before commencing the treatment of a new patient. Many unpleasant experiences in cases of diabetes, heart disease etc., will thus be avoided. Of course radical treatment is not always indicated and quite often useful and important teeth can be saved for many years in spite of a pathological condition of the apex by root amputation.

Today most every disease of the mucous membrane of the mouth is called Vincent's Angina, Trench Mouth and sometimes by a better term, namely, Vincent's infection by physicians and dentists. But to the doctor's great surprise, smears taken from different parts and depths often do not show the fusiform bacillus and the spirochete. It is more appropriate to speak of ulcerative gingivitis and stomatitis particularly because no matter what organisms are found, the main treatment consists of daily light prophylaxis

and the application of whatever drug one finds most efficacious in individual cases. Surgical interference during the acute stage is contraindicated. To my mind, osteomyelitis as a complication of ulcerative gingivitis is due to surgical interference as above mentioned, or to unduly vigorous instrumentation, which amounts to as much. While speaking of osteomyelitis of the jaws, I wish to recommend extreme patience to both practitioners, while dealing with this condition. Watchful waiting, draining pus collections and removal of sequestra if they are fully separated only, make up its successful treatment. All patients suffering with this and many other diseases require the care of a physician or at least his cooperation with the dentist in charge for the most efficient combatting of the condition and an uneventful and rapid recovery.

Malposed teeth if completely unerupted do not constitute a possible focus of infection. However, they and their subdivisions, like impactions, are quite likely to cause facial pains, absorptions of adjoining teeth and the impacted one with consequent involvement of the pulp, and if partly erupted, acute infections with fatal results sometimes, unless treated conservatively. It is for these reasons that I have advocated for many years now, the removal of all malposed teeth (not malposed in the sense of the orthodontist) whenever detected with the exception of those, which in cooperation with the orthodontist can be exposed and slowly forced into their normal position.

There are two types of dental cysts, to which I want to call your attention. The radicular cyst originates from a devitalized tooth and develops in its apical region, while the follicular one forms around the crown of a malposed tooth, which crown projects into the cyst cavity. The malposed tooth is removed in most instances at the time of the operation. In a number of cases the tooth or teeth involved in the radicular cyst area can be saved by root canal therapy, followed by root amputation. Granulomas at the apices, which may or may not develop into cysts—depending on the presence or absence of epithelial cells—should always be removed in chronic cases at the time of the extraction if removal of the tooth is advisable. Dry sockets unfortunately occurring only too frequently after the removal of teeth, must never be curetted; all debris is gently removed, the socket carefully dried with cotton swabs and dressed with iodoform gauze saturated with dentalone, which dressing is changed every day or two. While on this subject it may not be amiss to say a few words about extracting during an acute stage, namely, when a purulent periostitis

¹ Read before the Second Combined Medical and Dental Meeting of the Westchester Dental Society, December 15, 1931.

coexists. There is no objection to the removal of the tooth, although there is as a rule no indication for it. However, the main treatment consists of the evacuation of the pus by a liberal incision. Any further surgical interference should be deferred to the chronic stage.

The antrum naturally belongs to the field of the rhinologist. Only those diseases of this sinus caused by infected teeth or the bone in this region or roots pushed into the sinus, etc., are better cared for by the oral surgeon provided the other sinuses on the same side are not involved. No treatment of the antrum should be undertaken without *x*-ray examination of all sinuses as well as *x*-rays and pulp tests of both maxillae and teeth. Postoperative irrigation by the oral route can easily be accomplished by a method described elsewhere.²¹

The examination of the salivary glands is very frequently omitted or neglected and therefore stones in the glands and ducts only diagnosed when they give symptoms. In this connection I must say that I never had to resort to the removal of the gland for the treatment of sialolithiasis and only once removed a stone extraorally. Please remember also that in spite of the presence of a stone the *x*-ray examination may be negative.

Trifacial neuralgia must not be forgotten, when dealing with diseases of our field. The etiology is still obscure and removal of sound teeth entirely contraindicated. The treatment of choice is the operation perfected by Frazier, which is accompanied by a mortality of less than one per cent. The difficulty lies only in the diagnosis of doubtful cases. Facial pains, so-called, are quite a different complaint. They may be temporarily relieved by various medical and surgical interferences, but return quite regularly unless the cause is found and remedied.

The treatment of fractures of the jaws is the only borderline condition which practically always is turned over to the dental or oral surgeon. But here also, especially in severe accidents, the cooperation with the physician or surgeon is more than welcome.

Cancer being so prevalent, this paper cannot be closed without giving some space to the subject of tumors. The term epulis so frequently used should be confined to those proliferative masses showing inflammation appearing at the gingiva.

A giant cell tumor must not be confused with a giant cell sarcoma, which is a highly malignant neoplasm rarely found in the mouth. The giant cell tumor and osteitis fibrosa are not neoplasms, but central proliferative masses representing probably different stages of the same process.

Any abnormality about the mouth and face should be looked upon with suspicion, every specimen removed examined histopathologically and slide and specimen preserved and indexed. Small masses, which do not require extensive opera-

tions, are best completely removed first and then a cross-section examined. Because you find fluctuation the condition must not necessarily be a cyst or an abscess. To sum up this question, I would say that we can serve our patients best by diligently and carefully correlating our clinical observation, *x*-ray findings, and histopathological evidence. Neoplasms requiring intimate combined radium, *x*-ray and surgical treatment are best cared for by men in both specialties or in institutions specializing in this field.

It is impossible, of course, to mention even all the important conditions encountered in this region, less so to deal with them in detail. For those interested, a bibliography of previous articles is appended.

Why is this close cooperation of the two professions still lacking? My answer is that it is not so much the fault of the physician and dentist, but rather of the schools, the entire educational system, which makes the American student a hunter of diplomas, which waste his time and money. Any intelligent human being can receive all the preliminary education necessary for the entrance into a medical or dental school up to and inclusive of his or her eighteenth year. Then there will be plenty of time for the maximum of professional education, namely, four years of undergraduate study, two years of hospital internship and if so desired, another two years in the study of a special field: a saving of four years at least. Why should not a medical or dental student practically live in the hospital like a nurse in training does, who after graduation leaves the school by far better equipped for her profession than the medical or dental student? All this can be accomplished by elimination of bad politics and its accompanying waste of money, politics not only of state and city governments, but in all schools, low and high and professional and in hospitals.

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THE RESPONSIBILITY OF THE PRACTITIONER IN MENOPAUSAL BLEEDING*

By JAMES E. KING, M.D., BUFFALO, N. Y.

THE menopause is characterized by profound changes that involve the genital organs, the general physical condition of the woman, and the endocrine glandular system itself. Beyond the fact that the endocrine glands are primarily responsible for these changes, we know little of the delicate glandular readjustments that take place at this time. There are many false notions concerning the menopause which have been and still are tenaciously held by the laity, and which are accountable for many unnecessary deaths. Unfortunately, the profession, too, is in some measure responsible for fostering these false views.

For approximately thirty-five years menstruation recurs normally every twenty-eight days, interrupted only by pregnancy and lactation. It is known that menstruation is not the result of the ovary acting independently but that it depends upon a complex interaction of several glandular structures. It is obvious then that with the cessation of reproductive life the readjustment of those endocrine glands upon which reproduction depends, will be followed by certain phenomena. If the readjustment proceeds smoothly the functional and physical changes that take place will cause no inconvenience or discomfort. On the other hand, if, during the readjustment, a delicate glandular balance is not maintained, pronounced disturbances of various kinds will be the result. It is very difficult to draw hard and fast lines between a normal and abnormal

menopause and in a given individual this question can not be settled always upon any single manifestation but rather the entire picture presented must be considered.

It is not within the scope of this paper to theorize upon the glandular changes that take place at the menopause nor to discuss in general the clinical manifestations. We are only concerned with the question as to what constitutes a normal or an abnormal type of flow at this time. There are two common normal types observed. The first is the gradual loss of menstrual function, indicated by decreased flow recurring at prolonged irregular intervals. The second is the sudden, abrupt termination. The gradual withdrawal of menstruation is by far the more common and within normal limits great variation is seen in the interval between the recurring flow and the length of time over which such irregularity may persist. As to what constitutes abnormal flow can be stated dogmatically and safe principles can be laid down to guide one in judging between the normal and an abnormal bleeding. There are five of these principles. The first is that any increase in the amount of flow is abnormal. The second, that any shortening of the intermenstrual period is abnormal. The third, that any prolongation of the flow is abnormal. The fourth, that any intermenstrual flow is abnormal. And fifth and finally, re-appearance of bleeding a year or more following complete cessation is abnormal. If these facts can be burned into the consciousness of every woman and every member of the profession, a long, long step will have been taken toward the

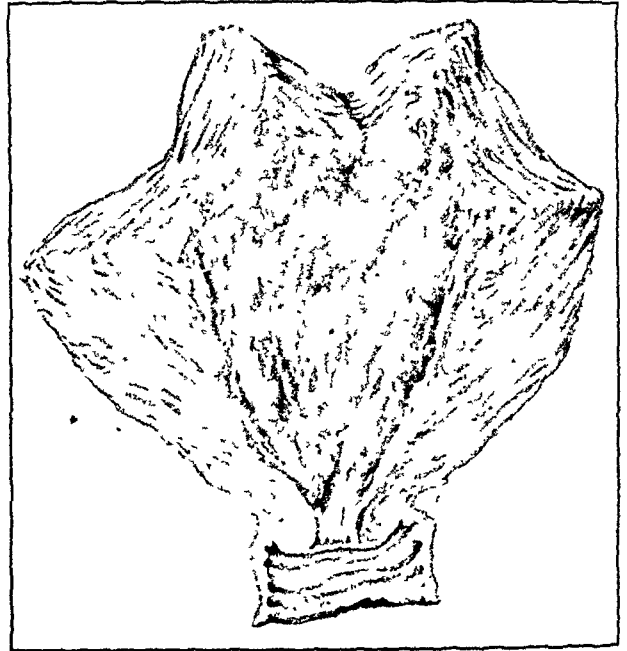
* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 2, 1931.

prevention of many tragic and untimely deaths. It is frankly admitted that exceptionally any of these abnormal bleeding types may be seen during a normal menopause, but no physician has any moral right to assume that such exceptions are normal until he has definitely proven it to be so. It is true that there are a number of benign conditions that cause abnormal flow and which, in due course of time, disappear. But here again the same rule holds true, no physician has any right to assume that the source of such bleeding is benign until it has been so proven. It is abnormal bleeding resulting from benign conditions that is responsible for the popular view that normal menopause is often associated with increased and irregular flow.

In order to approach menopausal bleeding intelligently it is essential that one be familiar with all those conditions which may cause such bleeding, and have clearly in mind the procedures necessary to determine their diagnosis. It is proper, first, to divide such conditions into those that involve the cervix and those that involve the body of the uterus and these again into lesions that are benign and those that are malignant. Of the conditions involving the cervix the benign lesions may be enumerated as cervical mucous and fibroid polyps and cervical erosions, especially those of the papillary type. All of these lesions are simply and easily diagnosed by digital examination and inspection. Their clinical manifestations are untrustworthy and not to be relied upon in determining a diagnosis. The symptoms, therefore, are of little importance in this discussion.

The malignant lesions of the cervix are obviously the most important. There are two kinds. The first is the squamous cell carcinoma of the portio of the cervix, and the second, the adeno-carcinoma of the cervical canal. The squamous cell carcinoma is ten times more frequent than the adeno-carcinoma of the canal. Indeed, it is many times more frequent than all other forms of malignant disease that involve the uterus. It is of practical importance, also, to bear in mind that there are two more or less distinct types of squamous cell carcinoma. Both types take their origin from the squamous epithelium covering the surface of the cervix but in the one the malignant cells develop *into* the cervical tissue, and in the other the malignant cells tend to *pile up* on the surface. The first is quite appropriately designated as the infiltrating type and the second the proliferating type. This distinction has a practical bearing both on the clinical course and in the diagnosis. It is not pertinent here to analyze the character of the bleeding that may result from

early squamous cell carcinoma. The all essential fact is that such malignant growths do cause abnormal bleeding which demands prompt investigation by the physician. The fact that the squamous cell types develop on the surface of the cervix makes it possible to



Patient Aged 53
Polypoid Endometrial Hyperplasia.

discover such lesions by examination even in their early stages. There may be difficulty in differentiating between the early proliferating carcinoma and a papillary erosion. Any uncertainty, however, can be settled by a tissue diagnosis. The question as to whether excision of tissue in such cases favors lymphatic extension is important, but until conclusive evidence has been produced to prove such a contention biopsy is eminently justified.

The adeno-carcinoma that begins and develops in the cervical canal presents a different diagnostic problem. Being sheltered within the canal it is less subject to those injuries that may produce early bleeding in the more exposed type. Early bleeding, therefore, in adeno-carcinoma is not as common. Examination, too, will often disclose very little. Possibly by palpation the cervix may be found to be harder and larger than normal. Inspection, also, may add little. There is, however, one valuable test that should not be forgotten when this type of malignancy is suspected. If a sound be carefully inserted into the cervical canal in the presence of carcinoma bleeding will result. In the normal canal gentle manipulation should not produce bleeding.

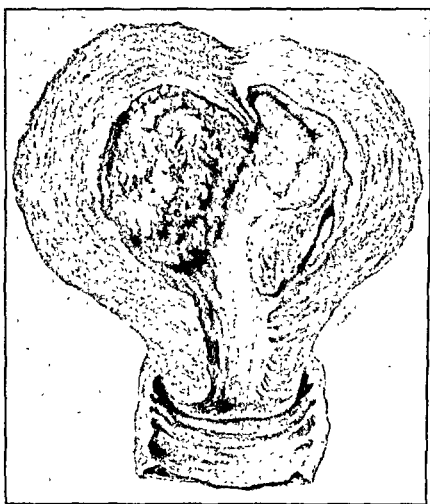
Both the benign and malignant conditions of

the cervix which have been mentioned are also usually associated with discharge. Naturally, complaint of a discharge during the menopausal years should receive just as prompt consideration by both patient and physician as bleeding.

Bleeding from the body of the uterus occurring during the menopause can also be classified, as in the case of the cervix, as resulting from benign and malignant lesions. The benign lesions are: hypertrophic endometritis, fibroids, fibroid polyps, mucous polyps, and rarely, atrophic endometritis. Of the malignant lesions the adeno-carcinoma is the chief, the sarcomas being rare.

In the group of benign lesions there are at times clinical and physical signs that make it possible to establish a diagnosis with reasonable certainty. As a rule, however, clinical evidence is very untrustworthy and to depend upon it is courting danger and inviting disaster. For this reason, it is much safer, especially for those of limited experience, to ignore more or less the clinical manifestations and to rely for diagnosis upon the evidence to be obtained by a proper and comprehensive examination. To do this it is necessary to have in mind certain characteristic features of the pathology that may cause bleeding. Such knowledge at once suggests the procedures necessary both for diagnosis and treatment.

Hypertrophic endometritis is a common condition about which there is still much to be learned. It may occur at any age during the reproductive life of women. It is more common, however, just preceding and during the

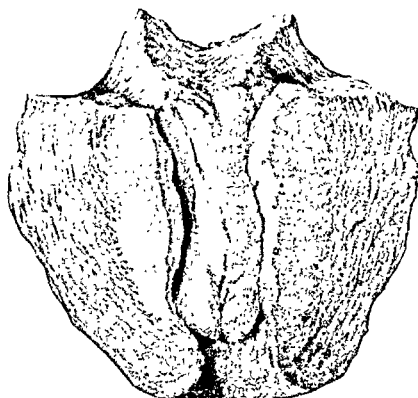


Patient Aged 55

Polypoid hyperplasia (right) adeno-carcinoma (left)

menopause. It is characterized by a definite thickening of the endometrium with an increase in the number and tortuosity of the glands. There are varying degrees of this condition. From a moderate thickening one may see all stages up to an enormous hypertrophy, with deep folds of membrane and the formation of polyp-like processes. This form is called polypoid endometritis. When the ducts of the glands become dilated the term cystic endometritis is used. The curet here is the diagnostic agent and it will bring away, in well marked cases, a large quantity of velvety membrane which to the experienced eye often establishes the diagnosis. These cases especially at the menopause have one characteristic that should be remembered: there is a tendency to recur following removal. A few months after curettage the bleeding reappears. This may be repeated several times until finally the pathologist reports the scrapings as malignant. This tendency to final carcinomatous change places recurring hypertrophic endometritis in the class of so-called pre-malignant lesions.

For reasons already stated no attempt will be made to analyze the type of bleeding resulting from endometritis. It is sufficient to know that bleeding does occur. It is the business of the physician to establish the diagnosis by other means than by clinical evidence. Bleeding fibroids at the menopause should not be taken for granted. The presence of such a



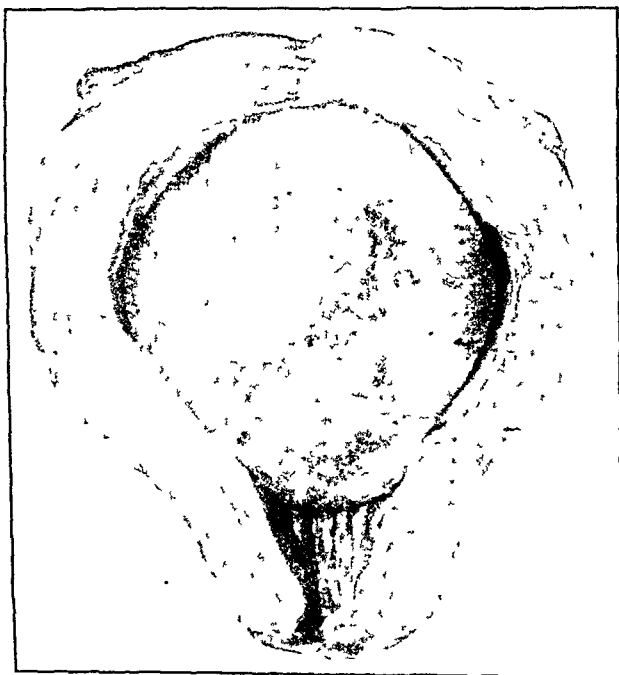
Patient Aged 51

Extreme endometrial hyperplasia: curetted twice within six months

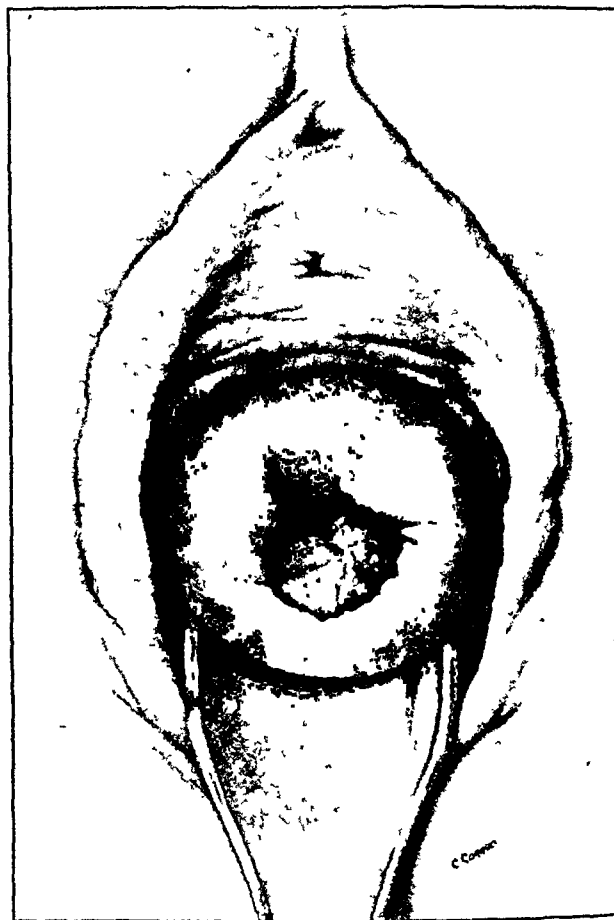
tumor naturally suggests it as the lesion entirely responsible for the hemorrhage. A fibroid which is growing and assumes a new activity at a time when regressive changes should be taking place, ought always to be regarded with suspicion. Degenerative changes of various kinds are common in these tumors during the menopause. It is for this reason that a blind reliance upon x -ray treatments for bleeding fibroids at the menopause is fraught with danger. A number of instances have come under the writer's observation in which, after a series of x -ray treatments and loss of much valuable time, the patients were found to have an adeno-carcinoma complicating the fibroid.

The mucous and fibroid polyps of the uterine cavity require no extended discussion. With the few exceptions in which painful expulsive contractions occur there are no clinical evidences that can be relied upon. Atrophic endometritis is comparatively rare. It does not commonly give rise to bleeding but more

body is seen more commonly in women who have not borne children. It usually appears at varying periods following the menopause. This fact makes bleeding that occurs one or more years after the menopause of great significance. It is seen, however, with sufficient frequency during the time when the menopause is being established and in women who have borne children to make it necessary for every



Small fibroid causing serious menopausal bleeding: dark area indicates site of bleeding.



Infiltrating squamous carcinoma of the cervix.

frequently causes a bloodstained discharge which is not distinguishable from that of the early carcinoma of the body.

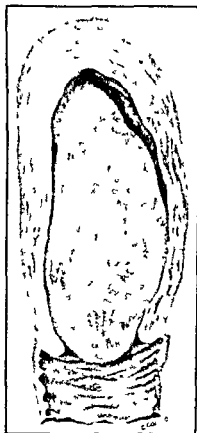
Adeno-carcinoma is obviously the most important lesion of the endometrium that produces bleeding. In a practical discussion it is not necessary to indicate the several forms which may be found but to point out certain practical clinical features. Carcinoma of the

physician to keep the possibility of its occurrence constantly in mind. As a general principle, however, the longer after the menopause that bleeding occurs the more probable it is that a carcinoma is responsible for it. The lesion, being sheltered within the uterine cavity, is not subjected to the traumas that the malignant conditions of the cervix are. A pinkish, serous discharge is often the first indication the woman has. Nor does the extent of the lesion always indicate the amount or type of bleeding produced. The body of the uterus is enlarged as the disease progresses and pain is never an early indication. A sound in the uterus is often a valuable aid in making a diagnosis.

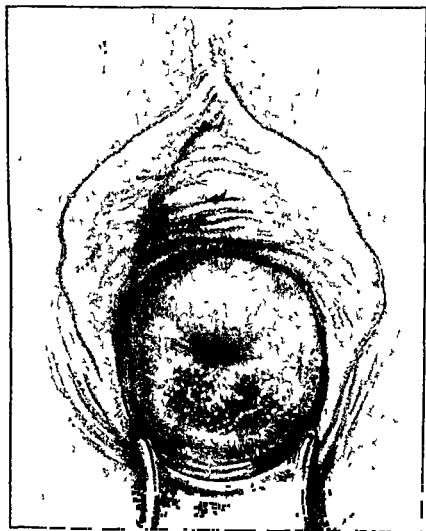
In this brief reference to the various conditions of the cervix and uterine body that may cause bleeding during the menopause there are a few facts applicable to both that stand out prominently. There are no symptoms which alone can be relied upon to diagnose any of these conditions. Dependence must be placed upon a careful and proper examination. Diagnosis is a comparatively simple procedure in case of cervical lesions. Uncertainty is most liable to arise in differentiation between certain cervical erosions and malignant disease. In the more advanced cervical carcinomas there is, of course, sufficient evidence to dispel any doubt. In the less advanced and doubtful cases any question should be promptly settled by biopsy. Not so long ago it was customary to "watch" the condition and when finally the physician awoke to the fact that he was dealing with a carcinoma the patient perhaps had passed beyond the stage when any procedure offered hope of cure. Today such dallying is rarely seen. Women, too, have become more cooperative and a frank statement by the physician as to his doubt and the reason for it, usually results in whole-hearted cooperation on the part of the patient. Examinations are sometimes delayed because the patient is flowing. In former years it was considered very indelicate to attempt examination with bleeding present. This, too, has

changed. A little tact puts the woman at ease and the cause of bleeding can earlier be ascertained, the remedy more promptly applied, and blood saved to the patient.

In the diagnosis of conditions effecting the body of the uterus the pelvic examination is far less conclusive than in the case of cervical



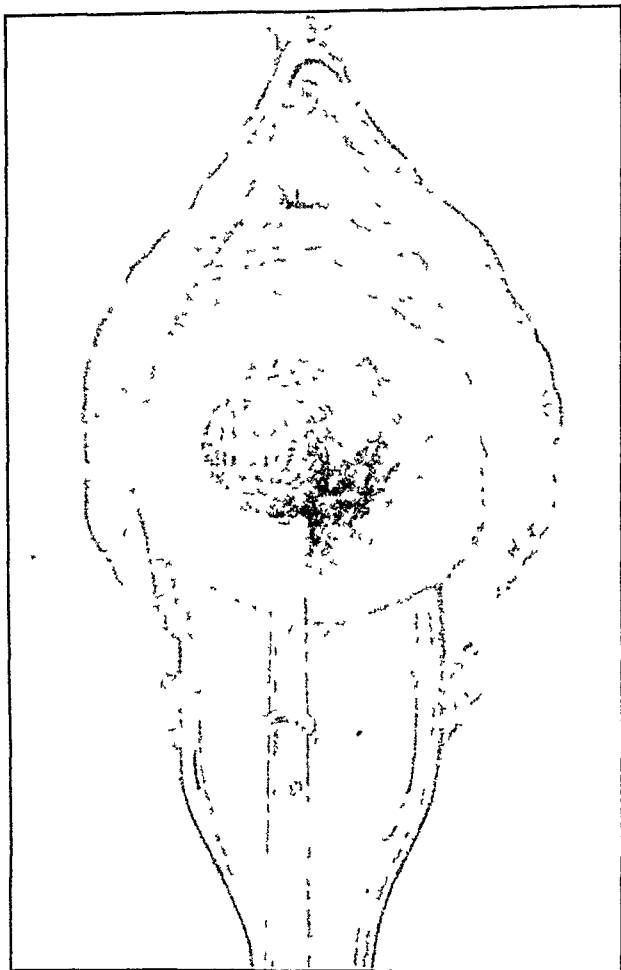
*Patient Aged 52
Large fibroid polyp which caused free bleeding*



Early squamous cell carcinoma

lesions. Here there is only one safe and certain means of diagnosis, exploration and curettage. No physician should hesitate to admit his inability to diagnose a condition which he can neither feel nor see. The possibility of a carcinoma of the endometrium complicating a fibroid uterus should cause one to hesitate in ascribing the bleeding to the fibroid in every case. Certainly at the menopause there should be no delay in removing the fibroid unless curettage has demonstrated that there is no malignancy present. Curettage, in the cases under discussion, should be regarded as an essential diagnostic procedure. The competent laboratories now maintained by county and state health departments offer every facility for the diagnosis of such tissue. It is important to remember that the curettage, to be of value, must be thorough, all the scrapings carefully collected, and the entire material submitted to the laboratory.

The treatment of cervical and intrauterine conditions causing bleeding at the menopause is too large a question for discussion at this time. Many cases are to be dealt with surgically with the use of x-ray and radium in



Patient Aged 49
Proliferating squamous cell carcinoma.

selected cases. While many practitioners may not have the facilities for treating all cases, every physician should be and is capable of assuming the responsibility for a correct diagnosis. As a result of educational campaigns women are coming to appreciate as never before the need for prompt and thorough examinations and to expect from the physician a positive diagnosis. The physician who without examination casually dismisses these cases as due to the "menopause" can not have, nor does he deserve to have, the confidence of the community which he serves.

The entire subject may be summarized in a practical way by four precepts:

1. In abnormal bleeding at or near the menopause the physician should not be content with anything short of a positive diagnosis as to its cause.
2. Biopsy of cervical tissue or examination of material removed by the curet afford in certain cases a sure means of diagnosis.
3. X-ray treatment should never be employed until carcinoma has been excluded
4. Physicians and nurses should constantly seek to dispel the false views held by many women concerning menopausal bleeding.

THE PROPEPTAN THERAPY OF LUTHLEN-URBACH IN THE TREATMENT OF ALLERGIC SKIN DISEASES CAUSED BY FOOD

By JAMES M. MARKIN, M.D., ROCHESTER, N. Y.

From the University Clinic for Syphilis and Dermatology of Vienna, Director, Prof. Dr. W. Kerl.

FOOD allergy is sometimes known to be the cause of a variety of skin diseases—urticaria, prurigo, lichen urticatus, strophulus infantum, eczema and angioneurotic edema; gastro-intestinal symptoms; asthma; migraine; convulsions, etc. These conditions are very often resistant to the usual methods of treatment, especially if the real cause is unknown.

Various methods of therapy have been used. Autohemotherapy and serotherapy have been employed as desensitizing measures. Laroche¹ Richet and Saint Girons did not recommend it. Duke² states regarding his experience with non-specific protein therapy (in the form of

colon bacilli) given intravenously or subcutaneously, that "good results if obtained are rarely permanent." Intracutaneous injections of the specific protein have been at times successful.

The treatment of allergic food conditions by the oral route has consisted of some of the following methods: 1) *True oral desensitization*, by administering the offending food in graduated doses. 2) The indigestion of small quantities of food which are to be taken one hour later at the regular meal have been found sometimes to result in desensitization.

The first men to employ unspecific peptones i.e. the common commercial peptones were

Pagniez, and Pasteur Vallery-Radot³ who reported a moderate percentage of relief Auld⁴, an Englishman, reported better success with the use of two kinds of peptones, animal and vegetable Luthlen⁵ was the first to work with the special specific peptones i.e. peptones derived from protein to which the patient is sensitive After Luthlen's death Urbach⁶ developed this method further and made it practical for therapy

Experience with this method in the Kerl clinic was so convincing of the practicability and high percentage of relief to be obtained, that I deem it justified to give the methods employed in detection and desensitization in detail, and to indicate the results obtained therewith The more so as the more widespread application will show the ultimate value of the method

METHODS OF DETERMINATION OF CAUSE OF ALLERGIC CONDITION

If it is believed that a child or adult is sensitive to a food, as determined by the symptoms and a careful family history, one may begin with a diet poor in protein If possible the patient is taken into a hospital and the same diet to which he is accustomed is given for two days, to determine whether extrinsic or intrinsic allergy is present If, after two days the same subjective and objective symptoms are found, a diet, as suggested by Urbach, is given for two days as follows

8 a m	Tea (without milk) and sugar Bread
12 noon	Soup—made of water, flour, potatoes and carrots Stewed apples
4 p m	As at 8 a m
8 p m	As at noon

In many cases a good effect regarding objective and subjective symptoms will be noticed within 24 to 48 hours If this occurs a new protein food is added every day and the day on which the symptoms reappear it is removed If the symptoms disappear the food is given a second time to make certain that that food is the cause of the symptoms

If the patient has had no effect with this diet, we cannot say that protein is not the cause of the condition, for especially in children also the protein of wheat, potatoe and carrots can be the causative factor

For this reason and because it is not always possible to give so limited a diet, Urbach suggests the use of his Propetan test The principle of this test is to feed the patient only those protein foods for which are prepared the specific peptones called Propeptan* as termed by Luthlen⁵ and Urbach⁶ These peptones

are administered exactly $\frac{3}{4}$ hour before the meal as illustrated below

Hour	Propeptan	Hour	Foods
7 15 a m	Egg, milk, wheat	8 00 a m	Egg, toast, butter, coffee, milk, sugar
11 15 a m	Chicken, potatoes, carrots, strawberries, milk, wheat	12 00 noon	Chicken soup, bread butter, chicken potatoes, carrots strawberries, cream
5 15 p m	Fresh water fish, peas, potatoes, wheat milk, banana	6 00 p m	Bass, potatoes tomatoes peas, bread, butter, banana

The Propetans are prepared in tablets of $1\frac{1}{2}$ grains each according to the method of Luthlen and up to date there are 25 types These were furnished by the Chemosan Union, Vienna III, * * and were derived from the following foods Veal, beef, lamb, pork, chicken, salt-water fish, fresh-water fish, crabs, egg, milk, cheese, rye, wheat, carrots, potatoes, spinach, tomatoes, beans, peas, lentils, rice, sauerkraut, cocoa, bananas, strawberries Other Propeptans may be prepared, as for example horse meat Propeptan, which was administered in a case to be described a little later

The advantage of this method is that the patient is most apt to get immediate relief of symptoms and at the same time enjoys a diet which is both agreeable and of a sufficient caloric value

If a person loses within three or four days a great part of his subjective and objective symptoms then one may feel that he is following the right course At the time when the patient loses all symptoms one type of Propeptan is removed each day If following the removal of milk or another Propeptan a fresh outbreak of symptoms occurs then the Propeptan is removed a second time for accuracy A recurrence of symptoms demonstrates a sensitiveness to that food

Not infrequently people are sensitized to 2, 3, or more foods and for this reason it is necessary to test systematically for sensitiveness to all of the accustomed foods of the patient

The "Elimination Diets" as suggested by Rowe⁷ who has done a good deal of work in America on Allergy, will be found also very useful These diets, five in number, contain

* *Method of Preparation* on The food substance is freed as far as possible from fat hulls etc and reduced mechanically to its smallest elements Next the resulting mass is allowed to digest in a watery solution mixed with the required quantity of effective pepsin until no native albumen can be found Then the pepsin is destroyed by boiling the liquid is freed from the insoluble substances by filtering it is next dialysed and the pepton contained in the solution is precipitated The final product a yellowish to dark brown powder is pressed into tablets

** American Representatives—American Biochemical Laboratories Ltd 235 Fourth Ave New York City

foods, which cause least frequently allergic disturbances. After finding the diet which relieves the symptoms, other foods are gradually added, every food causing symptoms being excluded.

It may be difficult at times to determine the agent responsible for the reaction. One should then think of the unusual foods. The following two cases which I have seen, serve as illustrations. In a recent case of a child of poor parents who was sensitive against sausage, the commonly used ingredients of sausage were given to the patient but without resulting symptoms. Finally, after trying horsemeat, this was found to be the disturbing element. With the administration of the specific Propeptan, the patient remained free of symptoms. In a second case where a man was sensitive to sausage, it was determined that pepper caused the lichen urticatus and not protein.

In chronic types of urticaria where the common protein foods were found to be tolerated one must think of the vegetable proteins, especially those belonging to the leguminous group as lentils, beans and peas. Occasionally, one also finds the cause in fruits. I have seen a case of hypersensitiveness against lemon, one against orange, another against apple. Butter may be a causative factor, either in connection with milk hypersensitiveness or alone. For the butter, milk Propeptan is used.

TREATMENT

If the cause of the allergy is determined the treatment is as follows:

First: *Avoidance of Cause.* Non-vital foods such as bananas, crabs, etc., may be omitted from the diet.

Second: *True Oral Desensitization*, where the foods are essential or cannot be conveniently avoided; by minute dosage of offending food in increasing amounts until tolerance is developed (this method is, however, not without danger and requires experience to avoid serious reactions.)

Third: *The Propeptan Method.* The offending food or foods are included in the patient's diet but are preceded $\frac{3}{4}$ hour by the corresponding specific Propeptans in 1-2 tablets ($1\frac{1}{2}$ -3 grs.) dosage per protein. At least four hours should elapse from the previous meal. Occasionally it may be necessary to administer more than two tablets, i.e. up to three or four. A period of 2 to 3 weeks of daily administration usually suffices to produce desensitization.

RESULTS

In order to demonstrate that the Propeptan method is not alone important for the treat-

ment of allergic skin reactions but also for other manifestations of food allergy, I describe first two cases presenting gastro-intestinal disturbances.

S. M., Female, age 13 months (my own child). About 8 hours following ingestion of egg, vomiting, diarrhea and colic occurred. An urticarial eruption of a somewhat longer duration appeared later. Following ingestion of 2 egg Propeptan tablets (grs. 3), 45 minutes before her meal containing eggs, no symptoms were noticeable. As the child was an infant and was sensitive only to egg, no attempt as yet has been made to desensitize her.

F. M., Man, age 33 years. Following a Billroth resection of the stomach for a duodenal ulcer, the patient complained of severe nausea, tachycardia and sweating immediately following his meals over a duration of four years. He stated when he first appeared at the hospital that he was only able to drink tea at that time. Lost 13 Kilos in four years. X-ray investigation showed that the stomach had good functional anastomosis. Gastric juice decreased, HCl 11, total acidity 19. By the Propeptan diet test, it was found that the patient was sensitive to egg, milk and mushrooms. After drinking half a pint of milk or eating a quarter of an egg, he developed severe nausea, tachycardia of 120 and a general outbreak of sweat. After taking 1 Propeptan tablet ($1\frac{1}{2}$ gr.) of egg in the usual manner, the symptoms appeared but somewhat delayed. After administering 2 egg Propeptans the symptoms were more mild and appeared after two hours. After 4 Propeptan tablets the patient remained free of symptoms. In order to see whether the effect of the peptones were specific or not, the patient was given, without his knowledge of the change, 4 chicken Propeptan tablets in place of the egg type. After 7 minutes he developed a severe attack of tachycardia. The treatment consisted in the daily feeding of milk and egg with previous administration of Propeptans. In the first week he received 4 Propeptan tablets of each, in the second week 2, and in the third and fourth 1. After 2 weeks his weight increased 2 Kilograms. After 4 weeks he was desensitized to egg and milk.

From a dermatological aspect, Lichen Urticatus and Strophulus Infantum are most often the cutaneous expressions of food sensitization. Urbach⁸ states that 90% of the cases of Lichen Urticatus and Strophulus Infantum are caused by food. The most frequent offending foods are eggs, milk, pork and wheat.

E. M. Female, 10 months. Had severe Strophulus Infantum. After albumin free diet, symptoms were little improved. Child was

given Propeptan diet for 3 days, at the end of which time she was quite free of symptoms. Upon removal of wheat Propeptan a fresh attack occurred on the following day. Wheat Propeptan was again administered with the same good results as formerly. Six days later a cereal (wheat) was fed to the child which resulted in a fresh attack. The removal of the other Propeptans resulted in no symptoms. After two weeks in which the child took twice daily wheat rolls with Propeptans she was permanently desensitized.

S M Daughter of an American physician, age 2½ years. Lichen Urticatus. Mother gave history of being allergic to strawberries. Child had no skin eruption until she came to Vienna. The child was placed on a diet containing tea with sugar, bread, soup made of water, flour, potatoes and carrots, and stewed apples. Only slight improvement occurred. She was next given Rowe's Elimination Diet No 1 and the symptoms immediately disappeared. Other foods were added to the diet. Following the ingestion of wheat and rye bread the symptoms reappeared and upon eliminating the bread the urticaria cleared up. The child was fully desensitized after 14 days by the daily administration of 2 wheat and 2 rye Propeptan tablets given ¾ hour before the meal containing wheat and rye bread.

I have seen a girl of 15 years with characteristic lesions of Prurigo (Hebra) with much enlarged hard lymph glands. Duration 9 years. Milk and beef were found to be the causative factors. The corresponding Propeptan treatment was given over a period of 3 weeks. The skin lesions and lymph glands disappeared entirely and now the patient is able to drink milk and eat beef without peptonates and with impunity.

Sometimes nutritive allergy appears in very unusual Dermatological manifestations as seen in the two following cases. Thus, first, was seen a case similar to dermatitis herpetiformis (Dühring) in an elder woman with residual bullae and with extreme itching. The duration of her condition was ten years. She was found sensitive to egg. Her lesions cleared

up following the administration of Propeptan for 4 weeks.

The other case*¹ was a woman who suffered for three years of a so called urticaria cum pigmentatione beginning with urticaria and vesicles. Beef and veal were found to be the offending foods. The patient was cured by the specific Propeptan therapy.

SUMMARY

In cases in which the history or the symptoms of a patient speak for nutritive allergy, one may use the so called "nutrition experiment" ("Ernährungsexperiment") of Urbach, "Elimination Diets" of Rowe, or the Propeptan method of Urbach to determine the offending food or foods.

For desensitization the Propeptan therapy is recommended. Three quarters of an hour before the meal containing the offending foods the corresponding Propeptans are administered daily. Desensitization generally occurs in about two weeks.

Good results were seen in nutritive allergic conditions of lichen urticatus, urticaria, prurigo, in a peculiar type of chronic eczemas*² as well as in cases of intestinal allergy, and other allergic conditions caused by food.

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*¹ Both cases were presented by Urbach at the Viennese Dermatologic Society of May 7th 1931

*² Work on the relationship between eczema and food allergy is being done by Urbach and Fasal of which a summary may be found in the *Archiv für Dermatologie*, vol 163, 1931

RECENT AGE TRENDS IN POLIOMYELITIS

By MILDRED WEEKS WELLS, MD, NEW YORK, N Y

IN recent years a tendency toward an increase in the incidence of poliomyelitis in the higher age groups has been noted. Undoubtedly this is directly contrary to what one would expect, considering the greatly increased intercommunica-

tion of late years and a presumably increased dissemination of the virus. This subject has seemed of sufficient importance to justify a preliminary publication of some of the data which have been collected in the course of an epidemiological study

of poliomyelitis made under the auspices of the International Committee for the Study of Infantile Paralysis.*

Forsbeck and Luther (*N. E. J. Med.*, 203:1115, 1930) called attention to such a trend in age distribution in Massachusetts. Up to about 1918, there was apparently little or no change in the age distribution. Since then, the relative number of cases in the 0-4 year group has markedly decreased, while there has been a compensatory increase in the relative number of cases in the age groups 5-9 and 10-14. The percentage of cases occurring in the age group 15-19 and in adult life has remained fairly constant. Figures taken from a table prepared by these authors, together with figures obtained through the courtesy of Dr. Gaylord W. Anderson, show this trend. (Table I.)

TABLE I

PERCENT OF DISTRIBUTION OF CASES OF POLIOMYELITIS IN MASSACHUSETTS BY AGE GROUPS

Year	Total No. of Cases	Per Cent of the Cases in Age Groups	0-4 Yrs.	5-9 Yrs.	10-14 Yrs.	15-19 Yrs.	20+ Yrs.
1916.....	1,927	69.7	19.8	5.9*	*	4.6	
1920.	696	53.2	25.3	10.3	5.2	6.0	
1924.....	277	47.0	24.2	14.6	5.6	8.6	
1927.....	1,189	45.9	30.9	11.4	6.0	5.8	
1930.....	503	38.1	38.9	12.6	5.2	5.2	
1931.....	1,428	27.6	40.6	16.2	8.0	7.6	

* For 10-19 yrs. in 1916 grouping.

Knowlton reports a similar trend in Connecticut (*Month. Health. Bull., State of Connecticut*, 46:3, 1932). The most striking example is seen however in the figures of the age incidence in the three major epidemics from which New York City has suffered. Our attention was called to this by Dr. Jungeblut. Table II gives the age grouping for New York City, 1907, 1916, and 1931. The figures for 1907 are unfortunately not given by standard age groups, so that to facilitate comparison the cases for the 1916 epidemic have been given by both age groupings.

TABLE II

PERCENT OF DISTRIBUTION OF POLIOMYELITIS CASES BY AGE GROUPS IN NEW YORK CITY IN THE EPIDEMICS OF 1907, 1916, AND 1931

Age Group (Old Style)	1907 ¹ Cases	1916 ¹ Cases	Age Group (Standard)	1916 ¹ Cases	1931 ² Cases
	729	9,131		9,131	3,898
0-1	8.5	11.1			
1-5	82.0	74.7			
6-10	6.4	10.5	0-4	79.2	53.3
11-15	1.9	1.9	5-9	16.2	30.8
16-20 .....	.7	.6	10-14	2.4	10.3
Adults .....	.4	1.2	15-19	.8	2.9
			20+	1.3	2.7

¹ The age incidence for the 1907 and 1916 epidemics is from Lavinder, Freeman, and Frost (*Pub. Health Bull. No. 91*, p. 109, 1918).

² The age incidence for the 1931 epidemic has been given to us through the courtesy of the New York City Health Department.

* Milbank Fund for Research on Poliomyelitis.

Limper, Thelander, and Shaw (*J. Prev. Med.*, 5:475, 1931) have called attention to the high incidence in California of persons 15 years of age and over in the 1930 epidemic. Although much the same areas of the state were affected as in 1925 and 1927, the adult percentage for the state as a whole in 1930 was 21.5, as compared with 18.3 in 1927; while the percentage of adult urban cases was 23.6 in 1930 as compared with 16.7 in 1927.

No figures are available which give the specific attack rates by age groups over a period of years. We know that there has been a marked change in the age make-up of the population even in the last ten years. Louis I. Dublin, in an analysis of the 1930 census, states that in 1930 the 0-4 age group in the United States was only 9.3 per cent of the total population, whereas in 1920 it was 10.9 per cent. Whether the attack rates for the various age groups will show so marked a trend as the percentage distribution remains to be seen.

The explanation is not known. Anderson (personal communication) has pointed out a similar trend in the age incidence of diphtheria in Massachusetts. This was quite marked until the extensive immunization of children of school age caused a temporary rise in the percentage of pre-school ages, but has recently again become visible. Thus it would appear that, whatever the explanation, this tendency is not peculiar to poliomyelitis.

Forsbeck and Luther suggest the possibility of an increased susceptibility of children born during the war years, but the figures for the 1931 epidemic would seem to cast doubt on such an explanation.

Aycock (personal communication) suggested to us that better diagnosis, a more general appreciation of the fact that poliomyelitis is not necessarily a disease of infants and young children, is a factor. While no one can doubt that better diagnosis must be reckoned with in this connection, the differences seem too great to be explained chiefly on such a basis, nor would such an explanation of course apply to diphtheria.

Jungeblut (personal communication) sees in the trend in age incidence in New York City a result of the drastic restriction of immigration in 1915. He argues that, since resistance to poliomyelitis is primarily a function of maturation, the age incidence in a heterogeneous population such as that of New York City will vary with the proportion of persons of northern and southern nationalities. The greater the percentage of slowly maturing north-Europeans, the higher will be the age incidence; the greater the percentage of quickly-maturing south-Europeans, the lower the age incidence. The immigration restriction excluded more particularly the south-Europeans. Recent experimental work (Jungeblut and Engle, *New York Acad. of Med., Pediatric Section*, Nov. 12, 1931), showing that virucidal substances may

be found in the blood after an artificially produced change in the endocrine balance of monkeys, would lend weight to this argument

The study of variations in age trends in poly-myelitis and in other diseases may yield data of rather far-reaching epidemiological significance

RENAL ANOMALIES

By JAMES R. LISA, M.D., and JACOB LEVINE, M.D., NEW YORK, N. Y.

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RENAL anomalies are always of interest from the viewpoint of pathology, and frequently have a direct bearing on surgical procedures. They are found not infrequently during routine autopsies. The present report covers the anomalies found in 1200 consecutive autopsies performed at City Hospital, and includes all types with the exception of congenital cystic kidneys.

Anomalies of the blood vessels. Ten cases of anomalous vascular trees were found. Six were in males, four in females. Although anomalies of the veins are not infrequent in other parts of the body, those of the renal veins are extremely uncommon. Two cases were found, one with the left renal vein situated posterior to the aorta, another with a double right renal vein. Both these cases were associated with an anomalous arterial supply.

Supernumerary arteries were found much more frequently. In eight cases, this was unilateral, a double artery being present on the right in five cases, on the left in two, and in one other case, three being present on the left. In two cases, supernumerary arteries were present on both sides, two left and three right in one case, and bilaterally double in another. The mouths of the arteries usually were close together at the normal site. In two instances, the origin also was anomalous: one at the bifurcation of the aorta, the other midway between the mouth of inferior mesenteric artery and the aortic bifurcation. In both these cases, the supernumerary arteries were bilateral. The arteries usually entered the kidney near or at the hilum. In the two cases of anomalous origin, these arteries entered at the poles.

Anomalies of the ureters. Eleven cases were found, seven in males, four in females.

There were six cases of double pelvis, double ureter, and double ureteral orifice, five unilateral and one bilateral. Of the unilateral cases, three occurred on the left side and two on the right.

There were five cases of unilateral double pelvis, bifid ureter and single ureteral orifice. In three of the cases, this was present on the left, one of them being associated with a double ureter on the opposite side. The other two cases occurred on the right side. The points of junction of the bifid ureters varied from bladder wall to half the distance to kidney pelvis.

In one case, the right ureter emptied into the bladder at the center of the interureteral ridge.

Fusion of the kidneys. This was found in three cases.

One case, male, presented fusion of the lower poles to form a typical horse shoe kidney. This was associated with anomalies of the heart and aorta.

Two cases, one male and the other female, showed fusion of both kidneys at the normal site of the left kidney, the fused organs weighing 250 and 300 gms. Externally, the line of fusion was marked by a horizontal fibrous band, on section, it was indefinite. Each half had a separate pelvis and ureter, that of the upper half terminating at the left ureteral mouth, that of the lower at the right mouth. Evidently, from the arrangement of the pelvis and ureter, the lower half of the kidney mass corresponded to the right kidney. The adrenals were in their normal situations. In one case where the circulation was recorded, each half had a separate renal artery to the pelvis, the upper arising from the aorta at the level of the normal site, and the lower below the inferior mesenteric artery. The renal veins corresponded to the arteries and drained into the inferior vena cava.

Congenital vestigial kidney. One case, female, had only vestigial remains of the right kidney, the size of a thumb, with a non patent ureter. The left kidney weighed 250 gms and was normal as was its ureter.

Complete absence of kidneys. In one premature stillborn female infant there was no trace of kidneys or ureters. The bladder was normally placed, but with no ureteral orifices.

Congenital displacements of the kidneys. Three cases were found, two males, one female. They were all unilateral, two being on the left, one on the right. The kidneys were situated at the level of the iliac crest. The ureters were correspondingly shortened. One of these kidneys was supplied by a renal artery arising just above the bifurcation of the aorta.

Summary. Anomalies of the kidneys found in 1200 consecutive autopsies are summarized. They include all types except congenital cystic kidneys. Anomalies of the arteries, and pelvis and ureter were found the most common. Fusion of the kidneys with unilateral situation was unexpectedly more frequent than reports would indicate.

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For list of officers of County Medical Societies, see January 15th issue, advertising page xxviii

Annual meeting, Hotel Statler, Buffalo, N. Y., May 23-25, 1932

NEWS REPORTS

The individual members of county medical societies, like those of all other organizations, are prone to let the officers do all the work, which, of course, is what the officers and committeemen are assigned to do. But the members are expected to know what the officers are doing.

This issue of the Journal contains a wealth of news regarding the activities of the State Society and the County organizations. An important news article is that describing the regional con-

ference conducted by the State Committee on Public Relations, in which the County Chairmen described the contacts which the County Committees on Public Relations are making with their local boards of supervisors, welfare officers, and other public officials. That by Dr. T. H. Cunningham, describing the work in Warren County, will be of special interest to members of the Public Relations Committees in other counties, and will inspire them to go and do likewise.

BROTHERHOOD

A doctor's attitude toward public health work is dependent largely on his temperament or inborn characteristics. Every man's nature is a combination of temperaments which all possess to a varying degree. The fundamental temperament essential in public health work is that of brotherhood. Some doctors have this attribute developed so highly that they throw themselves wholeheartedly into service for others with no regard for their own personal reward. A marked deficiency of brotherhood constitutes individualism or selfishness. The membership of every county medical society includes those in whom the attribute of brotherhood is highly developed, a few members with no outward evidence of its existence, and a main body of members in whom brotherhood and individualism are evenly balanced as in the average person.

Doctors rank with teachers and ministers of the Gospel in the possession of the trait of brotherhood. The reason is not so much that a medical training fosters that mental attribute as that the majority of medical students seek entrance into medical schools because they already possess the attribute and are impelled by it. Those who consider the study of medicine for gain usually enter other professions where honors and financial rewards are more evident.

Every doctor, no matter how individualistic his temperament, feels that the medical profession is under obligations to give health service to the community, and he is willing to subscribe to that creed as an abstract idea which is to be put into actual practice by his county and state medical societies.

The amount of service which a doctor is willing to give to his medical society depends largely on his temperament and sense of brotherhood. It is to the credit of the medical profession that the majority of doctors show their approval of the

work of their societies by their prompt payment of dues and their willingness to give specific service on committees.

It is a natural human trait to find fault with the attitude of other persons, but criticism is a two-edged sword that wounds its wielder as well as its intended victim. Arguments create dissensions, and a brotherhood founded on disputed ideas is practically impossible, for there are always two sides to a question and therefore, two opposing factors.

The idea of brotherhood to most persons implies personal friendliness, but in public health, as in all other great movements there often exists a brotherhood of an idea which may be so dominant that it submerges personal considerations. For example, insistence on the adoption of the platform "A county health department for every county" has threatened the rupture of personal friendships and delay in the execution of other desirable phases of public health work. When it comes to a test of strength, the brotherhood of personal friendship will triumph over that of an idea, no matter how disinterested its proponents may be.

Dissenters are not converted by argument and criticism, but by their personal respect and friendship for those who propose a different line of action and give good reasons for their opinions.

A dinner conference will settle a factional dispute more quickly and happily than a dozen public meetings will do. Nearly every dispute in a medical society is based on the dominance of an idea in the mind of a leader. Whether or not that idea shall result in dissension will depend largely on the personal attitude of that leader. If he has a sense of personal brotherhood and friendly consideration toward his fellow members, he will retain his influence even if he is unsuccessful in his proposal.

HUMANITY'S FRIEND—DR EDWARD M BURNS

The title of this editorial is also the title of an editorial in the *Poughkeepsie Evening Star* of February 1, 1932, in memory of Dr Edward M Burns, for thirty five years a beloved practitioner of the city. His medical colleagues subscribe to the sentiments of the editorial, and desire that publicity shall be given to one whose life exemplified the high ideals of the medical profession.

'He held a unique place in the city, a place he created for himself by his years of practice here. No one who went to him for help was turned away, no medical task was too arduous, no call too late, no trip too long. Anecdotes of his

service to this community's suffering humanity have grown about him for years, so that a legend of his good works will live beyond him until the last person whom he aided, or the last person who remembers such service, is gone.

"Modest retiring, hard working, Dr Burns went about his duties without ostentation yet always striving to relieve the suffering who turned to him for aid. And now he is gone—his life is only a memory. It is a memory, however, that will grow stronger and richer with the passage of time because he will be missed, and when people miss him they will recall the real worth of his services to this community."

POPULAR OPINION OF THE COUNTY MEDICAL SOCIETY

What do people say about your County Medical Society?

Do they realize that your Society is the advisor of the community in public health matters?

Do the people turn to the County Medical Society for final advice when lay health organizations propose clinics and consultations and lecture courses?

Let us ask another question: Do the people know that your County has a Medical Society? Go to the first ten business men that you meet in your home town, and ask each one this last question. The result will be startling.

One or two business men will say that they occasionally read accounts of meetings at which doctors get together to raise the prices on their calls.

Half a dozen men will say that they understand that the doctors want the county to build a tuberculosis hospital so that they will not have to get out of bed nights in order to minister to dying patients.

One or two will say that the president of the Society is quite a publicity hound, since he gets his name in the paper every month or two.

About one business man in the ten will show an intelligent knowledge of the aims and aspirations of the officers of the County Medical Society. The other nine will say that they "suppose" that the doctors have a county organization like that of the lawyers, or ministers, or school teachers; but only a small minority of business men realize that the County Medical Society is a vital, active force in the practice of public health in the community.

It is most encouraging that, when a body of business men, such as a board of trade, are instructed about a public health project, they give their hearty support to the proposal. The practice of public health by County Medical Societies is scarcely ten years old; and people are only now beginning to realize the wide scope and importance of the work. The progressive response of the people is most encouraging.

LOOKING BACKWARD

This Journal Twenty-five Years Ago.

The Clinical Laboratory:—This Journal of April, 1907, discusses the value of the laboratory in the practice of medicine, and advises the young doctor to make use of his laboratory knowledge and experience. The following editorial advice is being carried out to an extent that was not anticipated in 1907:

"As the younger man becomes more and more engaged with general practice he will give less time to the laboratory, but it is surprising how habits of accuracy in diagnosis cling to a man who has once practiced them. It is also surprising how difficult it is for a man who starts in practice 'by the rule of thumb,' to get away from his careless habits. About the worst thing that can happen to a young man is to enter immediately into a large and driving general practice before he has had a chance to get himself squarely oriented with regard to general medical work. The best results are to be secured by gradually growing out of the clinical laboratory into general practice.

"The equipment necessary for applying the modern methods of clinical diagnosis is neither formidable or out of the reach of the general practitioner. It does not require a complicated laboratory, although a laboratory is most desirable. A table for a microscope and its appurtenances is necessary. If there are no rooms adjacent to the consulting room, a small incubating oven may be set up in the kitchen. The apparatuses for blood counting and for determining blood pressure should be added to the clinical thermometer and the stethoscope. The important examinations to be made are of the sputum, the urine, stomach contents, feces, the blood, and bacteriological tests of mucous membrane discharges. The young men who are now being sent out to practice medicine have been taught these things, and they should practice them. The best conditions of general practice are served when the busy practitioner associates with him such a man. Their mutual interests will be helped by the cooperation."



MEDICAL PROGRESS



Metabolic Changes and Otosclerosis.—Clinical experience makes it evident, say H Behrendt and J Berberich, that otosclerosis must be regarded as a local disease that is closely related to the metabolism of the entire organism, but it has been difficult up to the present time to bring definite proof of this. The authors accordingly undertook to clear up the acid base equilibrium in otosclerosis. This could not be done by determining the hydrogen ion concentration of the blood, since it can easily be demonstrated that a diminished alkaline reserve may exist in presence of either a compensated acidosis or an alkalosis. First of all, therefore, the total carbon dioxide content of the serum was determined, and was found to average 18 volumes per cent lower than in healthy persons. This could only be interpreted as an indication of a diminished alkaline reserve, the cause of which, however, could not at once be recognized.

Uranalysis threw no light on the subject, nor did an examination of the different ingredients of the blood, until it came to tests for lactic acid, which was found to be 20-30 per cent lower than that in normal individuals, its average value being 7.4 mg per cent, as against a normal value of 10.4 mg per cent. This finding may therefore be accepted provisionally as an indication that an acidotic trend of the metabolism is more probable than an alkalotic. From this it was concluded that an acidotic state of metabolism in patients with otosclerosis is to be regarded as the expression, or the cause, of a general slowing down of the metabolism. In 16 cases of demonstrated otosclerosis a clear lowering of the basal metabolism could be established. It is of interest that 4 other cases which had been subjected to treatment with ultraviolet rays showed a basal metabolism not lowered but within the upper limit of normal. A glance over the totality of metabolic characteristics in otosclerosis gives rise to a very definite impression that some actual metabolic disease is present, constituting a constant and uniform disturbance of the state of equilibrium.

The only clinical finding that might be urged against an acidotic tendency is that of the electrical and mechanical hyperexcitability observed in these subjects. More recent studies, however, have shown that this is not the case, and that hyperexcitability is less frequently present than in normal individuals, so that this objection has no force. It is very evident therefore that endocrine disturbances are at the bottom of all these manifestations.—*Klinische Wochenschrift*, December 26, 1931

Some Points in Connection with the Treatment of Glaucoma.—R H Elliot claims that no case of glaucoma should be submitted to operation if the use of miotics, the employment of massage, and attention to the patient's general health suffice to arrest the course of the disease and to keep the case *in statu quo*. Of the two miotic drugs, pilocarpine is to be preferred to eserine in the majority of cases, as it causes less conjunctival irritation, does not give rise to the same measure of spasm and headache, and when suitably employed, maintains the necessary contraction of the pupil. When, however, it is a question of producing miosis as rapidly as possible in a patient with congestive glaucoma, eserine is the drug to employ. Pilocarpine should be used in the weakest doses that will maintain efficient miosis, and should be given the last thing at night, the first thing in the morning, and about three o'clock in the afternoon. This timing is highly important. If there is difficulty in maintaining miosis, this can best be combated by the use of silver collosol, alternated with hazeline eye drops. If miosis cannot be maintained, operative intervention may then become a necessity. Certain general rules should be impressed on every patient. He should avoid over-fatigue, get regular sleep, take regular meals, avoid alcoholic excesses, stooping and all sorts of strain, and, most important, all causes of anxiety. The following factors serve to guide the treatment: Tension of the eye, central visual acuity, curtailment of visual fields, enlargement of the blind spot, failing light sense, cupping of the optic disk. The use of belladonna should be avoided in all doubtful cases, especially when there is a family history of glaucoma. The use of cocaine or any other mydriatic in order to test an arterial pulse, by light pressure with the finger on the eyeball, is not worth the risk involved. In the past eighteen years the author has seen a number of cases in which glaucoma has been induced by the instillation of various mydriatic drugs including cocaine, homatropine, and atropine. The performance of iridectomy is vastly preferable. An arterial pulse is a sign which should fill the surgeon with anxiety. Until the sign has disappeared the patient should be kept in bed under the influence of sedatives, eserine should be used freely, a brisk purge should be given and leeches applied to the forehead. As soon as it is evident that nonoperative treatment is failing, operation should be performed without loss of time. The later the operation the worse the prognosis, though the latter is not hopeless even in very late cases.—*British Medical Journal*, December 26, 1931, ii, 3703

The Beginnings of Alcoholism.—W. Mayer-Gross points out, in the *Deutsche medizinische Wochenschrift* of November 27, 1931, that the point at which the alcohol habit becomes a disease cannot be determined simply by definition, but must rest on an empiric foundation. The fact that the damage done by alcohol does not as a rule become the object of medical treatment until much later in life, should not blind us to the fact that simple habit turns into addiction generally quite early. To understand the origin of alcoholism as a disease we must understand the significance of those disturbances and defects that are present in the consciousness of the drinker. Unable to face the conflicts of life, he uses alcohol to induce forgetfulness of the demands that reality makes upon him. By means of intoxication he is able to lose himself in a timeless condition, where past and future do not exist. It is customary to stress the special danger that attends the psychopath, especially of the passive type. But great caution is necessary in the assumption of a primary psychopathy as the basis of alcoholism. For chronic alcoholism produces permanent changes of character which strongly resemble psychopathy, making it extremely difficult to determine how much of these is attributable to a psychopathic anlage, and how much to the effect of alcoholic poison. But it would be far from the truth to take the view that only individuals who are psychically inferior can become alcoholics. This is seen from the fact that only a small proportion of women become addicted to alcoholism, yet psychopathic anlagen are no less frequent in them than in men. It appears that those physicians who are not psychiatrists are as a rule slow to recognize alcohol as the etiologic factor in the disease to which it leads; they appear to be suffering with an ineradicable scotoma, that is unwilling to see the obvious. The point of attack for alcoholism lies in prophylaxis. Alcoholism is a community disease, its beginnings must be systematically attacked by the cooperation of physicians with boards of health, in the same way that this is done in connection with other community diseases, such as tuberculosis.

Rheumatic Heart Disease.—David Davis and Soma Weiss, writing in the *American Heart Journal*, December, 1931, vii, 2, present a study of the incidence and rôle of rheumatic heart disease in the causation of death in 5,215 consecutive necropsies. They have correlated the morphological findings and clinical data, for the reason that statistics based on clinical data alone may fail to include a considerable number of cases. Of the 5,215 necropsy records of patients from the poorer class cared for in the Boston City Hospital between 1905 and 1929 inclusive, rheumatic heart disease was revealed in 474, or 9.1 per cent of the cases. Of this group 56.6 per cent were

males and 43.4 per cent were females. The sex distribution in the total necropsy examinations was 62 per cent for males and 38 per cent for females. Thus rheumatic heart disease was slightly more prevalent among the males. Of the total number with rheumatic heart disease 3.8 per cent were Negroes; 8 per cent of the autopsied patients were Negroes. This would indicate that rheumatic heart disease occurs about half as frequently among Negroes living in New England as among the white race. Rheumatic heart disease was directly responsible for death in 164 instances, or 34.5 per cent of the total group with this affection. In an additional group of 41 cases, corresponding to 8.6 per cent of all the cases in this group, subacute bacterial endocarditis was superimposed on rheumatic heart disease. In 21 cases, or 4.4 per cent of the cases in this group, malignant endocarditis developed in association with rheumatic heart disease. As the subacute and primary acute endocarditis developed on previously damaged rheumatic valves, in this group, representing 13 per cent of all cases with rheumatic heart disease, death was caused indirectly by rheumatic heart disease. In 205 cases, or 43.2 per cent of the cases with rheumatic heart disease, the character of the cardiac involvement was such that the lesion did not contribute to death. The study shows that rheumatic heart disease is surprisingly prevalent among the poorer section of the population of Boston. Its frequency (9.1 per cent) approaches that of carcinoma (10.4 per cent). Rheumatic heart disease frequently exists, however, without causing obvious impairment of the circulation.

Anemia of Alimentary Origin in Childhood.—According to Louise Weill, the clinical study of anemias of alimentary origin is a complex matter. Experiments are necessary, and these demand a rigorously careful technique. Blood examinations carried out during periods of inanition do not show anemia, but after a few days of re-alimentation a hypoglobulia and a fall of hemoglobin are observed. Clinically, subjects who have been suffering with inanition remain pale for a long time. The quality of the alimentation is also of great importance, carbohydrates being of no value for blood regeneration, and excess of fats having an anematizing effect. The exclusive use of albuminoids is harmful, but these substances are indispensable for normal blood regeneration. Certain amino-acids would seem to be more active than others. Dehydration represents a cause of error. Iron is indispensable, and its lack produces an anemia of chlorotic type, frequently seen in infants who have been fed too long exclusively on cow's milk, this product being very poor in iron. Treatment with iron in large doses gives excellent results, and copper is said to have a good effect, experimentally. Vitamins A and B seem

to have a slight effect upon the blood, and vitamin C has an undeniable one. Its absence causes scorbutic anemia or the anemia of pre-avitaminosis, which is favored by the very early age and growth of the infant. Iron alone produces no results here. Lemon juice has a very good effect, and works rapidly. Vitamin D, so far as we can at present observe, does not appear to have any direct effect on the blood. Lack of iron is the main factor in producing anemia in the child fed exclusively on cow's milk. Young infants fed exclusively on goat's milk suffer with severe anemia, accompanied by hypotrophy, the pathogenesis of which is not well understood. Experimentally, the cause does not appear to lie in absence of vitamin C or of iron, nor in hypoalbumination. Liver acts rapidly upon scorbutic anemia, but only slowly upon the lesions in the bones. Hence in severe cases it must not be substituted, but must be given in association with lemon juice. Hypoalbumination is what has to be feared in these cases; the diet must be varied and perfectly balanced. In fact, balance must be the guiding principle throughout treatment.—*Journal de Médecine de Lyon*, January 5, 1932.

Aplona, a Simplification and Improvement of the Heisler-Moro Apple Diet.—Siegfried Wolff, writing in the *Deutsche medizinische Wochenschrift* of December 25, 1931, recalls the good results already obtained by use of the Heisler-Moro method of administering raw apples reduced to a pulp, for the control of diarrhea. Long observation, however, revealed that the results are uneven, some kinds of apples lending themselves better to the method than others. Furthermore, it is not always possible, at all seasons of the year, to obtain the apples best suited for this use. For this reason it was desirable to provide a standard product, if possible, that should be available irrespective of the time of year. Such a product can now be had, in the shape of aplona, an unadulterated apple powder, 100 grams of which are equivalent to 1000 gm. fresh apples. This powder can be given in warm water or tea, or in barley or rice water, after standing 5 minutes in a hot water bath, with care that the temperature shall not exceed 50° C. (122° F.). In this time the powder swells, and can then be taken hot or cold, sweetened with or without saccharine, according to taste. The flavor is highly agreeable, quite characteristic of apple, and is enjoyed by both children and adults. A further advantage of this method of administration is that it can be used in any concentration desired, from 1 to 10 per cent. Wolff begins with a dosage, for infants under 6 months old, of 100 grams of a 2 per cent concentration 6 times a day; infants over that age receive the same dosage of a 4 per cent preparation. Older children are given 150 grams of a 4-6 per cent solution 5 times a day;

but there is naturally no need of strict schematization in the dosage. On both the second and the third day the dosage is increased, both in amount and in concentration; in most cases a part of the meal may by the third day consist of other forms of diet, of a light nature. It has been Wolff's experience that the stools always become formed on the second day, and only in exceptional cases has it been necessary to give aplona after the fourth day. Its chief indication is in cases of acute dyspepsia. It has given excellent results in parenteral dyspepsias in association with grip, pneumonia, otitis, and infectious icterus. The author does not mention ordinary applesauce which would a priori appear to be the same in action as powdered apple.

Abdominal Discomfort.—The word discomfort has been chosen by A. E. Russell to embrace the earliest subjective sensations that give warning of the onset of serious disease. Some of the grossest disturbances within the abdomen, namely, ascites, tuberculous peritonitis, enlargement of the spleen or of the liver, deep-seated abscess, and malignant growths, may give rise to little pain. The view that abdominal pain must be due to stimulation of the afferent visceral fibers and is not felt in the viscera at all, but is referred to more superficial structures, has not been substantiated. The existence of real visceral pain is again recognized. Of the structures contained within the abdomen the peritoneum lining the anterior abdominal wall is the most sensitive. The alimentary canal is insensitive to tactile stimuli and is very inadequately stimulated by heat, except as regards the esophagus and anal canal. The rôle of hydrochloric acid in causing pain is somewhat uncertain, but since it keeps an ulcer from healing, the most successful treatment aims at lowering the acidity of the stomach contents. Intestinal gas as a cause of discomfort is worthy of more attention than it receives. Any degree of distention beyond the constant or normal causes a feeling of fullness and discomfort. On the other hand, a diminution of gas below normal may cause discomfort by permitting the close apposition of the mucous membrane with obliteration of the canal. The position of pain or discomfort is of great diagnostic significance, and in the main it is felt in the region of the part involved. In certain cases pain and discomfort may be experienced in a locality rather remote from the cause; thus renal pain may start in the groin and appendicular pain is often umbilical in situation, shifting to the right iliac region when the peritoneum becomes involved. Hepatic and splenic pains and discomforts are felt in their respective hypochondriac regions and pancreatic pain in the epigastrium. Pain in the ascending and descending colon is accurately localized; the mobility of the transverse colon diminishes the



NEWS NOTES



COMMITTEE ON PUBLIC RELATIONS

A regular monthly meeting of the Committee on Public Relations of the Medical Society of the State of New York was held on Thursday, February 18, in the Albany office of the State Society, 100 State Street. There were present Dr. J. E. Sadlier, chairman, Dr. G. M. Fisher, Utica, Dr. O. W. H. Mitchell, Syracuse, Dr. A. J. Hambrook, Troy, Dr. W. D. Johnson, Batavia, President of the State Medical Society, Dr. F. F. Farmer, Chairman of the Committee on Public Health and Medical Education, and Dr. J. S. Lawrence, Executive Officer.

The morning session was devoted principally to a conference with Dr. W. A. Howe, and other representatives of the State Department of Education on the subject of the medical inspection of school children, with particular reference to the recommendation of the Governor's Health Commission that the examinations of school children be made at longer intervals than one year, as required by the present Education Law, but that the examinations be more thorough (see this Journal October 1, 1931, page 1216).

It was finally decided that the Committee on Public Relations and the Committee on Public Health should take up the subject of the medical examination of school children with each county medical society, and should urge it to devise means of arousing the interest of family physicians in the examinations.

The Chairman reported on action of the House of Delegates at its special meeting on January 14, requesting the Public Health Council of the State Department of Health to publish proposed amendments to the State Sanitary Code, in order to give physicians and others opportunities to discuss them before their final adoption (see this Journal February 15, 1932, page 224). In compliance with that request the Council of the State Department of Health had published in the February eighth issue of *Health News* a proposed amendment to the State Sanitary Code, defining the qualifications for health officers. This amendment proposes to classify health officers in two grades.

Grade one includes health officers of counties and those of cities of over 50,000 population. Their qualifications shall consist of either an approved course in public health of two years' residence, and one or two years' practical experience in public health work; or

five years of full-time practical experience in a responsible administrative public health position.

Grade two health officers include those of smaller cities, and those of villages and towns and consolidated districts. Their qualifications remain practically as at present, including the correspondence courses and short periods of practical instruction.

The informal discussion of the chairman's report showed that the members of the Public Relations Committee were of the opinion that if the proposed regulation were adopted, physicians in active family practice would find it difficult or impossible to qualify as county commissioners of health. The committee will take this subject up with the Public Health Council of the State Department of Health.

The afternoon session was devoted to a regional conference of the Chairmen of the Public Relations Committees of fifteen counties about Albany. Fifteen counties were included in the call, and nine were represented as follows:

Albany—Dr. J. N. Vander Veer
Greene—Dr. A. B. Daley
Schenectady—Dr. W. C. Treder
Montgomery—Dr. Charles Stover and his entire committee, including Drs. Collier, Ormsby, Hicks and Pierce.
Fulton—Dr. H. H. Oaksford
Warren—Dr. T. H. Cunningham
Clinton—Dr. E. S. McDowell
Schoharie—Dr. D. W. Beard
Saratoga—Dr. M. J. Magovern
Dr. M. F. Murray of Otsego County, and Dr. C. A. Hemstreet of Rensselaer County, sent their regrets at their inability to attend on account of sickness.

Dr. Vander Veer reported that the Albany County committee was preparing a new survey of the county. The previous one was made in 1927.

Dr. McDowell reported that the Clinton County committee had reached a satisfactory agreement with the welfare authorities of the county. He also reported that the committee had completed a survey of the obstetrical problems and conditions in the county.

Dr. Oaksford's report on Fulton County showed that his committee had made an arrangement with Montgomery County to take care of their tuberculosis patients. A close relationship is maintained with the activities

of the Gloversville city physician who refers all work possible to local physicians. He further stated that his society is opposed to the organization of county health units by mandatory law, and closed his remarks by saying that "we should be in the driver's seat" in public health matters.

Dr. Daley of Greene County reported as follows: "While our Public Relations Committee of Greene County has not accomplished a great deal as yet in the way of putting into effect a definite program with the various welfare agencies and lay organizations throughout the county, the committee has had several interesting and well attended meetings at which matters of mutual interest to the medical profession and the laity at large have been discussed. As a result of these conferences, the Medical Society of the County, at one of its regular meetings last fall, discussed and favorably acted upon a set of resolutions drafted by our committee relative to a more satisfactory and workable program involving the relationship between the profession and the laity, together with the Board of Supervisors of the county, and calling for a definite and harmonious cooperation between all interests concerned. A copy of these resolutions was forwarded to the Supervisors for their consideration and approval. Questions regarding the examination of the pre-school child, the diphtheria prevention movement, and the advisable administration thereof, together with the consideration of other various problems affecting the public health and welfare of the county, are now receiving the attention of the committee."

Dr. Stover reported that the board of supervisors of Montgomery County influenced by the fate of the Wicks-Hutchinson bill, had passed a resolution hostile to the organization of a county health unit. He felt it would be unwise at present to press an extra expense on the county, but his committee will continue to develop an educational interest in the organization of a county health unit. His committee has not, as a rule, taken a great interest in the activities of the voluntary agencies that work in the county. He feels that the influence of the County Medical Society is such that it can accomplish what it decides to be essential.

Dr. Magovern said that the Saratoga County Society does not feel it wise to have the public health work organized under the county health unit plan, and suggested that further study by the physicians is essential. He also stated that in the near future an attempt will be made to place before the Board of Supervisors a plan whereby physicians will be compensated for services rendered indigent cases in the hospitals.

Dr. Treder of Schenectady County reported that there has been some difficulty with the employment of public health nurses. The board of supervisors had cut out of their budget \$6,000 which was appropriated for the employment of public health nurses, but the item was restored when the Nurses' Association objected. The physicians are receiving satisfactory cooperation from the Commissioner of Public Welfare. His committee is now helping to solve a situation which has arisen in regard to the superintendent of the County Tuberculosis Sanitarium.

Dr. Beard of Schoharie County said that relations between the physicians and the public had been very satisfactory for the past few years. The secretary of the County Society is a member of the County Red Cross Committee, which supervises the activities of the county nurse. The public welfare law operated well last year. On the whole, the profession in Schoharie County has the support of the population to a great extent.

Dr. Hambrook reported for Dr. Hemstreet that in Rensselaer County the welfare officers and physicians are cooperating very agreeably; and that the county outside of Troy has four district public health nurses who conduct tuberculosis clinics and pre-natal clinics. The general sentiment in the county is in favor of organization on the county health unit plan.

Dr. T. H. Cunningham, of Glens Falls, read a comprehensive report on the public relations of the medical profession of Warren County, to the other public health organizations of the county. (This report is so full and comprehensive that it is printed as a separate article immediately following this report.—Editor.)

J. E. SADLIER,
Chairman.



PUBLIC RELATIONS IN WARREN COUNTY

The following report, on the relations of the medical profession of Warren County, N. Y., to public health, was given by Dr. Thomas H. Cunningham of Glens Falls, Chairman of the Public Relations Committee of the Warren County Medical Society, at a regional conference of the chairmen of the committees of twelve counties with the Committee on Public Relations of the Medical Society of the State of New York, held in Albany on February eighteenth, 1932. The report supplements "Public Relations Survey No. 17,—Warren County," published in this Journal of December 1, 1930, page 1436. Warren County has a population of 42,000 and its County Medical Society has 44 members.

We have been trying for three years to make the Warren County Medical Society an important factor in all public health and welfare work. We have tried to take a part in everything that had to do with public health or welfare in the county, and our society is now being recognized as an organization to be consulted in regard to all these matters.

We have sent representatives to act with and confer with the directors of many of the public health and welfare organizations, we have written letters to the newspapers, and we have appeared before many lay organizations in these efforts. The physicians doing these things have always tried to have it clearly understood that they were not acting as individuals, but simply as the representatives of the Warren County Medical Society; and we have explained time and again that our medical society is our official organization, and that it bears the same relationship to the physicians of our county that the Bar Association bears to the lawyers of the county.

We have been trying to get a county department of health established in Warren for almost three years. We have wanted this because we are sure that a county unit offers us the only way of systematizing the public health and welfare work in our county, and of regulating it so that there will be no infringement on the field which should belong to the local medical profession.

We are sure that a county unit will give our citizens the best possible results from their expenditures for public health efforts; and we feel, too, that our society can exert enough pressure upon the county board of health and the county health officer so that our interests will be protected and our incomes will not suffer as a result of their work. Such a statement may give the impression that our efforts are based on selfish motives; but actually they are not, because we are sure that our local medical profession will deteriorate unless it can enjoy an income great enough to permit it to do post-graduate work, take medical journals, buy diagnostic equipment, and do all of the other costly things which are needed to keep a physician abreast of the times.

The economy wave which is going hand in hand with our depression is holding up this county health unit. Our medical society has sent representatives to speak before the county Board of Supervisors, the Common Council of the City of Glens Falls, and many organizations in the county. We have interested about four hundred prominent citizens in the matter to the extent that they have formed an organization for the pur-

pose of promoting a county health unit. At the present time committees from the supervisors and from the common council of Glens Falls are considering ways and means for establishing a county unit. These committees are fearful, however, of increasing the tax rate, and it is possible that favorable action on the matter may be deferred for some little time.

Our society has received a great deal of excellent advertising from our efforts, and almost every citizen of the county now knows that the county has an organized medical profession which is capable of thinking, and of asking for what is best for the citizens at large.

At the meeting last year our medical society succeeded in gaining control of a local eye clinic which had been for years under the control of local optometrists. Our society took over the professional side of that clinic, and provided three eye surgeons who have organized it in exactly the same way that they conduct the eye service in our hospital wards. They have divided the year into terms of service, and they have elected a representative who speaks for them at meetings with the Board of Trustees of the Blind Association which covers not only our own county, but the counties of Washington and Saratoga as well.

Our medical society has stated to the trustees of the Blind Association that we are glad to extend this service to indigents. We have stated also, however, that we do not care to give clinic service to those who are able to go to the local eye specialists' offices as private patients. There is a very definite understanding that, if the attending eye specialists find at any time that they are being imposed upon in this matter, the county medical society will withdraw its support from the clinic. We have explained that there will be no rows and no discussions in regard to this matter, but that our three eye specialists reserve the right to withdraw quietly from the clinic at any time that they may feel that they are not being fairly used in this matter of giving their services only to patients who are not able to pay for them.

We have had considerable trouble with some of the other clinics in Warren County. As an example the orthopedic clinic conducted by the New York State Board of Health meets at irregular intervals in Glens Falls. Just prior to a clinic day last fall an advertisement was inserted by someone in our local newspapers urging that all citizens with orthopedic troubles take advantage of this free clinic. It was stated in the advertisement that all were welcome, and that people with

flat feet were especially urged to attend the clinic and secure relief for that condition. There was to be no charge made for the services of course and there was no implication that the services were to be restricted to our indigent citizens.

Our committee wrote Doctor Parran, State Commissioner of Health, enclosing some of these offensive advertisements, and pointing out how unfair such a stand was to the local medical profession. We suggested that the New York State Health Department could hardly expect cooperation from a local medical profession when it was entering the local field in such unfair competition and suggested that a conference be held to try and straighten out the matter. Doctor Parran came to Glens Falls and attended a dinner which we gave there and at which were present most of the local physicians who had any complaints to make about any of the clinics. The discussion was general and was not confined to the orthopedic clinic. The whole clinic situation was reviewed, and we tried to make Doctor Parran understand our attitude toward the prenatal clinic for example and much of the other clinic work. The meeting closed amicably, and there was a feeling on both sides that many of our difficulties had been straightened out. A scheme was submitted by us to Doctor Parran which we hope will eventually smooth out the orthopedic situation locally.

Our committee pointed out to Doctor Parran that our local surgeons could not compete with his clinic as he was conducting it. We pointed out that his clinic was headed by an expert orthopedist, that he had working with him an expert orthopedic nurse, that he had all of the public health and welfare agencies acting as advertising agents, and that he offered his services to all free of charge and regardless of their financial status. We pointed out to Doctor Parran that this was going to result in our local surgeons doing less and less orthopedic work and therefore becoming less and less competent to do that special branch of work.

We pointed out too that, in case the State should ever withdraw its financial support for that particular clinic, it would result in the county of Warren being left without any surgeons with orthopedic training, and that we believed that the harm which would thus result would more than offset the benefits that the citizens are now deriving from his free orthopedic clinic.

We suggested that our local surgeons be allowed to select one of their number who would work with Doctor Craig, orthopedic surgeon of the Department of Health, as his assistant at the clinic. We offered to secure an appointment as consulting orthopedist for Doctor Craig on our local hospital staff, and this would give him local operating room privileges. We urged that Doctor Craig then do as much as possible of his op-

erating in our local hospital, and that he use the local surgeon as his assistant for these operations and leave the cases in his charge when Doctor Craig left the city. We suggested also that we would give him a man who had had at least twenty years' training as an attending surgeon at our hospital, and who was also a Fellow of the American College of Surgeons; and we suggested that under these conditions Doctor Craig might be willing to permit this man to operate on the less serious cases and that Doctor Craig might then act as assistant or as consultant at such operations. Our idea was that we could thus keep these cases in our city, and that at least one of our surgeons would keep in touch with orthopedic work. It would also give us an opportunity of training one or more of our local nurses in orthopedic work, and would generally speak for betterment for our local profession and our citizens. Doctor Parran accepted our plan and our local surgeons have selected one of their number to act as their representative. He and Doctor Craig of the State Department have had some correspondence in regard to arranging a scheme for work. I do not know just how far the matter has progressed, but I hope that in the not too distant future we shall have an orthopedic clinic functioning in the manner which I have outlined.

Our Parent-Teachers Association had their second Round-Up Week last summer, and the head of the organization communicated with our committee and stated that many of the parents who wished to have their children examined had said that they were not in a position at just this time to pay for such an examination. The Association wanted to know what clinic they should send these children to in order to have this work done.

Our committee asked for a list of these indigent families, and for the names of their family physicians. We then communicated the facts to the family physicians, and they all offered to make such examinations free of charge. In conversation with some of them later I was told that the family physicians approved of our procedure because it kept these families from the clinics, and it helped the family doctor to hold his practice together in our present depression.

Last year the Warren County Tuberculosis Society made a survey in our county to discover how many indigent children in the county could be grouped as predisposed tuberculous children. It found about two hundred who required removal of tonsils and adenoids, and other minor nose and throat procedures in order to make them less susceptible to tuberculous infection.

The head of that society communicated with our committee and asked how it could be arranged for these children to enter the wards of our local hospital for operation. We found upon investigation that not all of these children were actually entitled to ward care, because some of the

parents were able to pay something for these services, even though none of the parents was able to pay full fees either to the surgeon or to the hospital. We brought three of our local nose and throat surgeons into contact with the Tuberculosis Society and suggested that they work out a scheme whereby the Tuberculosis Society would make arrangements to have this work done and would find out just exactly what the greatest sum was that each parent could afford to pay for the operation and for the hospital care. We suggested that the society collect this money and hold it in a lump sum to pay all of the expenses incurred. We suggested, too, that the hospital accept these children at a small flat fee, and pointed out that the hospital would lose less money by so doing than by having the children go into the wards. We suggested, too, that whatever lump sum was left after the hospital expenses were paid be divided into three parts, and that each of the three operating nose and throat surgeons be given one of these sums for his services. In this way the children had necessary care and the hospital, and the nose and throat surgeons received something even though they did not get their full fees. We all felt that it was better for these parents to pay what they could, instead of to go into the wards as charity cases.

Last spring our committee arranged a meeting between the Welfare Commissioners of Warren, Washington, and Saratoga Counties, and our medical profession. At that meeting the provisions of the present Welfare Act were discussed and we tried to impress upon the commissioners that the medical profession should be compensated for services to the indigents under their care.

It has not yet resulted in much money for the local profession, because of the fact that the budgets for the counties had already been made out. The meeting was very satisfactory however in that we secured evidences of cooperation from the commissioners; and we are sure that in time a very satisfactory working basis will be established between them and our physicians. All of the commissioners conceded that physicians should be compensated for their work among the indigent and it was simply a question of devising ways and means for working it out satisfactorily.

Some months ago the president of our local Young Men's Christian Association asked for a meeting with our committee. He and his physical director came to the meeting and stated that the physical director was very anxious to install in the building an equipment of sunshine lamps, electric cabinets, and some other physio-therapy equipment in order to give treatments to the patrons of the gymnasium. We discussed that matter at the meeting and stated that we would write a letter to them a few days later after a more careful consideration of the request. In our letter we pointed out the dangers attached to the

indiscriminate use of these therapeutic agents, and we pointed out also that the "Y" could not conscientiously use them without having a competent physician or nurse in charge in order to prevent harm being done.

Following the receipt of this letter the trustees of the Y.M.C.A. called a meeting and decided not to install the equipment. The president of the board wrote us a letter thanking us for our advice and consideration and expressing pleasure at having been able to turn to us in this matter.

I trust Mr. Chairman that you and the gentlemen present are not thinking I am taking up too much time in discussing unimportant matters. I am assuming, and I hope rightly, that you are interested in all of the trivial details that have attended the work of our committee. We started our work without any precedent to guide us, and we have simply done our best to keep ourselves as much as possible before the public and to associate ourselves in the minds of the public with these various welfare and public health matters in a consulting capacity.

We have lost no opportunity to put the Warren County Medical Society into the newspapers. For example, my committee wrote the editor of one of our local papers a letter of commendation because of an editorial which he wrote and printed during our poliomyelitis epidemic. In that editorial he pointed out that there was no use in our citizens becoming too greatly alarmed, and that safety lay in consulting with the family physician just the moment that the child showed any symptoms of any sort that would indicate any oncoming disease. Our committee congratulated him on his sane viewpoint, and stated that we hoped that his readers would pay careful attention to what he had said. He printed our letter on the front page of his paper the following day, and seemed very proud of the fact that he had been commended by the Warren County Medical Society.

The most ambitious project that our committee has tackled is the securing of a new hospital for our city. We secured a great deal of reliable data concerning the number of people who should be dependent upon our city for hospital care, that is the number who should normally fall into our hospital district. We found that our city should normally be giving hospital service to a district containing about 75,000 permanent citizens; and we found, too, that this number was probably doubled by the summer population which comes to Lake George and the lower Adirondacks in our vicinity.

We then communicated with the American Hospital Association and found out the number of beds that should be normally required to service a population of this size and character. We also secured a very exhaustive summary of the hospital accommodations which our city is now offering.

All of these facts were assembled in a report to the medical society. This report urged that the medical society call the attention of the citizens of our city to these facts, and that the citizens be urged to construct another hospital of a considerable bed capacity in order to meet this normal demand more adequately.

We also urged that the medical society ask the religious and service organizations of our city to interest themselves in the matter, and that the Commercial Association and business men be also asked to investigate the business side of it just as they might wish to investigate the financial possibilities of a new industry which was thinking of moving into our city.

We pointed out the beneficial effects that better hospital accommodations would have upon the local medical profession, and the secondary benefits that would thereby be derived by the citizens at large. We also urged that changes be made in our present hospital nursing system, that no wards be constructed in the new hospital, and that several physicians nominated by the medical society be placed upon the Board of Trustees of the institution.

A resolution was passed at the meeting at which this report was given endorsing the report and asking that it be published in our newspapers. Our newspapers were very glad to feature the entire report as front page news, and the project secured a great deal of publicity because of this, and it has aroused a very favorable reaction on the part of our citizens.

We do not expect of course that such a hospital will be built immediately. We pointed out in the article that we expected that it would be at least two or three years before a site was selected and plans drawn, and we stated also that we realized that the present depression would probably interfere somewhat in starting the project.

We expect however that we will get this new hospital and we are planning from time to time to have prominent citizens write the newspapers questioning some of our statements in order that we may answer them and keep the matter alive and before the public.

One of our physicians of standing was sued for malpractice a short time ago. The local profession felt that the suit was a most unjust one, and we are all very anxious to discourage the bringing of unjust suits. Our committee communicated with the attorney for the New York State Medical Society, and stated that any or all of the four attending surgeons at our hospital would be glad to cooperate with him in giving expert testimony in this case. We stated that we made this offer because we feared that the physician who was being sued might have some delicacy about asking for our backing. The state attorney seemed pleased at the cooperative spirit shown by our society and wrote stating that he would be glad to avail himself of it if the case comes up for trial.

THOMAS H. CUNNINGHAM, M.D.

EARLY DIAGNOSIS OF TUBERCULOSIS

The State Department of Health is confronted with a many-sided problem in its anti-tuberculosis work, and realizes its dependence on family physicians for success. The Department therefore appeals to the general practitioner to take an active part in an Early Diagnosis Campaign, the slogan of which is

"Tuberculosis comes from tuberculosis. Every case comes from another."

Such a slogan is broad in its implication, but it emphasizes principally the need for prevention. The family doctor plays a most important role in the further solution of the tuberculosis problem.

If more progress is to be made in the more general application of known methods of combating the disease, physicians must keep uppermost in their minds the fact that prophylaxis is as important as therapeutics. Although this campaign last only a month, the tubercle bacillus works every day in the year. Campaigns are of

value, but continuity of thought, word, and action throughout the year must prevail if we are to hope for encouraging results.

The fundamentals of adequate tuberculosis work are case-finding, follow-up, treatment, and public health education. Each of these essential elements must assume a conspicuous place in our prevention program. Lack of the coordinated machinery with which to carry on these services cannot but affect the results unfavorably.

In the light of experience, it is time for health officials and physicians to talk about the number of *households* in which tuberculosis is present, rather than the number of *cases*. Every physician realizes that tuberculosis generally is a family disease, and is far more than a personal problem of an individual patient. Environmental factors in family associations provide an opportunity second to none for massive infection. Such infection is likely to cause disease with its resultant medical, social, and economic handicaps.

Case-finding is the keystone of tuberculosis control; and closely allied with this *case-reporting*. Early diagnosis and prompt notification of cases are of paramount importance in the successful conduct of any control program.

Treatment and education go hand in hand,—treatment for the *patient*, and prophylactic education for the *patient*, *family* and *community*. Sanatorium treatment and education are to be considered in almost every case.

Adequate follow-up work is always essential with both patients and contacts. In this field of endeavor the public health nurse is a valuable aid to physicians. Equally important is the coordinated effort of the practicing physicians and public health officials, including those of the sanatoria and unofficial agencies.

"*Every Case Comes from Another*" is worthy of repetition, and reiterated by all concerned with the health and welfare of the people. Who is in a better position effectively to promote measures which will reduce further the prevailing morbidity and mortality rates, than the family doctor? Many physicians are profoundly interested in preventive tuberculosis work. They are taking an active part in this significant medical and social problem. However, there is room for improvement. It is to be hoped that these *Early Diagnosis Campaigns* may result in a more general and thorough application of these basic principles of tuberculosis control.

ROBERT E. PLUNKETT,
Director, Division of Tuberculosis,
N. Y. State Department of Health.

LEGISLATIVE RÉSUMÉ FOR 1932

The legislature closed its shortest session on record on Friday, March 11th, 1932. Until the last minute we were not certain but that the osteopaths might be successful in having their bill advanced and, therefore, we were obliged to keep in close touch with the session all the while.

We have been informed that the Regents, by resolution, have decided to require that the osteopaths must present after 1935 two years' pre-medical work when entering the state board examinations. That means that all persons who expect to practice osteopathy in New York State in the future must now begin their two years' pre-medical school work. Osteopathy will no longer offer the student a short-cut to the practice of medicine; thus a part of the osteopathy problem will be solved, but without doubt efforts will be made again next year by those who are practicing osteopathy in the state, to have their privileges extended. There is an honest desire on the part of a number of the osteopaths to be taught pharmacology and *materia medica*, and it seems to us that the medical schools might make some provision by which osteopaths desiring to familiarize themselves with drugs and their prescriptions, could be given an opportunity to take up such post-graduate work.

A physiotherapy bill was introduced, but received no support. No chiropractic bill was introduced. We are informed that efforts were made to do so, but the chiropractors were discouraged by conversations with the legislators.

No anti-vaccination bill was introduced this year, nor birth control bill, but the anti-vivisection bill proved to be more troublesome than usual. A disaffection occurred among the anti-vivisectionists and resulted in a second bill being

introduced in the Assembly and a companion in the Senate. The ambitious young ladies who sponsored this second bill proved themselves to be most aggressive lobbyists. They presented petitions signed by twenty thousand voters of the state, asking for the advancement of their bill, and would have succeeded had they been able to show to the satisfaction of the legislators that the present law protecting the dog is being violated. These ladies were not discouraged, but let it be widely known that they shall immediately begin a campaign program which will be carried to every section of the state, calling for support of their measure for next year. They threaten to campaign actively against the return of certain Assemblymen. It is highly important, therefore, that the physicians should take a more active part in informing the public of the true facts regarding the services rendered by the dog in our experimental work. The anti-vivisectionists make their greatest progress through enlisting the assistance of the humane societies. Their appeal to the people is, unfortunately, not based upon honest data. The gruesome illustrations which they circulate very widely are mostly taken from a German catalogue of apparatus and equipment, issued twenty-five or more years ago. Many of the statements that they have gathered from medical journals regarding the use of dogs, are taken from journals and text-books, some of them fifty years old; for instance, they brought to the chairman of the Senate Public Health Committee, for his study, a book on physiology published in 1888.

Some of these women do not hesitate to say that their friendship for the dog is such that they do not feel dogs should be sacrificed, even

though by so doing they would save the lives of babies. The sincerity of their friendship for the dog can be questioned on the ground that their greatest interest seems to be in taking the dog out of the experimental laboratory. They are not interested, according to their own statement, in preventing dogs from being summarily electrocuted or asphyxiated in pounds by humane societies; they have no interest whatever in securing the immunization of dogs, generally, against rabies or distemper; they do not wish information as to the conditions under which dogs are spayed; they are not even interested in securing legislation such as Assemblyman Cuvillier introduced this year, bringing a heavy penalty upon persons who deliberately run dogs down with their automobiles or abandon dogs they have had as pets. These people should truthfully be considered as opposed to what they term "vivisection," and should not be permitted to masquerade as dog lovers, because, upon being pressed, their leader admitted that were this legislation enacted, their organization would return in another year, asking that similar legislation be enacted for all animals.

In this connection, it is most disheartening to learn that there are physicians in the state who encourage these people by saying that dogs are not necessary for laboratory work and that they, personally, never profited from the use of dogs. The hospital lien bill in which we were interested, was killed in committee. Its opponents did not deny that there is need for such legislation, but they were opposed to the wording of the two bills which were introduced this year. It is to be hoped that in another year we can arrive at a wording that will be acceptable to everybody.

The bills that would permit injured workmen free choice of surgeon, which were before the legislature last year, were reintroduced, but they received less consideration than last year, prob-

ably because the report which the special commission appointed to investigate problems affecting workmen's compensation, recommended against free choice, and labor organizations, likewise, opposed such legislation.

Three bills offering amendments to the Workmen's Compensation Law, resulting from the report of this special commission, were introduced just before the close of the session, but did not get out of committee.

Our relations with the legislature were unusually pleasant this year. We felt the legislators appreciated that we were always acting in the interests of the public good and not from selfish motives. In this connection may we say that we felt very keenly again this year that both the legislators and the public frequently confuse the relationship that exists between the medical profession and the Department of Education, and the medical profession and the Department of Health. When amendments to the Education Law are considered, as, for instance, chiropractic and osteopathy bills, the Department of Education is accused of being too friendly with the medical profession. A telegram received by a legislator demonstrates very concretely the confusion that exists in the minds of some taxpayers as to the relationship of the Department of Health to the Medical Society. This telegram asked the legislator to vote against the "doctors' bill which would create health clinics in all of the counties." It went on to say that the doctors were doing this to create jobs for themselves at the expense of the taxpayers and that the taxes are already too high. The legislator was at a loss to know to what bill the telegram referred. Some confusion is unavoidable and some people will always be confused, however clearly matters may be stated, but here is a condition to which all of us should give some consideration.

J. S. LAWRENCE.

ON TO NEW ORLEANS

President Johnson has appointed Drs. John A. Card, of Poughkeepsie, and Arthur W. Booth, of Elmira, a Transportation Committee for the American Medical Association meeting in New Orleans, beginning May 9, 1932.

The Committee has arranged for the New York delegation to leave New York on the Pennsylvania Railroad, Saturday, May 7, 1932 at

8:10 A. M., Eastern Standard Time, arriving in New Orleans, Sunday evening.

Several Pullman cars have been placed at the disposal of the Committee and tentative reservations for drawing rooms, compartments, or berths may be made by applying to Dr. John A. Card, Poughkeepsie, N. Y.

JOINT COMMITTEE ON GOVERNOR'S HEALTH COMMISSION

A joint meeting of the Committee on Public Relations, and on Public Health and Medical Education was held in the Hotel Roosevelt, New York City, on Wednesday, March 23, 1932, for the purpose of continuing the discussion of problems connected with its report on the Governor's Health Commission. There were present:—Drs. Thomas P. Farmer, Martin B. Tinker, Edward G. Whipple, William A. Groat, Leo F. Schiff, Clayton W. Greene, James E. Sadlier, George M. Fisher, O. W. H. Mitchell, A. J. Hambrook, William H. Ross; and also Drs. W. B. Johnson, J. S. Lawrence and Harry Aranow.

The Committee first considered the subject of State aid to local public health projects, as it had been directed by a vote of the House of Delegates at its special meeting on January 14, for the purpose of making a report at the regular meeting of the House of Delegates on May 23. (See this Journal, February 15, 1932, page 225). After a lengthy discussion the following resolution was adopted:

Resolved, That the time available for the committee to study this subject is too short to make a complete study of the material bearing on the subject.

The committee then took up the consideration of the proposed amendments to the Sanitary Code of the state relating to the qualifications of health officers, especially those of counties as announced in *Health News* of February 8. The following resolution was adopted:

Resolved, That the committee go on record as opposing any regulations that are in opposition to the report submitted by the Joint Committee to the House of Delegates.

It was announced that the Public Health Council would hold a hearing on this amendment prior to its taking effect, and the committee recommended that inasmuch as this regulation is directly related to public health activities, the Public Health Committee should be represented at the hearing by Drs. Farmer, Greene and Whipple. (See page 406.)

(The Public Health Council has announced in *Health News* of March 28, that the hearing will be held on Wednesday, April 13, at 10 A.M., in the offices of the State Department of Health, Room 546, State Office Building, 155 Worth Street, New York City.)

JOSEPH S. LAWRENCE
Secretary of the Joint Committee.

BRONX COUNTY

A regular meeting of the Bronx County Medical Society, held at Elsmere Hall on March 16, 1932, was called to order at 8:40 P.M., the President, Dr. Irving Smiley, in the Chair.

The following physicians were elected to membership: Drs. Max Beiser, James F. Brown, Maurice A. Egan, I. Janeway Ehlin, Morris Harry Hadler, Philip Jaeger, Mandel Jaffin, Charles M. Kapp, Pauline P. Matusow, Adolph Posner and Abraham Seltzer.

Dr. Harry Aranow, Chairman of the State Legislative Committee on Legislation, reported that the Medical Society of the State of New York had succeeded in defeating every bill antagonistic to the medical profession introduced in the session of the State Legislature recently adjourned. He concluded the report by moving that the society express its appreciation to the Bronx members of the State Legislature for their cooperation with the medical profession. This motion was carried.

The President referred to the report of Mr. Howard S. Cullman, Chairman of the Governor's Committee on Compensation Insurance, opposing the free choice of physicians by patients, which

has been answered by Dr. Rosenthal, of New York County.

A meeting was called by Dr. Smiley of representatives of the New York, Kings, and Bronx County Societies, at which the majority and the minority reports were considered. A subcommittee, consisting of Dr. Rosenthal, of New York County, Dr. Projector, of the Bronx, and Dr. McGoldrick, of Kings County, was appointed to make a detailed study of both of these reports and devise a definite plan of action, which will be presented before the annual meeting of the State Society in May. It is our intention to try to prevent such libel of the medical profession in the future.

The scientific program then proceeded as follows:

- Symposium on therapy in thyrotoxicosis:
- Surgical Aspects of Thyrotoxicosis, George W. Crile;
 - The Radiation Results in Toxic Goiter, George E. Pfahler;
 - Discussion, Edward R. Cunniffe and Solomon Ginsburg.

I. J. LANDSMAN, M.D., *Secretary.*

DUTCHESS-PUTNAM COUNTIES

A regular meeting of the Dutchess-Putnam Medical Society was held at Vassar Brothers Hospital March 9, 1932, and was called to order by the President, Dr. William L. Krieger, at 8.45 p.m.

Michael Osnato, M.D., Director Neurology, Post-Graduate Hospital, New York, gave a paper on "Fundamental Conceptions Underlying Neurological Diagnosis."

Drs. G. A. H. Price and C. E. Bauer, of Poughkeepsie, were elected to membership.

Dr. George L. Warner was accepted by transfer from Oneida County.

The following report of the cancer committee was submitted:

"At a meeting of the Cancer Committee, held March 5, 1932, it was decided to make the following recommendations:

"I. That a campaign of education in regard to cancer be carried on in Dutchess and Putnam counties.

"II. That an authority on cancer be requested to address a meeting of this Society in the near future in order that the physicians of this district may become acquainted with the latest developments in the cancer question and may also learn what is being accomplished in other communities in regard to education and methods of prevention.

"III. That organizations throughout Dutchess

and Putnam counties be requested to have a physician from this Society speak on the subject of cancer at a regular meeting. Your committee believes that these talks should be brief, lasting from ten to fifteen minutes and special emphasis should be placed on the precancerous lesions. It also believes that it is important to regard this subject from an optimistic point of view to prevent undue fear or hysteria among the laity.

"IV. That public health organizations and public health nurses be asked to cooperate with us in the educational campaign.

"Helen L. Palliser, Chairman,
James E. Sadlier,
Josiah Coborn."

The report was adopted and the Cancer Committee was empowered to arrange the meetings suggested.

The meeting adjourned at 10.15 p.m. for refreshments.

Attendance 38, as follows:

Drs. Mackenzie, Thomson, Tabor, Christensen, Appel, Voorhees, Breed, Ashley, Poucher, Cadwell, Krieger, Rogers, Marks, Richie, Miller, Baldwin, Lange, Palliser, Stoller, Sobel, Malven, Storrs, Simon, Steblin, Smith, Sadlier, Cotter, Harrington, Rosenthal, Davison, Deyo, Gosse, Stibbs, Whitbeck, Carpenter and three internes.

H. P. CARPENTER, *Secretary*.

LIVINGSTON COUNTY

The annual meeting of the Livingston County Medical Society was held at the White Horse Tavern on Thursday evening, February 25, 1932, jointly with the Livingston County Bar Association.

A short business meeting of the medical society was called at 6:15 p.m. Dr. Edward Smith of Retsof, the retiring secretary and treasurer, furnished the financial report ending December 17, 1931. A formal vote of thanks was given to Dr. Smith for his efficient work.

Officers for the ensuing year are as follows:

President: Dr. R. J. Maichle, Dansville, N. Y.

Vice-President: Dr. G. E. Murphy, Mt. Morris, N. Y.

Secretary-Treasurer: Dr. G. M. Doolittle, Son-yea, N. Y.

Committee on Medical Economics: Dr. F. V. Foster, Caledonia, N. Y.

Committee on Medical Relations: Dr. C. I. Newton, Genesee, N. Y.

Delegate to the House of Delegates: Dr. Tracy Swan, Livonia, N. Y.

Alternate to the House of Delegates: Dr. W. T. Shanahan, Son-yea, N. Y.

Censors: Drs. Preston, Burt, Newton, Shanahan, and Lauderdale.

Dr. F. J. Bowen of Mount Morris, introduced a resolution that the Livingston County Medical Society endorse Mount Morris as a site for the State Tuberculosis Hospital for the seven surrounding counties. This motion was carried.

At 7:15 p.m. the joint meeting repaired to a chicken dinner. Music and singing were enjoyed during the meal.

Dr. Floyd S. Winslow of Rochester presented the paper of the evening with stereopticon views of medico-legal aspects of cases.

GEORGE M. DOOLITTLE, *Secretary*.

WESTCHESTER COUNTY

At the regular annual meeting of the Medical Society of the County of Westchester, held November 17th, 1931, at the Burke Foundation, White Plains, the following officers were elected for the year 1931-32:

President: Dr. Louis V. Waldron, Yonkers;
Vice-President: Dr. Mortimer W. Raynor, White Plains;
Second Vice-President: Dr. A. A. Eggston, Mount Vernon;
Secretary: Dr. Arthur F. Heyl, New Rochelle;
Treasurer: Dr. Harry Klapper, White Plains;
Censors (two years): Dr. Louis B. Chapman, New Rochelle, Dr. C. I. Chapman, Mt. Kisco;
Delegates (two years): Dr. Harrison Betts, Yonkers, Dr. M. E. Marsland, Mamaroneck;
Alternate Delegates: Dr. R. A. Higgons, Portchester, Dr. E. H. Restin, Mount Vernon, Dr. Berton Lattin, Scarsdale.

The following were elected to active membership:

Dr. Frances E. Barnhart, Valhalla
Dr. David A. Laveson, Yonkers
Dr. Ward H. Cook, Yonkers
Dr. H. W. Nottley, White Plains
Dr. Virginia N. Palmer, Scarsdale
Dr. Patrick C. Rizzo, Mount Vernon
Dr. Dorothy M. Lang, Elmsford
Dr. George A. Bullwinkle, Rye
Dr. Edward A. Lane, White Plains

Two very instructive papers on Thyroid Disease were given, one by Dr. Frank Lahey of Boston, on its surgical aspects, and one by Dr. Hurx-

thal, the Associate of Dr. Lahey, on the medical aspects.

Dr. Louis B. Chapman, the retiring President, gave an address, of which the following is an abstract:

The subject of medical economics is of supreme importance to the medical profession at this time. We are on the threshold of changes in the practice of medicine and must prepare ourselves to meet the demands of the people for medical service for all persons. The rich can always purchase it, and the poor have it given to them; but those of moderate means are often impoverished by sickness. Since the distribution of sickness is extremely unequal among families, so also is the distribution of the cost of medical service. The time has come for us doctors to meet the situation, to recognize our own shortcomings and to make a start to correct them. The "middle rate" plan at the Massachusetts General Hospital, Boston, and a somewhat similar plan at Mount Sinai Hospital, New York, are among the evidences that some doctors are trying to solve the problem. If socialized medicine comes, it will be because the medical profession had missed its opportunity to conform to present day conditions.

The Westchester County Medical Society, one of the oldest in the United States, naturally aspires to be a pioneer in medical progress. We look forward specifically to a permanent home, centrally located, with a full-time office staff; to more frequent meetings; to the publication of a bulletin; to the development of a library; and to educational publicity.

ARTHUR F. HEYL, *Secretary*

The regular January meeting of the Medical Society of the County of Westchester was held on the 19th of January, 1932, at the Mount Vernon Hospital. Dr. Russell L. Cecil of New York addressed the Society on the Diagnosis and Treatment of Pneumonia. The discussion was opened by Drs. C. C. Guion and M. D. Touart.

The following were elected to membership:

Dr. S. Franklin Adams, White Plains
Dr. Raymond K. Bush, Mount Vernon
Dr. Leo V. Feichtner, Croton-on-Hudson
Dr. Bernard C. Hecht, Valhalla
Dr. John R. Jeppson, New Rochelle
Dr. Frederick Haskell McKee, Larchmont

Dr. Francis Murphy, Larchmont
Dr. John M. Nicklas, Valhalla
Dr. Stanford Pulrang, Yonkers
Dr. Paul K. Shirk, Yonkers
Dr. Paul A. Ulrich, Larchmont
Dr. Joseph Guard Welling, New Rochelle
Dr. Walter James Wellington, Mamaroneck
Dr. Waring Willis, Bronxville

Dr. Louis B. Chapman submitted a motion to alter the By-laws omitting the Milk Commission and creating a Committee on Economics. This was seconded by Dr. Roberto and was laid over for a vote at the next regular meeting.

ARTHUR F. HEYL, *Secretary*

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THE DAILY PRESS



Mr and Mrs—

The Preliminaries to a Public Snooze



From New York Herald Tribune of January 27 1932

COSMETIC PSYCHOLOGY

Why people buy cosmetics in ever increasing amounts in spite of the condemnation of doctors and informers, is told in the following editorial in the *New York Times* of February 20

"What most critics of cosmetics and the absurd claims made for them overlook is the psychological effect they have. If a woman goes to a party with her face clean but unadorned, she spends a miserable, self-conscious evening. But if she strokes it with cream, rubs it with

lotion, lifts it with massage, pats it with powder and applies a ruby flush in a way that pleases her, she will have the consciousness, more consoling than religion, of looking her best. She may have gone in debt to get the permanent wave, the anti-fat remedy may be ruining her digestion, and the total effect of her appearance may be startling rather than beautiful, but she is satisfied. To her it is all worth the money.

COSMETIC CLINICS

Since the makers of school textbooks on hygiene make direct appeals to beauty and happiness as incentives to care for health the 'cosmetologists' seem to be justified in suggesting beauty clinics, as described in the *New York Times* of March 16

"The morale of the woman who cannot have a 'permanent' or have her cosmetic needs attended to became a question of first importance yesterday at the opening of the International Beauty Shop Owners' convention and exhibition at the Hotel Pennsylvania

'Local 14 of the National Hairdressers and Cosmetologists Association voted to organize in the metropolitan area beauty clinics, where proof that the person cannot afford beauty care will insure free treatment

"A resolution to this effect was read

"Whereas the results of a prolonged financial catastrophe of any type or variety manifests itself in a breakdown in the morale of womankind, and

'Whereas the present emergency is following previous trends in this direction and thousands upon thousands of young, beautiful, healthy girls and women are permitting themselves to relapse into a state of mental lethargy which not even the emergence from present conditions will correct, and

"Whereas the relations between the profession of beauty culture and beauty is identically that of the relation between the medical profession and health, the problem of maintaining the morale of women is one which no beauty culturist can avoid since a woman feels as she looks,

"Therefore, with the combined resources of all the associations in the metropolitan area there will be organized beauty clinics where any woman or girl, upon proof of her being unable to afford beauty care, shall receive the best of treatment at no cost"

Physicians will watch the experiment with considerable curiosity

DESSERTS IN DIETS

Adults are only grown-up children so far as eating habits are concerned. If you were turned loose in a restaurant to eat all you want of anything on the menu, what foods would you chose? The New York *Herald Tribune* of February 29th discusses that question in a scientific way in the following editorial:

"So far as eating is concerned, the American people's greatest of suppressed desires in recent times has been apparently in the direction of desserts. A nation-wide survey of gastronomic tendencies on the part of a great restaurant chain, which for the last year has been experimenting with the "all you can eat" for a fixed-price plan, has revealed that, freed from the inhibitions deriving from the check total, what diners wanted most is more and

bigger portions of sweets. Repeat orders where unlimited choice and quantity have been the rule have not substantially increased the consumption of roasts, entrees or vegetables, but have centered in the stage of the meal characterized by apple pie à la mode, peach shortcake, jelly rolls and the more imaginative patisseries.

"Whether or not this circumstance will make for increases in the national waistline and the incorporation of instruction for pastry chefs in the offerings of correspondence schools is problematical, but it is at least indicative of an increased taste for the fanciful and romantic on the part of the public. The realism of roasts is in abeyance, while a nation of public diners indulges in flights of fancy in the realms of exotic sweets."

REPORT OF THE GRIEVANCE COMMITTEE

The report on the work of the Grievance Committee in enforcing the Medical Practice Act during five years, published in this Journal of March 15, page 334, received favorable editorial notice in several Metropolitan dailies. A typical editorial is that in the New York *Herald Tribune* of March 17, as follows:

"Medical quackery in this state has much abated in the five years' diligent enforcement of the Webb-Loomis law strengthening the medical practice act. Many charlatans have been weeded out and the unauthorized use of the title 'Dr.' is practically at an end. Trusting patients are better protected against fakers than they were formerly.

"Thus, the public has benefited. With respect to physicians also, the law has worked with exemplary fairness. When it was in debate some feared that the grievance committee feature might be an instrument of a harassing sort. Composed of ten physicians appointed

by the Board of Regents and serving without pay, the committee has wide disciplinary power; but this authority it has used most equitably, according to the report of Dr. Harold Rypins, secretary of the State Board of Medical Examiners.

"In the five years of its operation the grievance committee has investigated 2,932 complaints of illegal practice. It found 1,866 law violations, of which 1,355 were stopped without criminal prosecution. Cases prosecuted numbered 274, with 205 convictions, nineteen acquittals, forty-three cases withdrawn and seven still pending.

The grievance committee, in fact, is a protection to the physician against whom unjustified complaints are lodged, as well as an effective agent for driving out black sheep. Both for the medical profession and the people of the state the Webb-Loomis law is proving salutary."

THE STUTTERING ACTOR

The stutterer is funny to everybody else than himself. The radios have capitalized this frailty or defect, to the amusement of their audiences, but with unfortunate results which are described in the following editorial in the New York *Times* of February 26:

"One of their difficulties is that some of the most innocent-seeming comedy in the world as they plan it can turn into something objectionable while they have their backs turned for a moment. Lately there have been some stuttering comedians who have become very popular. Perhaps they were inspired by the old

song about K-K-K-Katy and kitchen door. At any rate, radio and talkie audiences took the new art to their hearts.

"Now complaints are beginning to come in. The officials were amazed at first. What could there be in these jolly, stuttering songs to object to? Children especially are delighted with them. It seems that this is the trouble. The children like them so well that they are imitating them and their parents and teachers are not amused. These comedians are now going to be compelled to find some other way of being funny."



BOOKS RECEIVED



Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits or in the interests of our readers.

A HANDBOOK OF OCULAR THIRAPLUTICS By SANFORD R. GIFFORD, M.A., M.D. 12mo of 272 pages, illustrated Philadelphia, Lea & Febiger, 1932. Cloth, \$3.25

THE PRACTICE OF CONTRACEPTION An International Symposium and Survey Edited by MARGARET SANGER and HANNAH M. STONE, M.D. Octavo of 316 pages illustrated Baltimore, The Williams & Wilkins Company, 1931. Cloth \$4.00

CONTROL OF CONCEPTION An illustrated medical manual By ROBERT I. DICKINSON and LOUISE S. BRYANT Octavo of 290 pages illustrated Baltimore The Williams & Wilkins Company 1931. Cloth \$4.50 (Medical Aspects of Human Fertility Series issued by the National Committee on Maternal Health Inc.)

SURGICAL CLINICS OF NORTH AMERICA Vol. 12 No. 1 February 1932 (Chicago Number) Published every other month by the W. B. Saunders Company Philadelphia and London Per Clinic Year (6 issues) Cloth \$16.00 net, paper \$12.00 net

CANCER What Everyone Should Know About It By JAMES A. TOBEY, Dr. P.H. Octavo of 313 pages illustrated New York, Alfred A. Knopf 1932. Cloth \$3.00

PSYCHOLOGY AND PSYCHIATRY IN PEDIATRICS The Problem Report of the Subcommittee on Psychology and Psychiatry, Bronson Crothers, M.D., Chairman White House Conference on Child Health and Protection Octavo of 146 pages New York, The Century Company, (c 1932) Cloth, \$1.50

BODY MECHANICS Education and Practice Report of the Subcommittee on Orthopedics and Body Mechanics, Robert B. Osgood, M.D., Chairman White House Conference on Child Health and Protection Octavo of 166 pages, illustrated New York, The Century Company, (c 1932) Cloth, \$1.50

MENTAL HEALERS Franz Anton Mesmer, Mary Baker Eddy, Sigmund Freud By STEFAN ZWEIF Translated by Eden and Cedar Paul Octavo of 363 pages New York The Viking Press, 1932. Cloth, \$3.50

SURGERY OF THE CHEST By GEORGE F. STRAUB, M.D. F.A.C.S. Octavo of 475 pages illustrated Springfield, Charles C. Thomas 1932. Cloth \$10.50

THE STORY OF MEDICINE By VICTOR ROBINSON, M.D. Octavo of 527 pages New York Albert and Charles Boni, (c 1931) Cloth \$5.00

VARICOSE VEINS with special reference to the injection treatment By H. O. MCPHETERS, M.D. F.A.C.S. Third edition Octavo of 285 pages, illustrated Philadelphia, F. A. Davis Company, 1931. Cloth \$4.00

TEXTBOOK OF GYNECOLOGY FOR NURSES By PHILIP J. REPL, M.D. F.A.C.S. Octavo of 282 pages illustrated Philadelphia F. A. Davis Company, 1932. Cloth \$2.50

NOTES ON CHILDREN'S NURSING By MARGUERITE C. LEXLEBEN, R.N., B.S. Octavo of 242 pages illustrated Philadelphia, F. A. Davis Company, 1931. Flexible cloth, \$2.00

KORYZA der Schnupfen und seine Bekämpfung By HERMANN ERNST 16mo of 104 pages illustrated (Wien, Druck der Vernay A. G. 1931)

UNITED STATES ARMY X-RAY MANUAL Authorized by the Surgeon General of the Army. Second edition rewritten and edited by LT. COL. H. C. PILLSBURY, M.C. U. S. A. 12mo of 482 pages, illustrated New York Paul B. Hoeber Inc. 1932. Cloth \$5.00

THOMSON & MILLS MANUAL OF SURGERY By ALFRED ANDER MILES, M.D. L.L.D. and D. P. D. WILKIE, M.D., F.R.C.S. Eighth edition volumes 2 and 3 12mo of 1263 pages illustrated New York Oxford University Press (c 1931) Cloth \$3.80 each (Oxford Medical Publications)

INTERNATIONAL STUDIES on the Relation Between the Private and Official Practice of Medicine with Special Reference to the Prevention of Disease conducted for the Milbank Memorial Fund By SIR ARTHUR NEWSON, M.C.B. M.D. Volume 3 Octavo of 558 pages Baltimore The Williams & Wilkins Company, (c 1931) Cloth, \$5.00

THE INSANITY PLEA By EDWARD HUNTINGTON WILLIAMS, M.D. 12mo of 169 pages Baltimore The Williams & Wilkins Company, 1931. Cloth \$2.00

EPIDEMIC ENCEPHALITIS—Etiology—Epidemiology Treatment Second Report by the Matheson Commission William Darrach, Chairman 12mo of 155 pages New York Columbia Press 1932. Cloth, \$1.50

FERTILITY AND STERILITY IN MARRIAGE Their Voluntary Promotion and Limitation By TH. H. VAN DER VELDE, M.D. Translated by F. W. STELLA BROWNE Octavo of 448 pages illustrated New York Covici Friede Inc., 1931. Cloth \$7.50

SURGICAL ERRORS AND SAFEGUARDS By MAX THOREK, M.D. Quarto of 696 pages illustrated Philadelphia J. B. Lippincott Company (c 1932) Cloth \$10.00

SURGICAL PATHOLOGY OF THE FEMALE GENERATIVE ORGANS By ARTHUR E. HERTZLER, M.D. Octavo of 346 pages illustrated Philadelphia J. B. Lippincott Company (c 1932) Cloth \$5.00 (Hertzier's Monographs on Surgical Pathology)

HEALTH PROTECTION FOR THE PRESCHOOL CHILD A National Survey of the Use of Preventive Medical and Dental Service for Children under Six Report to the Section on Medical Service George Truman Palmer, Dr. P.H. Chairman Subcommittee on Statistics etc. White House Conference on Child Health and Protection Octavo of 275 pages illustrated New York The Century Co. (c 1932) Cloth \$2.50



BOOK REVIEWS



A COMPENDIUM OF THE STATUTE LAW OF CORONERS AND MEDICAL EXAMINERS IN THE UNITED STATES. By GEORGE H. WEINMANN. Octavo of 240 pages. Washington, The National Research Council, 1931. Paper, \$3.00. [Forms Bulletin of the National Research Council No. 83.]

In reviewing this publication we find that for the most part coroners are elected officers although Justices of Peace may function as coroners. The medical examiners which in our opinion handle the work more satisfactorily are only found in the States of Maine, Massachusetts, New Hampshire, New Jersey, Rhode Island and New York City. Coroners, in most instances have no special qualifications and in some states only must they be physicians. There is no uniformity as to qualifications. In our opinion, the lamentable feature of the entire system throughout the states is the lack of uniformity as to qualifications of personnel and regulations governing them.

Inquests can, in most cases, be most advantageously conducted by a regular convened Grand Jury of the county in which the alleged crime is committed because for the most part, this inquest is but a preliminary hearing or investigation as to the cause of death.

Under the heading of autopsy most laws require that it shall be performed when the cause of death cannot otherwise be determined. This, of course, is totally inadequate in as much as an autopsy properly performed should determine all information that may be necessary for the proper prosecution of the case. This particular research may take one far beyond the cause of death and yet the information gained would be absolutely essential for the proper administration of justice.

The recommendations in the final paragraph of the introduction of this "Bulletin" well summarize what is most desirable, the medical examiner or coroner should be a person skilled in the science of medicine and pathology and that the law should be completely codified and made uniform throughout the nation if practicable, guaranteeing to the people of the community, no matter how sparsely settled, all the benefits of modern scientific knowledge and experience.

M. MARTEN.

SCHOOL VENTILATION Principles and Practices. Final Contribution of the New York Commission on Ventilation. By C.-E. A. WINSLOW, Chairman, and others. 12mo of 73 pages. New York City, Columbia University Teachers College, 1931. Cloth, \$1.00.

This book gives a concise history of the progress of proper ventilation with especial reference to schools. It reviews the hygienic relationship and effects of ventilation.

It reviews the previous attempts and now gives the final work on proper ventilation principles as laid down by the New York Commission on Ventilation.

Sanitary engineers would do well to study this survey.

J. J. WITTMER.

A DESCRIPTION OF THE PLANES OF FASCIA OF THE HUMAN BODY with Special Reference to the Fascia of the Abdomen, Pelvis and Perineum. By B. B. GALLAUDET. 12mo of 75 pages, illustrated. New York, Columbia University Press, 1931. Paper, \$2.00.

This small descriptive booklet, containing 59 pages of text and 6 figures drawn by the author, represents actual dissections by him on 34 adult human bodies.

Dr. Gallaudet has certainly most accurately and briefly described the fascial planes of the abdomen,

pelvis and perineum and has done exceedingly well in his attempt to prove the law of continuity of fascial planes in the body.

He should be commended for this work on a section of anatomy which has undoubtedly been inadequately described in the average textbook.

HERBERT T. WIKLE.

MIDWIFERY FOR NURSES. By DOUGLAS MILLER, M.D., F.R.C.S. 12mo of 256 pages, illustrated. London, Edward Arnold & Company; New York, Longmans, Green & Company, 1931. Cloth, \$2.40.

The author has written this volume to supplement the practical instruction in midwifery which the nurse receives in the hospital. The book is divided into nine parts, and covers the subject of Anatomy and Physiology, Physiology of Pregnancy, Management of Pregnancy, Normal Labor, Pathology of Pregnancy, Abnormal Labor, Pathology of Puerperium, The Infant, and Obstetrical Operation, and Anesthesia.

The text is clearly written in simple language and contains only such data of which a nurse should have knowledge.

The volume is excellent as a textbook of midwifery for nurses.

W. S. S.

ON THE EDGE OF THE PRIMEVAL FOREST. Experiences and Observations of a Doctor in Equatorial Africa. By ALBERT SCHWEITZER, Dr. Med. Translated by C. T. CAMPION, M.A. 12mo of 180 pages, illustrated. New York, The Macmillan Company, 1931. Cloth, \$2.00.

How many doctors would give up their practices, however small, and their families out of sympathy for the physical miseries of the African natives? Doctor Schweitzer, a doctor of theology as well as of medicine, gave up a university professorship, a comfortable home, and artistic background in order to become a medical missionary. It was a religious zeal rather than scientific curiosity which prompted him to venture on such an unusual undertaking; or, to use his words—"the sympathy which Jesus and religion generally call for." However different his motives may have been from those of the strict practitioner of medicine the fact remains that in his own way he found the opportunity of doing much good.

EMANUEL KRIMSKY.

HEALTH FOR TRAVELERS. Hygiene and Health Preservation in the Tropics, Orient, and Abroad. By the Staff of the Pacific Institute of Tropical Medicine Within the George Williams Hooper Foundation for Medical Research of the University of California. Edited by ALFRED C. REED, M.D. 12mo of 239 pages. San Francisco, J. W. Stacy, Inc., 1931. Cloth, \$3.00.

This new handbook is written especially for those contemplating travels to the tropics. We are first introduced to the variations in temperature and in humidity that one may expect with changes in latitude as well as altitude. Simple and comprehensive directions are given concerning the common dangers to be avoided. There are some facts here and there that will interest the medical man. For example, we are told that "many persons (about 50%) who die of snake-bite really die of fright or from the treatment." There are directions on sterilizing water with iodine and sodium hyposulphite successively where boiling is impossible. Dried milks are used extensively in the tropics for adults as well as children. This book should prove a thoroughly reliable and friendly guide for the traveler.

EMANUEL KRIMSKY.

GYNCOLOGY AND UROLOGY FOR NURSES By SAMUEL S. ROSENFELD M.D. F.A.C.S. 12mo of 230 pages illustrated New York: William Wood and Company, 1931. Cloth \$2.00.

A small textbook in which the student nurse may find gynecology and urology in one volume. A new departure. The subject matter is good well arranged and practical. Illustrations showing nursing technique are excellent but the pictures of pathological specimens and operative procedures might well have been omitted. C. A. G.

THE COMMONER NERVOUS DISEASES FOR GENERAL PRACTITIONERS AND STUDENTS By FREDERICK J. NATTRASS M.D. F.R.C.P. Octavo of 218 pages illustrated New York: Oxford University Press, 1931. Cloth \$4.00 (Oxford Medical Publications).

The book is based upon the experience of post graduate teaching of neurology given to general medical practitioners. More emphasis is placed upon the different clinical manifestations of the various neurological diseases than upon anatomical and physiological considerations. It emphasizes the salient points of each disorder with discussion of the various different manifestations of each condition. Twenty chapters are devoted to the elucidation of the commoner neurological conditions. Inflammatory and degenerative and neoplastic diseases are given thorough consideration. Traumatic disorders are not discussed. As a whole the book is admirably presented and satisfies the purpose for which it is written, i.e. a discussion of the common neurological disorders before a group of medical practitioners with the chief objective of recognizing these disorders and of instituting adequate therapy. IRVING J. SANDS.

SIMPLIFIED DIABETIC MANAGEMENT By JOSEPH T. BEARDWOOD JR. A.B. M.D. and HERBERT T. KELLY M.D. A.A.C.P. 12mo of 191 pages illustrated Philadelphia: J. B. Lippincott Company [c1931]. Cloth \$1.50.

The book is divided into three chapters the first containing the essentials that every diabetic patient should know, the second more advanced information of interest to patient and physician and the third various food values, recipes and menus. The principal difference from other similar books is the recommended use of a plan called the unit method which the authors think simplifies diabetic management.

Three units are used—Group A in which each food listed is equivalent to 5 grams of carbohydrate, 1 gram of protein and yields 24 calories. Group B 5 grams of protein, 10 grams fat, 110 calories and Group C which represents in each unit 5 grams of carbohydrate, 6 grams of protein and 10 grams of fat yielding 134 calories. Each unit of Group C represents one unit of Group A and one unit of Group B.

Nineteen diets have been calculated with the unit method charts. Diseases other than diabetes or complicating it as nephritis, cardiac decompensation, epilepsy and obesity may be treated by the application of the method. There is a chapter containing the content in the salts (sodium chloride and sodium bicarbonate) of various foods as compiled by Dr. F. M. Allen with whose ideas about salt the authors apparently agree. W. E. McCOLLON.

THE FOUNDATIONS OF MEDICAL HISTORY By SIR D'ARCY POWER K.B.E. F.R.C.S. 12mo of 182 pages illustrated Baltimore: Williams & Wilkins, 1931. Cloth \$3.00 (Johns Hopkins University Institute of the History of Medicine).

This is an octavo of 180 pages and 3 illustrative plates

which properly belongs on the Doctor's bookshelf. It is written in a chatty, pleasing style and bears abundant evidence of the Author's thorough knowledge of his subject. It is compelling in a direct invitation to the doctor of literary taste to try his hand at iconographic work. Furthermore it is replete with methods of accomplishing such a task—a fact which particularly recommends it to beginners. Sir D'Arcy Power's book comprises a series of six lectures delivered at the Institute of the History of Medicine of the Johns Hopkins University with an introduction by Dr. William H. Welch who characterizes the Author as a distinguished and charming personality whose visit to Baltimore has left delightful and enduring memories. J. M. VAN COTT.

CANCER AND RACE. A Study of the Incidence of Cancer Among Jews Conducted under the Auspices of the Jewish Health Organization of Great Britain. By MAURICE SORSBY M.D. F.R.C.S. Octavo of 120 pages. New York: William Wood and Company, 1931. Cloth \$3.00.

Dr. Sorsby has ambitiously undertaken the burdensome task of collecting statistics on the incidence of cancer in Jews as a race and of the frequency of that disease in both orthodox and reformed Jews respectively. Unfortunately however these studies will not lend the author or the reader to trace even a distant etiological basis for cancer. In fact if Shylock were to plead his cause at the present time he might use just such a book as convincing evidence of the equal susceptibilities of the Jew and Gentile to this disease. EMANUEL KRIVSKY.

INFECTIONS OF THE KIDNEYS By FREDERICK F. CAMPBELL M.D. F.A.C.S. 12mo of 343 pages illustrated New York: Harper & Brothers, 1931. Cloth \$3.00 (Harper's Medical Monographs).

The book is one of Harper's Medical Monographs. It is written for the medical practitioner who should welcome it for its conciseness, its completeness and its modernity. The author has taken great pains in collecting all the new findings pertaining to kidney infections and presents them with his judicious comment which appears to be very sound.

The chapter on kidney infections in childhood will be of interest to the urologist.

The illustrations are schematic but serve their purpose very well; there is a table of contents and a good index. H. L. WEHRBEIN.

SURGICAL PATHOLOGY OF PROSTATIC OBSTRUCTIONS By ALEXANDER RANDALL M.A. M.D. Quarto of 267 pages illustrated Baltimore: Williams & Wilkins, 1931. Cloth \$7.00.

This work is based upon autopsy findings noted in 1218 specimens of the bladder and prostate. In this group there were 312 instances of gross pathological change in the prostate. There is presented a clear and concise correlation of all the pathological and clinical data which have been demonstrated as a result of this very long and painstaking investigation. There are a large number of excellent illustrations taken from actual photographs and accompanied by brief clinical histories of the cases under discussion.

Through the medium of numerous papers presented from time to time by Dr. Randall the profession has been made familiar with his work. The presentation of all of this work with 15 findings and conclusions in a single volume is a distinct contribution to medical literature. The book should find a place in the library of every urologist. N. P. RATHBUN.



OUR NEIGHBORS



MEDICAL SOCIETY AND PUBLIC HEALTH IN ALABAMA

The January number of the Journal of the Medical Association of the State of Alabama comments editorially on the legal responsibility of Alabama doctors in public health through their State organization:

"In states other than Alabama, the practicing physician aligns himself with organized medicine largely because of ethical considerations and because of the personal advantages which accrue from such affiliation. Membership in other state medical associations or societies carries with it no clean-cut, legal responsibilities to the citizens of such states; the obligations and purposes of such societies find expression in the promotion of scientific medicine and of the general welfare of their members as related to the board scheme of modern day social organization. This, in no sense, means that the humane, philanthropic attitude, which should characterize every earnest physician, is discouraged; but it does mean that no definite, legal obligation attaches to such membership. History abundantly points out that a fixed responsibility serves as a potent lever in productivity; and human nature is such that, in the absence of such responsibility, output lags, consequently there is a direct ratio existing between productivity and responsibility.

"In Alabama's scheme of organization, the legislature has definitely placed upon the organized profession the direction and control of all public health affairs within the State. The County Medical Societies, speaking through their respective Boards of Censors, become the County Boards of Health; and the State Medical Association, voicing itself through the State Board of

Censors and its State Health Officer becomes the State Board of Health. It is because of this responsibility and the courageous manner in which organized medicine has met these obligations, that much of our success in this field of endeavor is due. Sane leadership we unquestionably have had; but leadership alone, without the mighty and articulate backing of a unified, interested medical profession, would never have produced such happy results. The public health worker cannot advance far beyond the vision or scope of the crystallized medical thought existing in any community without immediately encountering difficulty. One of the marvels revealed to visitors from other states and other countries when coming in Alabama, is the splendid type of cooperation given to health workers by the entire profession; and yet to the doctors of this state this does not seem strange, because of the fact that they recognize and assume their own responsibility in this important regard. The new and younger acquisitions to our profession should quickly acquaint themselves with the details which make them a vital part of the health machinery of this state. Regular attendance upon the meetings of the County Medical Society; a familiarity with the various activities conducted by the health workers within a county and a careful study of the constitution of the Association and the health laws of the state offer ready means for giving this necessary information.

"With this information once acquired, and the proper vision caught, the practicing physician in Alabama becomes not alone a healer of the sick; he becomes much more; he becomes a promoter of health and a preventer of disease."

PUBLIC HEALTH ADMINISTRATION IN ALABAMA

The State Board of Health of Alabama is the Medical Association of the State. The February number of the Journal of the State Association contains an article by Dr. J. N. Baker, State Health Officer, which says:

"The State Health Officer wishes very much that a copy of a recent publication by the Commonwealth Fund entitled, 'Child Health and the Community' by Courtenay Dinwiddie, might be placed in the hands of every physician practicing in this State. A few excerpts from this little book are given below, which admirably serve to show the attitude of the officials of this Fund towards the practicing profession, and also how necessary it is for any

forward-looking health program to have the undivided and sympathetic support of the profession.

"In Alabama, because of the interest, responsibility and voice given by law to organized medicine in the direction and control of public health affairs, it is felt that less friction and misunderstanding creeps into the relation of these groups than likely occurs in any other state. The present State Health Officer, who for many years trod the same path which every active physician is now treading, would like to feel that he has the confidence of the entire profession whose interests and welfare he

(Continued on page 426—Adv. xvi)

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PRESENTS the therapeutic properties of iodine in a nascent state linked with cinchophen in a definite chemical formula (U. S. Patent 1,828,525).

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(Continued from page 424)

shall ever strive to most zealously guard, in the effort to solve the many problems now confronting both the profession and health workers."

The article quotes the following principles set forth in the book:

"1. The public interest must be paramount. This is a general statement to which almost any one will agree until the ideas of others as to the public interest come into conflict with his own ideas as to his private interests.

"2. The interest of any group that is contributing to the solution of a public problem must to that extent be considered a public interest.

"3. Physicians constitute a body of citizens whose training has prepared them to render a service to public health for which there is no adequate substitute.

"4. Physicians in private practice perform a service in the treatment of disease, whether as individuals or in fully organized groups, whether in private offices, clinics, hospitals, or homes, that is the accepted mode of treatment, in this country, for those able to pay for such service.

"5. Physicians in private practice, because

of their training, numbers and relationships to their clientele, constitute the one group which is potentially most capable of applying the lessons of preventive medicine to the habits and circumstances of the individual. They are largely unprepared to render such service because their training and experience have been chiefly therapeutic.

"6. The public is largely unready to demand or pay for such guidance in the application of the lessons of preventive medicine to personal problems.

"7. An honest, consistent, and cooperative effort should be made by the organized medical profession, the health authorities, and private groups interested in public health to develop public demand for preventive services by private physicians whether practicing as individuals or in organized groups.

"8. An inseparable corollary to this effort should be the conscientious preparation of physicians for such services, without which the attempt to build up satisfactory preventive services by private practitioners is doomed to failure.

"9. Health conferences or preventive health center medical services conducted by the health

(Continued on page 428—Adv. xviii)

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Cardiologists...



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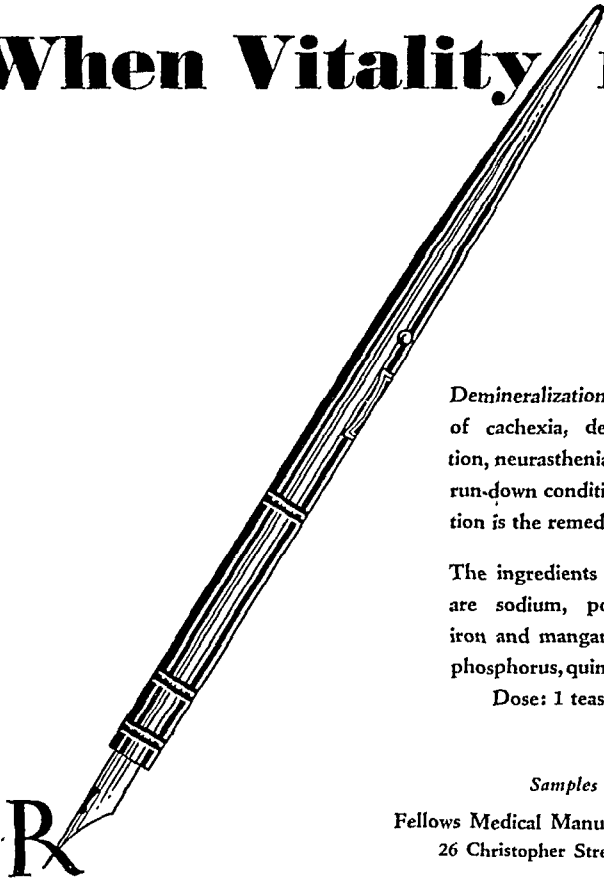
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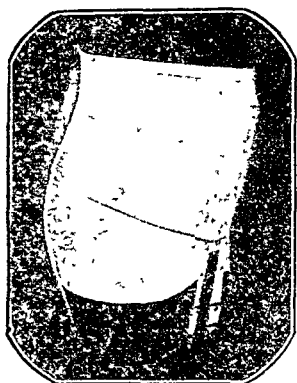
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(Continued from page 426—Adv. xvi)

department, especially for babies and younger children, are justified and desirable (a) as a means of creating a demand for such services, (b) as an agency of inaugurating proper standards for such services, (c) as a practice ground for physicians in the art of preventive medicine, and (d) as a supplement to the preventive services of private practitioners, so long as conscientious efforts to make such service adequate to the public needs have not been successful.

"10. The paramount interest of the public must come to the fore especially in any question of the control of communicable disease. Leaving to the private practitioner as much latitude as possible in all discretionary matters of treatment, the health officer should take responsibility for promoting such immunizations as are accepted as part of the necessary protection of the community, and must assume final authority for all control measures and for diagnosis in so far as that is necessary to insure prompt and accurate recognition of cases."

PUBLIC HEALTH ACTIVITIES IN GEORGIA

The February issue of the Journal of the Medical Association of Georgia contains a review of the public health activities of the Georgia Department of Health written by Dr. T. F. Abercrombie, Director. Those activities of special interest to practicing physicians are described as follows:

"At the present time, there are thirty-eight counties in the state carrying on full-time health programs, including two districts. Approximately fifty per cent of the population is located in these counties having public health service. Economic conditions have made it difficult for many of them to carry on the work; however, health work was discontinued in only one county last year.

"A mobile health unit has put on demonstrations of county health work in eleven counties. The personnel consists of a health officer, nurse, and a sanitary inspector. This unit has demonstrated the value of full-time health work in rural counties.

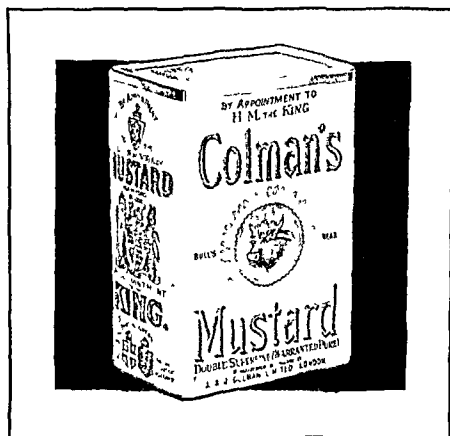
"Since the typhoid fever problem in Georgia is a serious one, the county health officers of the state have been requested to follow up every case of this disease during convalescence with the view of detecting and eliminating carriers. The problem will be lessened considerably when carriers are controlled.

"During the month of May, through cooperation with the Georgia and Florida Railroad, a health exhibit train was operated over the

(Continued on page 430—Adv. xx)

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WITHIN EVERY DOCTOR'S EXPERIENCE there are cases where his skill and good judgment have suggested the external use of mustard. A mustard poultice relieves inflammatory conditions, internal pains and congestions.

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COLMAN'S MUSTARD is grown where natural soil and climate conditions favor the production of the greatest amount of these volatile oils. It is ground and packed in ways to preserve them. So to be sure of the greatest therapeutic effect, specify Colman's each time you prescribe mustard.

Colman's Mustard

(Continued from page 428—Adv. xviii)

Georgia and Florida line. More than 20,000 people viewed the exhibit and attended the lectures given each night.

"The summer roundup of pre-school children was conducted in every county in the state through co-operation with the Parent-Teacher Association. The President of the Medical Association of Georgia appointed a physician in each county to make physical examinations.

"Findings are beginning to show interesting figures as to the distribution of hookworm and other intestinal parasites in the state. Many of the sections of South Georgia still show high incidence of hookworm, while others in the upper half of the state are relatively free of hookworm.

"The technique of culturing throats of all convicts was employed in an outbreak of meningitis in the United States Penitentiary. In this way, the carrier was located in the person of a prisoner who had meningitis six months ago.

"About sixty tons of dried brewers' yeast were distributed during 1931. Aside from many individual testimonials which have reached this office, there is yet no reliable method of determining the value of yeast in

the prevention and treatment of pellagra. Something has lowered the mortality, while neighboring states report increased mortality.

"Diphtheria toxoid and toxin-antitoxin are not being used as much as merits justify in spite of the fact that the price to the consumer has been reduced to forty per cent of the cost price. Of each dollar spent for these products, thirty per cent is paid by the Bankers Health & Life Insurance Company of Macon, thirty per cent by the State Department of Health, and forty per cent by the consumer.

"The laboratories supply the freshly prepared dilutions of tuberculin to health officers and others engaged in the early diagnosis of tuberculosis.

"Extension courses for rural physicians were conducted jointly by the University of Georgia, Emory University, and the State Department of Health at six different points throughout the State. A total of 315 physicians, from 81 counties, attended these courses.

"Beginning August 24th, through co-operation with Emory University, the Children's Bureau, and the Rosenwald Fund, a five-day course was held in Atlanta for the Negro physicians of the State; 53 colored doctors attended this course. The Rosenwald Fund

(Continued on page 432—Adv. xxii)

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The course approximates 34 hours a week, and includes: Demonstrations of urologic operations and diagnostic procedures; cystoscopy and endoscopy; operative urologic surgery on the cadaver; urographic studies and interpretation; pathology, bacteriology, and bio-chemistry of genito-urinary diseases; etc. ¶ Under the direction of Dr. Joseph F. McCarthy. ¶ The class is limited to ten. The seminar is a full time six months' course, and part time work will not be permitted. ¶ For further information, address

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The far-reaching systemic effects of intestinal toxemia are generally appreciated, but the methods offered for its correction have usually proved unsatisfactory.

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Clinical investigation appears to substantiate the earlier laboratory investigations of Larson, which showed that Soricin—a physiologically standardized preparation of purified sodium ricinoleate—exerts a detoxifying action on the enteric flora.

Soricin Capsules are offered in two sizes: 5-grain and 10-grain. For the administration of the larger doses required at the beginning of treatment, the 10-grain Soricin Capsules are suggested. For the subsequent prolonged treatment, the 5-grain capsules will be found convenient.

Full descriptive literature giving complete outline of treatment will be gladly mailed upon request. THE WM. S. MURRELL COMPANY, CINCINNATI, U. S. A.

CHIROPRACTIC INITIATIVE IN MASSACHUSETTS

The *New England Journal of Medicine* of December 31, 1931, contains the following note on a legal petition of the chiropractors of Massachusetts to the Legislature:

"Although the law requires the signatures of but twenty thousand registered voters on a petition of initiative, the chiropractors recently filed one with the office of the Secretary of State of Massachusetts with sixty thousand signatures. They were obtained as follows in the several counties:

"Barnstable, 248; Berkshire, 1,751; Bristol, 3,741; Essex, 9,200; Franklin, 1,367; Hampden, 4,349; Hampshire, 1,163; Middlesex, 17,800; Plymouth, 4,715; Worcester, 7,150; Suffolk, 7,338; and Norfolk, 1,959.

"The cities and towns were represented as follows:

"Pittsfield, 1,136; New Bedford, 1,800; Taunton, 1,049; Amesbury, 914; Gloucester, 1,007; Lawrence, 1,536; Lynn, 766; Newburyport, 1,400; Orange, 540; Holyoke, 1,706; Springfield, 1,326; Fitchburg, 1,166; Worcester, 3,394; Leominster, 378; Ware, 373; Cambridge, 700; Everett, 1,819; Lowell, 2,753; Marlboro, 2,022; Medford, 700; Melrose, 700; Newton, 700; Somerville, 1,100; Waltham, 1,450; Woburn, 600; Quincy, 1,100; Brockton, 1,900; and Boston, 7,000.

"This survey of the petition will give the general public a very good idea of the intention of the chiropractors to locate in these places. The canvassers undoubtedly obtained many signatures from individuals who will not vote in favor of the petition. It must be admitted that physicians in these several cities could have obtained many more signatures in opposition to a change in the statutes if they so desired.

"We are not dismayed or even depressed by the problem which confronts us. The present requirement of one standard to determine the qualification of fitness to practice the healing art in this state has been attacked.

"The approval of chiropractic methods in Massachusetts now rests with the citizens of this Commonwealth. The medical profession will, as in other public health fields, present the facts. The final decision will be a demonstration of approval or repudiation of scientific medicine.

"If intelligent study can be brought to bear on this subject there will be a satisfactory answer. It is of vital importance that the medical profession should act unanimously, not by reason of selfish interest, but because of its responsibility in leadership in public health education."

PUBLIC RELATIONS IN WYOMING

The February number of *Colorado Medicine* records the action of the President of the Wyoming State Medical Society, D R H Sanders, in appointing a committee of nine members to constitute a committee on Public Policy and Legislation, and says

"It is to this committee that the citizens and officials should turn for advice on all questions of health and disease. Unbiased and a strictly scientific source of information on all questions of public health and medical knowledge, its opinions should and will be the court of last resort

"This committee will serve for a term of years so that its membership will in most cases serve for at least five years. The committee will cooperate with the State Legislature, the Governor, and Board of Charities and Reform, the State Board of Health and all other state boards as well as county and city officials, on all medical and health problems

"With such a committee to consult with, state, county and city officials can no longer plead ignorance or hope to escape just criticism if they act on public health matters without consulting this committee

MEDICAL PUBLICITY IN FLORIDA

The February number of the *Journal of the Florida Medical Association* has the following editorial on medical publicity in the newspapers of Florida

"Newspaper releases and announcements of radio broadcasts have been given to all the newspapers of the state. The press releases have been going out weekly the past nine weeks. In order that the Public Relations Committee may learn of the reception their press releases are receiving all members of our Association are requested to clip the items appearing in their local papers and

Many
Obstetricians
Have Reported
That

Poland Water

Relieved Hyperemesis
Gravidarum,
Either Used Alone or as
an Adjuvant

Interesting literature free
on request



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COMPANY

Dept C
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New York

forward them to Box 81, Jacksonville. The clipping of these releases and forwarding them to the central office will be of considerable help to the Public Relations Committee as an indication of the value of the task they have undertaken, for it is quite important that reliable information be received regarding the number of papers in the state that have given space to the Committee's press releases"

EDITORIAL THOUGHTS FROM NEBRASKA

The editor of the *Nebraska State Medical Journal* for February comments on the source of articles, as follows

"During the year 1931 there has been an abundance of copy furnished to the editor and it has been somewhat embarrassing at times to decide what or which articles to publish next—they all deserved early publication. At the time this is being written the supply is still adequate to carry us over the annual meeting. We mention this for two reasons that essayists may know that we are doing the best we can to get material published, and to let prospective contributors know that we are always glad to get something real good"

The editor also has his troubles with authors who use much space in saying little

"A correspondent sent us the following criticism months ago about an article published during the past year. We now offer it to the reader. The criticism was specific, but applies to other articles and should be a suggestion to authors. *The Medical Journal*, which came yesterday, had a number of interesting articles. I think the man who wrote the article on— had a good topic but he wasted several pages saying nothing and then it was time for him to give his conclusions. He had no ideas that were new to anybody, to offer. The article on *Trichomonas* was more definite than any of the other articles on the same subject which I had read"

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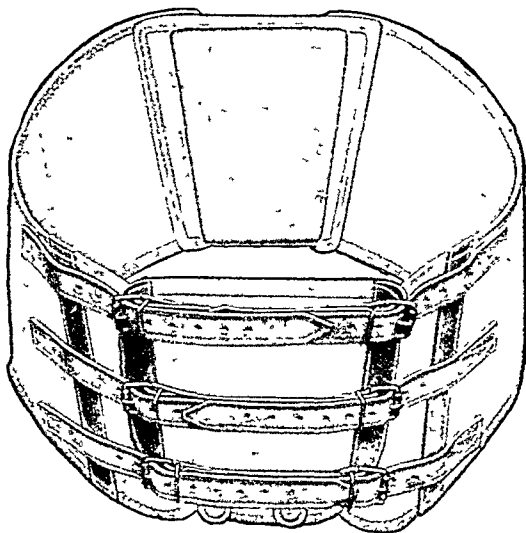
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COMPULSORY HEALTH INSURANCE ABROAD

By EMIL KOFFLER, MD, NEW YORK, N. Y.

A report of the Special Committee on the Study of Health Insurance of the Bronx County Medical Society given February 17 1932

INTRODUCTION If the present depression has taught us something, it is that the world must be considered as a unit and that there is not such a thing as continental isolation or national self-sufficiency. Economic and social events or changes in one country must necessarily have their repercussion all over the inhabited world and national or geographical boundaries are even less effective in stemming social or economic tides than they are for instance, in checking epidemic disease.

A first hand information of what is going on in other countries—especially in the so called old world so similar in culture and tradition to our own—is therefore necessary if we want to face intelligently and understandingly the problems we will be confronted with sooner or later in our own country. Rather sooner than later, according to my own feeling.

The economic and professional aspects of the practice of medicine are deeply affected and changed abroad and we must take cognizance of every change in order to know what awaits us here.

Mindful of this truth the present splendid administration of our County Medical Society has made an effort to get an unbiased and reliable account of what is happening in this field and has appointed a special committee on the study of Compulsory Health Insurance abroad. Three members of this Committee of four are foreign graduates two have a direct and personal acquaintance with compulsory health insurance practice abroad and have completed their previous experiences by a renewed sojourn in Germany and Austria one year ago.

When I accepted the chairmanship of this Committee I had followed for many years every phase of this question and knew that I would have no difficulty in getting the literature and data of publications in English, German and French. After I took the plunge I found out that the real difficulty was how to get out and bring you a comprehensive and brief exposé of the situation. Out

of about 1,300 references listed we have selected 44 publications which we studied and which constitute the bibliography appended to this article.

Historic Survey The French revolution of 1789 in its formulation of "*les droits des hommes*" was the first to recognize that the organized society has the duty to guarantee to each individual protection and support in case of sickness. However the real precursors of the health insurance movement were the old trades guilds and their mutual protective organizations.

In **GERMANY** the first mutual organization for assistance and sick benefit is represented by the miner's union or *Knappschaftskasse* which numbered 53 funds with a membership of 56,500 people in 1841. This organization has preserved its separate entity up to this day. In 1849 the Prussian Industrial code asked the employers to insure workmen against illness and taxed them with 50% of expenses incurred.

In 1876 there were 12,000 *Hilfskassen* with a membership of 2,000,000 people occupied in industries.

In 1881 Bismarck in following his anti-socialistic policy wanted to put the State on record as the fatherly guardian of the welfare of his working people and so introduced the principle of compulsory health insurance by appropriate legislation.

The act of June 16, 1883 was the first legislative expression of the State asking and sponsoring collective protection against sickness, accidents during work and old-age insurance. To this large group was added gradually unemployment insurance, maternity benefits, pensions for permanent injuries and funeral expenses—all these activities under State control and legislation. This is what constitutes the so-called Social Insurance.

In **GREAT BRITAIN** there were early forms of contract practice in the economically limited industrial and agricultural areas—besides the Poor Law system.

1) Many doctors had their own "private clubs" collecting from their members small weekly con-

tributions in return for which the entire family was attended. These contributions were about 3d. per week.

2) Other doctors arranged with the owners of factories for medical attendance of employees. Deductions were made from the wages of such employees and turned over to the doctor covering thus the medical care of the entire family of each employee.

3) Friendly Societies and Trade Unions. These bodies had branches throughout the country and provided benefits against unemployment, sickness and funeral benefits. Later they provided medical attendance. Each local branch or lodge appointed its own doctor and paid sums from 2s. 6d. to 5s. per member per year, for which ordinary medical care was obtained.

This system was completely analogous to the lodge contract practice in U. S. A. The well-known insufficiencies and abuses prevailed: a) low remuneration of doctors, b) superficial and perfunctory medical service, c) abuse on the part of the client, d) overburdening of doctors on account of large numbers of patients, e) canvassing and all kinds of questionable procedures on the part of the doctor, f) low esteem for this form of medical practice from both sides.

An important step was achieved when Great Britain in its desire to emulate Germany promulgated the *Act of January 1913*.

In the course of time other countries followed suit with similar acts of legislation (as shown in table I).

Table I shows for a number of countries the dates of enactment of laws of compulsory insurance and also the kind of workers affected by these laws.

TABLE I
LAWS INTRODUCING COMPULSORY
SICKNESS INSURANCE

Country	Year of Enactment	Workers Covered
GERMANY	1883.....	Industry
	1885.....	Commerce
	1886.....	Agriculture
AUSTRIA	1888.....	Industry, Commerce
HUNGARY	1891.....	Industry, Commerce
NORWAY	1909.....	Industry
	1915.....	Commerce, Agriculture
RUSSIA	1911.....	Industry
	1922.....	Commerce
GREAT BRITAIN	1911.....	Industry
	1913.....	Commerce, Agriculture
BULGARIA	1918.....	Industry
	1924.....	Commerce, Agriculture
PORTUGAL	1919.....	All persons economically weak
POLAND	1920.....	Industry, Commerce, Agriculture

GREECE	1922.....	Industry
	1923.....	Commerce
JAPAN	1922.....	Industry
FRANCE	1930.....	All working men

Sickness Insurance in Europe
Commission on Medical Education

Table II indicates countries which have compulsory health insurance on their statute books. Some of these have also voluntary health insurance organization.

TABLE II
COUNTRIES HAVING COMPULSORY
SICKNESS INSURANCE

1929	1930
Austria	Belgium
Bulgaria	*Chile (All population)
Czecho-Slovakia	Estonia
France (Alsace-Lorraine)	Germany
Great Britain	Greece
Hungary	Irish Free State
Italy (New Provinces)	Japan
Latvia	Lithuania
Luxemburg	Norway
Poland	*Portugal (All population)
Roumania	Russia
Yugo-Slavia	*Switzerland (All population of 6 cantons)

* Some also have Voluntary sickness insurance.

(Appendix—Sickness Insurance in Europe, Commission on Medical Education)

Table III indicates countries which have mostly a system of voluntary health insurance. Some of these have also compulsory insurance legislation but the former system is prevailing. For instance: Switzerland, a country distinguished by its local autonomy has only 6 cantons out of a total of 22 in which compulsory health insurance obtains.

TABLE III
COUNTRIES HAVING VOLUNTARY
SICKNESS INSURANCE*

Argentina	Australia
Belgium	Canada
Denmark	Finland
France (Compulsory 1930)	Great Britain
Northern Ireland	Italy
Netherlands	New Zealand
Palestine	Spain
Sweden	Switzerland
Union of South Africa	Uruguay

* Some also have Compulsory sickness insurance.

(Appendix—Sickness Insurance in Europe, Commission on Medical Education)

The latest country to enter the column of compulsory health insurance is *FRANCE*, August 1930.

We see therefore an uninterrupted triumphant march of *Socialized medicine* during the last 50 years. We prefer to call this system *Socialized medicine* and not *State medicine* which has other implications. The real *State medicine*, that is practice of medicine as civil servants under supervision of the State obtains only in U S S R. In Russia practice of medicine is a function of the State and doctors are State servants. The State bears the full cost of medical education and the graduates are at the disposal of the State. Fifty per cent of the medical students are women.

Doctors are paid monthly salaries varying from \$60 to \$120. Hospitals, clinics, maternity care, nurseries, treatment of venereal diseases and advice on contraception are free to the population. Beginning January 1, 1932 salaries of medical workers were increased 23% in accordance with a recent decision of the Council of People's Commissars (*Economic Review of the Soviet Union*, January 15, 1932, p. 48).

Organization, Its General Principles. Before presenting along general lines the most essential points in the organization of compulsory health insurance we wish to make a clear distinction between this kind of insurance and any other system of voluntary insurance.

In compulsory insurance there are three parties to the insurance contract: 1) the State representing organized Society, 2) the insurance carrier, the insured. The State by its inherent power of legislation makes the insurance *mandatory* on employers and employees alike, supervises the fulfillment of the provisions of the contract and makes the transaction independent of economic returns by subsidizing the undertaking with means obtained by direct or indirect taxation of its entire population. Social insurance is never paying its own way except in prevention of suffering and of social unrest.

In some countries like Denmark and The Netherlands the State supplements voluntary insurance by subsidies, free hospitalization and by benefits derived from the old poor law system.

This system also differs from compulsory insurance in so far as it does not make insurance *mandatory* on every enterprise employing wage earners. Compulsory insurance on the other hand does not consider whether an enterprise is profitable or not but aims to distribute the cost of its maintenance over the whole range of productive activity.

It is therefore more social as it does not burden only the economically sound enterprise which insures its workmen voluntarily but also applies to the workers in weak industries which can not afford insurance and are at the same time mostly in want of support.

In compulsory health insurance the following points must be considered:

Principles. Distributing the economic burden of medical care over a large fraction of the population.

Financing. Combination of contributions from the insured persons' employers, compulsory savings and indirect taxation.

Tendency. Fractional programs to include insurance against incapacity, disablement, unemployment, old age and other economic risks.

Further tendency. Shift from 'cash benefits' to "benefits in kind" (Irish Free State).

"Benefits in kind" include medical treatment, drugs and optionally additional benefits as hospital, dental, ophthalmic and sanatorium treatment.

Restoration rather than compensation is the principal function of present day insurance.

Sickness Insurance tends to be put on a basis of family insurance.

Grouping—by trade (earliest) (Part of trade union or group or local) by territorial capitation.

Insurance carriers and is based on the contract of employment.

Voluntary contributors admitted.

Of 23 countries where compulsory health insurance obtains 20 are restricted to wage earners.

In Table IV we have taken for comparison 3 countries representing to our mind 3 differentiated types: Germany—the first country with social insurance for the last 50 years, Great Britain—on account of its similarity in culture, language, etc. to our own country, and finally Austria or rather autonomous Vienna which is the most advanced along lines of socialization. All the other countries have pretty uniform features with some differences of detail.

Under the common denomination of "funds" we understand the different insurance carriers.

They are in Great Britain the previous friendly societies or trade unions all under the designation of "approved societies", in Germany they are the old guilds, the unions and territorial units (Ortskrankenkassen).

We also show the maximum yearly income which entitles a workman to the benefits of insurance. Workmen between 16-70 years of age earning below or the maximum of \$1,250 per year in Great Britain or \$900 in Germany are insurable under the law. In Vienna there is no income limit. Every worker, servant or apprentice comes under the provisions of the Act.

We also show the yearly capitation or deduction from the pay envelope of every workman in order to obtain insurance.

In Great Britain the care of the dependents of the insured is not included. In Germany it is included but the yearly capitation is accordingly higher.

Table V illustrates the disbursing and adminis-

TABLE IV
ORGANIZATION

Country	Income (Yearly) of Insured	Yearly Capitation	Families of Insured	Number of Funds
Great Britain	£250 = \$1,250	9s. = \$2.25	Not included	7,876 (Approved societies and their branches)
Germany	M 3,600 = \$900	M 23 = \$5.25	Included (Territorial Funds)	7,500 (200 in Berlin)
Austria	No income limit for workers, servants or apprentices	Sch. 15 about \$2.00	Not included except: railroad and gov- ernment employees	82 (Law 1928-1929) includes railroad as- sociations

trative units of Great Britain. They are called Insurance Committees and are under the control of the Ministry of Health. Each insurance committee is subdivided into different smaller groups

schein" or sickness slip must be purchased. This costs about 12 cents and has reduced considerably the number of applications for treatment. It was also intended to act in such way.

TABLE V
ADMINISTRATION OF INSURANCE IN GREAT BRITAIN

INSURANCE COMMITTEES (about 200) Composed of Representatives of	{ County Council representing insured population. (Majority.) Panel Physicians Ministry of Health
INSURANCE COMMITTEES Subdivided into	{ Medical Service Sub-Committee (Equal number of doctors and laymen). (For complaints.) Panel Committee (For professional matters). Allocation Committee (Equal number of doctors and laymen).

whose composition and attributes are briefly outlined.

Table VI deals with the administration of insurance in Germany. The supervision rests with the department of labor. The most important units are the territorial funds: Ortskrankenkassen. They make all disbursements of sick benefits and pay the doctors through the medium of the Physicians' Union (Aerzteverband).

The other independent agencies or units had their own mode of payment, but since January 1932 all the funds use the medium of the Aerzteverband and have changed to the type of the Ortskrankenkassen. They employ general practitioners as well as specialists, have referees or "Vertrauensärzte" to check the work of physicians, employ technicians for physiotherapy and laboratory work and take care of hospitalization or transfer to sanatoria, convalescent homes, etc. They also supply optometric and orthopedic appliances as well as drugs and all means of therapy. The clerical, technical and administrative force equals or surpasses the number of medical employees.

For each single case of sickness a "Kranken-

TABLE VI
ADMINISTRATION OF INSURANCE IN
GERMANY

(Supervision Department of Labor)

Territorial Funds (Ortskrankenkassen)	{ Pay physician through medium of Physicians' Union.
Trades Funds Mutual Aid Funds Leipsiger Verband (Voluntary)	{ Pay physician directly (per contract).* M: 1.80 per Krankenschein.— The Krankenschein is valid 1 month.— Unusual procedures like minor surgery, intravenous medication, are paid separately.

* Since January 1932, all the funds use the Aerzte Verband as intermediary for payment.

In Table VII we show the scale and period of sickness benefits in several countries. They are about alike and correspond to the degree of economic wants of each nation, figured at the lowest level of subsistence. The most liberal or advanced is here also represented by poor but socialistic Vienna.

Results for the Insured and for the Physician
After almost 50 years of social insurance in Germany and about 20 years in Great Britain we may well talk of results. We can see how many people are affected by this system and we can

work out the percentage of physicians absorbed by the system in the three countries, which we have chosen for our comparative study. We must not forget that besides compulsory insurance these countries have salaried positions for the

TABLE VII
SCALE AND PERIOD OF SICKNESS BENEFITS IN A FEW COUNTRIES

Country	Benefit Commences	Maximum Period of Benefit	Rate
Germany	Fourth day	26 weeks	50% of basic wage
Austria	First day	52 weeks	$\frac{3}{4}$ to $\frac{1}{2}$ of basic wage
Denmark	Fourth day	26 weeks in the course of a year	Minimum 40 ore
Great Britain	Fourth day	26 weeks	Males—15s per week Females—12s per week
Hungary	Third day	52 weeks	$\frac{3}{4}$ of basic wage
Norway	Fourth day	26 weeks	60% of basic wage
Poland	Third day	39 weeks	60% of basic wage
Switzerland	Third day	180 days	Minimum 1 fr per diem

From *Sickness Insurance in Europe* Commission on Medical Education

even fill roughly a ledger page with a credit and a debit side. Medical practitioners should not be thought of as a victimized group or as a separate class whose interests are opposed to the interests of the people at large. The famous G. B. Shaw held this view in his "Doctor's Dilemma."

If there was a grain of truth in the propounded thesis thus applied to the healer of old and not to the practitioner of modern medicine. The best interests of the physician coincide with the best interests of the people and the economic status of the physician mirrors the general situation. In Germany the doctor is a pauper not on account of the insurance system but because the entire middle class of professionals is starved and almost annihilated.

In Table VIII we show the percentage of the population affected by compulsory insurance. We have taken again for comparison Germany, Great Britain and Austria and we have added Sweden a sparsely settled and mostly agricultural country, which although highly cultured and advanced is placed only for the effect of contrast.

TABLE VIII
POPULATION AFFECTED BY INSURANCE

Country	Percentage of Population (Large cities up to 90%)	Of Occupied Population	Of Employed Population
Germany	62%	63%	77%
Austria			100%
Great Britain	35%	78%	86%
Sweden	16%		

Table IX represents the number of physicians employed under Social insurance and the average number of patients which come to the list of every employed physician. We have tried to

educational hospital and charitable functions of the State. In Germany and Austria there is not such a thing as an honorary position on a teaching, hospital, sanitation, government or municipal staff. We see therefore that only about 5% are wholly unemployed independent practitioners.

TABLE IX
NUMBER OF PHYSICIANS EMPLOYED BY SOCIAL INSURANCE
NUMBER OF PATIENTS PER PHYSICIANS LIST

Country	Total Number	Number Employed	Per Cent	Number of Patients per List
Great Britain	24,000	15,000	62%	Over 1,000 up to 2,500
Germany	47,000	38,000 to 39,000	80% to 95%	1,350 (Territorial Insurance) varying At present 600
Austria (Vienna)		441, including specialists		

Table X deals with the average income of physicians employed under insurance. We refer again to Great Britain, Germany and Austria, although they are widely divergent in their economic aspects. It brings out the fact that the income of the physician is dependent on the general economic status of each country and not on the form of his activity. In all these countries however it is reduced in comparison to the returns of independent practice. In Great Britain it is considerably higher than in Germany or Austria because of the better economic condition of the country at large.

On the other hand socialistic Vienna, which is the poorest of all, secures a higher remuneration

for its physicians solely in recognition of the physician's social usefulness and importance.

In Table XI we present a distinctive feature of the compulsory insurance system in continen-

system thus cultivating a defense mechanism wholly uncalled for. The free out-patient service of every hospital in London numbers from 40-60% of insured persons among its patronizers.

TABLE X
AVERAGE INCOME OF PHYSICIANS EMPLOYED BY INSURANCE

Country	No. of Patients	Families	Capitation	Number of Visits per Insured	Payment per Visit	Yearly Income from Insured	Yearly Income from Families	Yearly Income TOTAL
Great Britain	Over 1,000 Maximum 2,500	Optional	Yearly 9s. 6d. = \$2.37	Figured about 5 per year	About 2s. = \$0.50	About £400 = \$2,000	About £400 = \$2,000	£800 = \$4,000
Germany	1,350 average unlimited	Included	Yearly M:23 = \$5.25	.....	About M:1.0 Home Call M:1.50	M:6,000 about \$1,500 In 40% M:1,000 = \$250	Included	M:6,000 = \$1,500
Austria (Vienna) (441 Physicians)	.....	Optional except R.R. and Gov't Employees	Sch. 15 about \$2	.....	Office Call Sch. 5 = \$0.70 Home Call Sch. 7.20 = \$1.00	.....	.....	Sch. 13,200 about \$1,900

tal Europe. It concerns hospitalization. In English-speaking countries hospitalization in city or State institutions is a development of the poor law concept. The hospital ward service is free and the physicians appointed hold honorary positions. They work there in order to acquire prestige and experience and to do their share in support of the destitute. In continental Europe they are salaried and have to devote their time either exclusively or for the most part to their hospital duties. Compulsory insurance pays ward or 3rd class service for a limited time for each insured and pays also the physician separately for each case. A price schedule for operation fees is mentioned not on account of its nominal character but to show the different conception of continental Europe, which does not ask the physicians to give something for nothing.

Table XII and Table XIII are a summation of the advantages and the disadvantages of the insurance system for the insured worker. An outstanding feature which results in a disadvantage of the insured is the changed relation between patient and physician. Any successful therapy requires a certain amount of confidence on the part of the patient. The insured worker is not yet adjusted to the practice of socialized medicine, he is distrustful and determined to beat the

TABLE XI
HOSPITALIZATION
PAID BY INSURANCE FUNDS—
THIRD CLASS OR WARD SERVICE

Country	Time Allowed	Fees (Per Case)
Germany	26 weeks	<i>Reichsgebührenordnung</i> Appendectomy M:20 = \$5 Gastro Intestinal Surgery M:40 = \$10 Tonsilectomy M:5 = \$1.25
Austria	.....	From Sch. 50-250; \$7-\$35 Appendectomy 150 Sch. or \$21 Cataract 200 Sch. or \$28 G-I Surgery 250 Sch. or \$35

TABLE XII
RESULTS OF THE SYSTEM FOR THE INSURED

ADVANTAGES

1. Preserves the self respect of working people and prevents their being an object of charity.

- 2 Attention is given to minor ailments, thus enhancing preventative medicine
- 3 Patient is soon brought to the specialist and receives the benefit of modern medicine
- 4 Choice of physician, although limited, gives the patient independence
- 5 The quality of medical service is still superior to the former lodge or society practice

TABLE XIII

RESULTS OF THE SYSTEM FOR THE INSURED

DISADVANTAGES

- 1 The great number of patients per doctor impairs the physician's efficiency
- 2 The will to recuperate is impaired and malingering is rampant
- 3 Confidence in the doctor, who appears as a lowly and overburdened employee, is lessened (O P D favored)
- 4 Overprescribing and the abuse of physical therapy neurasthenize the patient and undermine his character
- 5 The patient acquires tendency to increase time of sickness and its ensuing benefits and compensations

Table XIV and Table XV summarize the advantages and the disadvantages of the insurance system for the physician as a class and as individuals. Aside of the changed economic aspects of the profession the most striking feature is the painful conflict between the new and the old order of things. The physician is harassed by an enormous amount of clerical work to which he can not get accustomed. He is more a scribe than a doctor. He is not any more a member of a free profession. The Insurance and its referees are a difficult boss and the patients are customers the harder to please the more they regard the doctor as a fellow worker like themselves. If a physician is condescending to patients and "easy" on certificates for all kinds of benefits he becomes a Kassenlöwe (Insurance lion), he is popular and a comparatively big earner, but he is also dishonest and a subject of contempt of his fellow practitioners. The only remedy in sight may be a fixed and graded salary for every physician employed.

TABLE XIV

RESULTS OF THE SYSTEM FOR THE PHYSICIAN

ADVANTAGES

- 1 The young graduate obtains sooner a practice and a modest livelihood
- 2 The practitioner is enabled to obtain for his patients the modern means of diagnosis and therapy
- 3 The free choice of physician although limited, favors display and success of personality
- 4 The system favors specialization (Germany)
- 5 Once employed the physician is more responsible to his own kind than to his client
- 6 His fees are determined his work and hours regulated. Vacations are obtainable
- 7 Panel practice is an object of sale (England)

TABLE XV

RESULTS OF THE SYSTEM FOR THE PHYSICIAN

DISADVANTAGES

- 1 Clerical work enormously increased
- 2 The individuality of the physician is submerged
- 3 The great number of daily callers prevents thorough examination and diagnosis. The work is mostly identification and sorting for institutions or specialists (Germany)
- 4 The relation between patient and doctor is often antagonistic. Condescendence to patients is a profitable abuse
- 5 The attitude of the patient is one of distrust
- 6 His medical activity is checked by superior authority (Referee or Kontrollärzte in Germany)
- 7 His income, although superior to club or lodge practice is definitely limited

Tendencies and Future Aspects of Health Insurance. The Social Insurance system comprises so many economical social and technical factors and so many possibilities of development and change that an appraisal of its present merits or its future aspects is almost impossible. One thing is quite certain: it is not a system of stability but one of eminent lability. Conflicting tendencies abound and general consent is still missing.

Concerning our subject Compulsory health insurance we find in Germany a tendency to centralize and unify the different funds to curtail the number of patients on the list of each doctor to stabilize the income of each employed physician and to extend institutionalization and specialization.

In Great Britain the medical profession seems to be more or less reconciled to the situation. Changes are advocated from different quarters and are different according to their point of view.

In Table XVI we have grouped the proposed changes according to their source and considered as authoritative the voice of organized medicine, of public agencies and of contemplated legislation. In this condensed manner we hope to present best the future aspects of the insurance system.

Table XVII concerns the municipality of Vienna which is the most advanced exponent of socialized medicine at present with the exception of Soviet Russia. Austria was reduced from an empire of 54,000,000 population to a small republic with 6,500,000 inhabitants. The different provinces of this small country have not changed much from pre-war days in regard to their social insurance. On the other hand the municipality of Vienna with less than 2,000,000 population has become autonomous and is administered by the socialist party. Under the leadership of the great scientist Prof. Dr. Tandler the city of Vienna has achieved the most ambitious and far-reaching social change. A magnificent city housing and building program has established about

TABLE XVI
TENDENCIES AND FUTURE ASPECTS OF HEALTH INSURANCE
GREAT BRITAIN

Organized Medicine	Public Agencies	State Legislatures
<i>British Medic. Assn. 1930</i> 1. Inclusion of families. 2. Smaller panel and larger capita- tion. 3. Extension of maximum income limit. 4. Voice in the administration. 5. Exclusion from free hospital serv- ice. 6. Employment of specialists. 7. Uniform payment (salary). 8. Hospitalization service.	<i>National Medic. Service Assn.</i> 1. Abolition of contributory nature of the insured. 2. State medical service at the tax- payer's expense. 3. Medical profession as whole-time salaried practitioners.	Public Health activities to be ex- tended by: Ante-Natal clinics Infant and child welfare clinics Maternity Homes Day school clinics Diagnostic Laboratories

60,000 modern apartment houses for workers with small incomes—on a rental to cover the cost of maintenance only. The following table enumerates the institutions employing physicians on a salary basis.

TABLE XVII
AUSTRIA (VIENNA)
INSTITUTIONS EMPLOYING PHYSICIANS ON
A SALARY BASIS—PATIENTS NOT LIMITED
AS TO THEIR INCOME

Prenatal Clinics	34
Nurseries (Under construction)	112
(Already existing)	84
Clinics for Backward Children	14
Maternity Homes (used by 40% of all cases)	
Clinics for School Children	
Dental Clinics	11
Municipal Eye Clinic	1
Tuberculosis Clinic	9

Dominion of Canada: No report on health insurance would be complete if we omitted to mention the Dominion of Canada, a country on our continent, so very similar to our own in its economic and social aspects.—While Canada does not register yet a law of compulsory health insurance on its statutory books the question of socialization of the practice of medicine along continental European lines is much debated and proposed.

Table XVIII summarizes several aspects of health insurance in several parts of the Dominion.

TABLE XVIII
DOMINION OF CANADA

British Columbia:	Impending compulsory health insurance.
Saskatchewan:	Union hospitals supported by taxation—Small charges for service. Physicians on salary basis.
Alberta:	Travelling clinics—Employs salaried physicians.

Ontario: Proposed health insurance.
Canadian Medical Assn. (President, W. Harvey Smith)
Favors voluntary health insurance, organized, instituted and controlled by the medical profession.

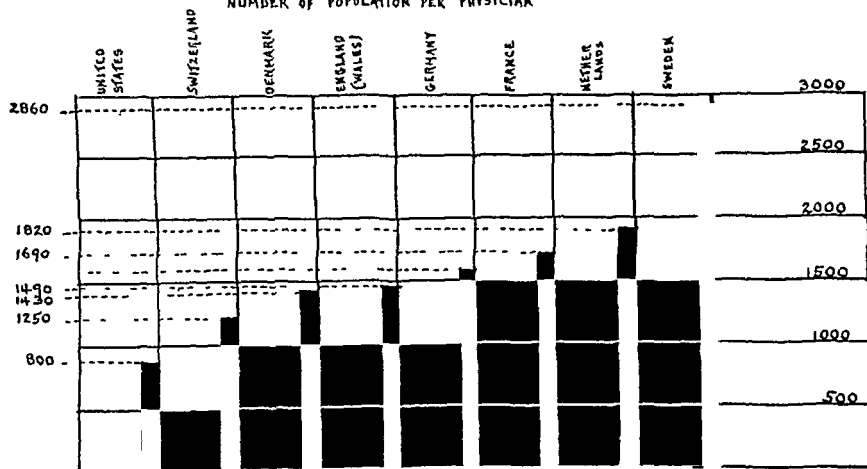
Table XIX represents graphically the number of patients per physician in different leading countries. If service is to be considered as a commodity which has a "market" then we must admit that here also the law of demand and supply reigns supremely. Furthermore there is only one conclusion concerning the future economic status of the doctor in the United States whose lot is the smallest group of patients in the world. Of course other factors must be taken into account as for instance the use and demand for doctors. One thousand people in New York will need more medical service than perhaps 100,000 in Mississippi. Nevertheless figures have a definite significance.

CONCLUSIONS

1. Compulsory health insurance abroad is an unavoidable development of social and economic conditions.
2. It is an evolutionary step, beginning with mutual benefit organizations and contract practice, passing through the phase of voluntary health organizations and terminating with State control of a socialized medicine or State Medicine.
3. Its present insufficiencies prevail over the benefits it confers on the population.
4. The modern practice of medicine with its implicit high cost of diagnosis and therapy enhances socialized medicine and sentences to extinction the former individualistic practice.
5. A judicious and economically satisfactory form of salaried employment is the most desirable prospect for the profession.

TABLE XIX

NUMBER OF POPULATION PER PHYSICIAN



INTERNATIONAL DIGEST Oct. 1931

These conclusions were reached only concerning the situation abroad and have only a remote relation to conditions and future developments in our own country.

Individually we may foresee the extinction of the old family doctor and the end of the individualistic practice of medicine but as to the future of medicine we all may remain optimists.

Will this oldest and noblest profession be degraded by socialization and reduced economic returns? Will the single practitioner cease to be an altruist or a seeker of knowledge? We believe not. We are not worried over the loss of character on account of an alleged subdued individualism. We all know that the principle of differentiation, of individualization is a supreme biological urge in life. *It can not be damped.* And as long as there will be a physician there will be love of the profession, pride in workmanship, thirst for knowledge and that eternal human sympathy which, after all, fills the life of every one of us and prompts us to give to our patients the best there is in us, the best without stint and without reserve.

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RADIUM POISONING

By FREDERICK B. FLINN, Ph.D., NEW YORK, N. Y.

From the College of Physicians & Surgeons, Columbia University, New York

THE term radium poisoning is used to differentiate between the effects produced when radium is used externally or in the form of implanted seeds or needles, and those resulting from its presence in the body through the ingestion per os, or injections of the element, or inhalation of radio-active dust.

When radium is used externally or in implanted seeds or needles the effects noted are those produced by Gamma rays and are the same as those which might result from exposure to α -rays. Part of the Gamma rays from radium have a shorter wave length and are harder than those of α -ray and have, therefore, a greater penetrating power. The danger from these rays is from overexposure either from too large a dosage or from a smaller dosage over a longer period of time. The harmfulness of so-called radium belts, —if they actually contain radium,—lies in this last exposure.

When radio-active material is absorbed by the body, it is transported by the blood stream and finally deposited in the skeleton in a more or less uniform manner because of its chemical similarity to calcium. There is no special concentration in any particular bone.

The first action of the radium, if not present in too large an amount, is a stimulation of the body functions. Diarrhœa may result and the quantity of urine passed temporarily increased if the dose is large enough. It is this laxative effect that is responsible for the subjective feeling of well being so often claimed for radium waters. When the radium is deposited in the bone, emanation,

a gas, is given off and carried around in the blood stream until finally eliminated by the lungs. The quantity of this emanation depends on the form in which the radium is deposited. Once deposited in the bone, the radium remains there indefinitely unless eliminated by medication, although there is an extremely small normal elimination over a period of years.

When the radium is absorbed into the body, the immediate surrounding tissue is subjected to a bombardment of Alpha and Beta particles as well as to Gamma rays. These Alpha and Beta particles are destructive to tissues under certain conditions. The Alpha particle is the most powerful physical agent known to man. This is partially understood when one realizes that a milligram of radium gives off 37 million Alpha particles per second for years, and might be likened to machine gun fire greatly magnified. The action may be stimulating at first, then destructive. Because of this stimulating action, the blood picture, except toward the terminal end, gives no indication of the exposure. A histological examination of the bone suggests a physical action similar to that of sand on rock,—fragmentation, absorption, and a replacement of the fragments by fibroid process. Due to stimulation of the osteoblasts and osteoclasts, bone proliferation may be seen in some instances in the same area as bone destruction is taking place. As bone-forming cells are overstimulated they gradually lose their function and bone healing or formation ceases. Spontaneous fractures occur and decalcification of bone is seen in radiographs. We are dealing,

in the jaw cases, with a partially devitalized bone which has become infected. It is impossible to stop the infection because of this damaged condition. It spreads rapidly, destroying the whole jaw and, if death does not occur from general septic condition and anemia, brain abscesses are apt to follow, of course ending fatally.

The change in the blood picture is due to the action of the radium on the bone marrow and lymph glands. Anemia and drop in white cells finally result and the drop in white cells may indicate the terminal end. The blood picture in humans varies somewhat during the clinical history, and in individual cases, so that there is no characteristic radium blood picture. Anisocytosis, polikilocytosis and nucleated red cells are frequently seen. The radium tends to shove the cells of the body back to the primitive cells, as is seen on histological examination of tissues. A certain percentage of the cases terminates in sarcoma, generally in cases where small amounts of radium have been present over a long period of time.

Because the blood picture is unreliable for the detection of radium poisoning, dependence must be placed on the electroscope. Two types of electroscopes are used to confirm the diagnosis. In making these tests the Gamma ray electroscope is placed near the back of the patient to

insure close proximity to large bone mass. The increased rate of leaf discharge over the normal rate gives an indication of the amount of radioactive material present. In the second test the patient blows the expired air through a drying train into an ionization chamber, and the radioactivity of the expired air, arising from the emanation carried in the blood stream, is determined. For details see the April and December numbers of the *American Journal of Roentgenology and Radium Therapy*, 1929.

Treatment: Operations are contra-indicated. In jaw cases the wound should be kept draining as freely as possible. Liver, iron injections, and blood transfusions do not show any permanent improvement in the blood picture. I have felt at times that the iron metabolism has been interfered with in these cases. Our best results have been from eating fruits, especially stewed apricots, which are high in iron and copper. High calcium therapy except when elimination is attempted. Our experience has indicated that if the patient be kept on from 20 to 30 drops of irradiate ergosterol three times a day there is an elimination over a long period of time. The difficulty lies in the fact that one is dealing with an already damaged bone condition and any intensive treatment will further decalcify the bones which lack the ability for regeneration.



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For list of officers of County Medical Societies, see April 1st issue, advertising page xxviii

Annual meeting, Hotel Statler, Buffalo, N. Y., May 23-25, 1932

THIS ISSUE OF THE JOURNAL

Careful preparation for the annual meeting of the Medical Society of the State of New York ensures smoothness and efficiency of the sessions. This issue of the Journal devotes 12 pages to the Program of the Annual Meeting, and 47 pages to the first installment of the annual reports of the officers and committees. The issue of May first will contain the remainder of the annual reports; and all the reports will be reprinted and

distributed to the members of the House of Delegates, who will be required to take official action on them.

No one could foretell the extent of the reports, although their size was anticipated because of the progressive activities of the State Society. The annual reports are therefore printed in two installments, thereby avoiding undue size and expense of the May first Journal.

SOCIALIZED OR STATE MEDICINE—PROFESSIONAL AND NATIONAL RESPONSIBILITY

Comments on Dr. Koffler's review of State medicine in Europe (page 437) by the Chairman of the Committee on Medical Economics of the Medical Society of the State of New York

Much vocal music resounds in Æsculapian halls. The prevailing Key is F (fear, fancy, fog, futuristic philosophy, futility). The tempo varies from *andante dolorosa* to *allegro furioso*. The climactic passages are full of major and minor chords with many dissonances. The score is broken abruptly before completion—for the end is not yet and none can relate the finale in words or music. However, the general theme is the medical treatment of persons under government compulsion and control, and the payment of some reward therefor, however small, to physicians for every service rendered.

Considerable imaginative unreliable fiction has been written about various phases of socialized medicine and compulsory health insurance in European and other countries, also libraries of reasonably reliable statistics and accounts of operation have been put forth.

No concise summation of this subject (in English) compares in value and in "over the page" interest with the account written by Dr. Emil Koffler appearing in this issue on page 437. The original presentation of this epitome and analysis was so clear that all physicians of this State and Country should have the privilege of surveying the subject through Dr. Koffler's masterly birds-eye view of a broad field of economic facts of profound importance to the peoples and our profession everywhere in the world.

The value of any governmental or social system is best determined by ascertaining its results to the whole of a people. The overwhelming evidence shows that the mental and moral fibre of the masses of workers is undermined or destroyed by compulsory health insurance. This destruction might very well be worse for any nation than prevalent disease entirely untreated. (See tables XII and XIII of Dr. Koffler's article.)

Confidence in a leader often brings signal success in any issue. If this system brings loss of confidence in the physician, the leader out of the wilderness of real illness is it good for the people? Do the people receive a just return for employers' and taxpayers' (and their own) money when the bulk of a trained physician's time must be used for completing sheaves of official papers? Does the encouragement and creation of malingerers add to the character and vigor of a nation? Can the morale of the sick be maintained or elevated when they are rushed and herded through multitudinous formalities without personal interest or individualized care? Can the cheapness of treatment under these systems in any way compensate

for the loss of discriminating care which even the poorest persons receive gratuitously in the United States?

We should never forget that the benefits to the people at large show what is the better or best in medical practice.

A secondary but important consideration is the effect of compulsory health insurance upon the great majority of physicians. Should specially trained scientists become, in the main, paper clerks? Should individuality in a highly educated man or woman be submerged in bureaucracy?—Should the preponderance of duties as a clerk prevent the specially-trained examiner from examining his patients? Should his office become a sorting spot for institutions or specialists with a prescription handed by guess work from one of a half-dozen prepared piles to the slightly ill or the malingerer? We are told that the relations of physicians and patients are often antagonistic and that condemnation to a patient's desires (for certificate of illness to secure money and avoid working) is a profitable and frequent abuse. Does this tend to elevate the practice of medicine for the benefit of the people? Again it is said that "the attitude of the patient is one of distrust." Does this enthuse the scientist whose elemental desire is to do good to others? Superior authority is a check upon his activity. How can he grow into fruitful scientific citizenship?

As a civic and State consideration the question of income from practice is of little importance. To the individual physician the question raised by Dr. Koffler's account is as follows: Which is to be preferred, a very small, certain, definitely limited income for a routine service long in prescribed hours and devoid of scientific opportunity, or uncertain but less limited income based entirely upon scientific attainments and willingness to work?

We do not share the fear voiced by many observers that European conditions of practice will soon be prevalent in America. Governmental tendencies (especially in States and large cities) do show increasing agencies for treating solvent prosperous earners free of all charge. (This has been made easy by the change of the title "Charity" into "Welfare.") This is the petty politician's way of exploiting medical practice to secure his "job" or promotion. (Why should he care what happens to the people or the nation after he is rich or gone?) Should this tendency advance extensively, the instinct of self-preservation is likely to prompt practitioners of medicine to demand an American system of compulsory health in

surance, instead of steadfastly opposing it, as now. However, they know (and they are the only ones who can possibly know all about it) that it would be bad for the people and bad for our Country.

The entire world needs the leadership of the United States in almost everything—especially in the complete, humane, individualized prac-

tice of medicine. *Merely thinking* of reducing benefits to the people and hurling the bulk of trained physicians into a hopeless clerical routine with an occasional spatter of empirical practice based on guess-work, is a violation of our duty as a nation. Who else than the United States is to lead the other nations back to the full enjoyment of complete service to the sick?

THE SCIENTIFIC PROGRAM

Whatever reason a doctor may have for attending the annual meeting of the Medical Society of the State of New York, he will expect a scientific program that is both interesting and practical. That printed on page 462 of this Journal has both of these qualities in a high degree.

A well-balanced scientific program consists of three elements:

1. Lectures
2. Exhibits
3. Clinics

The lecture meetings of the program recognize the fact that every physician,—specialist or family doctor,—is concerned with general conditions of the body. The afternoon sessions are therefore devoted to general topics, while the specialists will find their congenial places in the eight section meetings to be held on two mornings.

A doctor says that a paper is "practical" when

he can use it in treating his own cases. The Journal frequently receives requests from authors that they be permitted to publish their papers in journals of specialists. The editors anticipate the pleasure of publishing practically every paper on the program.

Modern medicine is founded on research and pathology. The scientific exhibit will afford a unique opportunity for family doctors to review their pathology and to see the methods used in research laboratories. The exhibits will be of special value because demonstrators will be in attendance to give personal demonstrations to visitors.

Contact with actual cases is the best form of medical teaching. A day of clinics will be conducted by medical leaders of Buffalo.

A physician attending the events listed in the scientific program will receive inspiration as well as instruction.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Pasteurization of Milk: Twenty-five years ago the question of the compulsory pasteurization of milk was widely debated. At that time pasteurization consisted in heating the milk to 167° F., and holding it at that point for half an hour.

This Journal of April, 1907, contains the following item on the action of the New York Academy of Medicine in regard to milk pasteurization:

"The Section on Public Health of the New York Academy of Medicine passed the following resolution at its meeting of March 12th, and the resolution was presented to the New York Academy of Medicine at its meeting on March 21st and adopted.

"(1) That the Section on Public Health of the New York Academy of Medicine does not believe in the necessity of the compulsory pasteurization of all of the milk supply of New York City, but recommends for the present to all those whose milk supply cannot be proven to be thoroughly inspected and wholesome, and mainly the

milk destined for the feeding of infants unless it is 'certified,' to boil their milk when delivered in the morning for three minutes.

"(2) That the health of the City of New York demands a persistence in the policy of supervision of farms, dairies, and creameries, supervision at the points of distribution in the City to the consumer, whether the milk that is distributed has been pasteurized or not.

"(3) That local and State health authorities and the Bureau of Animal Industry of the United States Department of Agriculture should cooperate with milk producers to prevent the occurrence of communicable diseases in cattle and their caretakers.

"(4) That the Section on Public Health recommends that the New York Academy of Medicine adopt the above resolutions, and that a copy be sent to the members of the Committee on Public Health of the Board of Aldermen, and to the Committee of the New York State Legislature having under consideration the Reece bill."



MEDICAL PROGRESS



The Simulation of Heart Disease.—K. Shirley Smith, writing in the *British Medical Journal* January 23, 1932, i, 3707, states that the three principal syndromes which may simulate heart disease are the effort syndrome, left mammary pain, chronic or paroxysmal, and retrosternal pain of muscular origin. The symptoms of effort syndrome are usually breathlessness, palpitation, dizziness, faintness and tightness or pain in the chest, provoked by effort often trivial in degree. The power of a given exertion to produce these symptoms varies very much from time to time. Conversely, in cardiovascular disease the predominant complaint is dyspnea, closely related to the degree of effort. The patient with organic heart disease feels quite well between bouts of dyspnea; with effort syndrome there is a background of other vague and indefinite sensations. Chronic left inframammary pain is often associated with respiratory troubles, which occur independently of effort, and are often relieved by it. A host of collateral symptoms frequently accompany left inframammary pain. This type of pain seldom afflicts men, and, when it does, it is generally the sequel to over-smoking. Paroxysmal left inframammary pain may simulate angina pectoris. If it is remembered that a wealth of subjective and objective phenomena speaks against angina, that the functional attacks mostly affect women at or before middle life, that amyl nitrite does not relieve neuropathic pain, that the pain of angina is usually constrictive and substernal, a mistaken diagnosis should rarely be made. Paroxysmal retrosternal pain is generally of cardiac origin, though some attacks may be attributed to muscular exhaustion. This may be suspected if thoracic respiration predominates over abdominal in the supine position, and if excessive tone or tenderness is found in the muscles in the neighborhood of the sternum. All patients of this group should receive careful investigation. In effort syndrome the basis of treatment lies in moral support and reassurance. The patient should be encouraged to take suitable normal healthy exercise in moderation. Faintness, giddiness, and syncope are often relieved by iron and strychnine. Ultra-nervous patients are helped by bromide and valerian. These general measures are also applicable in chronic left inframammary pain. Obesity, if present, must be dealt with. Thyroid extract, if employed, should be given in strictly moderate doses. The writer has seen angina pectoris precipi-

tated by its injudicious administration. In both chronic and paroxysmal inframammary pain, if tachycardia and restlessness are pronounced, luminal may prove helpful at night, with bromide and chloral twice daily in addition.

The Treatment of Paroxysmal Tachycardia.—On the basis of 17 personal cases, observed during a period of two years, Max Hochrein gives his experience with a prophylactic treatment of uncomplicated paroxysmal tachycardia in patients whose attacks could not be cut short by any of the usual methods, such as quinine, quinidine, strophanthin, or pilocarpine. By a combination of atropine with dietetic and psychotherapeutic measures he succeeded in preventing the appearance of attacks from the third to fifth day on, after the atropine had begun to take effect. Of the 17 individuals treated, 3 had a sinus, 13 an auriculoventricular, and one a ventricular, tachycardia. Three of the patients had been subject to attacks more than 15 years, and 6 for more than 5 years. Some of them had been having daily attacks. After these ceased, there was for the next 3 to 8 days an "uncertain" feeling about the heart, which disappeared with the further continuance of treatment. It is desirable to keep up the treatment for about 2 weeks after the attacks cease to appear. The value of the method was shown not only by the fact that the seizures stopped, but also by the fact that they had not returned, even in the case of individuals engaged in hard physical labor. One man who formerly had daily attacks had gone a year and a half without one, and a druggist who led quite a strenuous physical existence had been similarly free for a year. In our present ignorance of the etiology of tachycardia it is difficult to determine the mechanism by which atropine produces this result. It may be assumed that this substance exerts a favorable influence upon a heart in a condition of overexcitability by raising the threshold of irritability and lengthening the latent period. If the conception is true, that paroxysmal tachycardia develops on the basis of a vagotonia, the effect of atropine can be explained readily by its action upon the vagus, the fibers of which run to the sinus, the auriculoventricular node, and the ventricle. A special significance seems to attach to the inversion of the vagosympathetic balance, from which we must assume that this is brought up to a new level after the atropine has been

acting for some time, and that it becomes fixed there by some compensatory process even after administration of the drug has been stopped.—*Münchener medizinische Wochenschrift*, December 4, 1931.

The Heart in Diseases of the Respiratory Apparatus.—Circulation and respiration, says R. Siebeck, stand in a very close mutual relation, their functional activity being interdependent, and controlled by mechanical relations and strict regulation. We are very familiar with respiratory disturbances caused by cardiac insufficiency, but not so much is said about the effect of changes in the respiration upon the circulation and the activity of the heart. In the most various changes in the thorax, there is one common factor: Resistance in the channel of the lesser circulation is increased. From the laws of cardiac dynamics we must conclude that the right ventricle undergoes a "tonogenous" dilatation, and in the course of time hypertrophies. There is no doubt that diseases of the respiratory apparatus, especially emphysema, result in an increase of pressure in the pulmonary artery. The disease pictures are very characteristic: the patients are generally markedly cyanotic, the breathing is labored and dyspneic; when they are called upon for exertion, or often even when they are at rest, it is easy to recognize that these symptoms are more severe than the disturbances of respiration would lead one to expect. The roentgen examination is decisive for the evaluation of the size of the heart. Phenomena of obstruction appear after a time: first in the liver, with albuminuria and ascites prominent. The left ventricle becomes dilated, hypertrophic, and insufficient; the obstruction in the pulmonary circulation makes respiration more difficult, this puts a greater burden upon the right heart, and thus a vicious circle is established. The course in these cases is generally slow and chronic. The prognosis depends upon the changes in the lungs, and also upon the condition of the heart muscle. In treatment, the insufficiency can in the average case be overcome by rest and administration of digitalis. As expectorants, potassium iodide and ipecac are often beneficial. Obstinate coughing should if possible be controlled by a certain discipline, but if necessary medicaments may be used (codeine and the like). In compensated cases respiratory gymnastics are useful for increasing functional capacity. This aims not at a better movement of the thorax, but at a general invigoration, through which the patient learns a better respiratory technique.—*Münchener medizinische Wochenschrift*, February 5, 1932.

Comparative Study of Antiseptics in Experimentally Produced Local Infections.—Eli Saleeby and Malcolm J. Harkins undertook this study to determine the antiseptic most

suitable for the treatment of local wounds. Abscesses were produced in guinea-pigs with a recently isolated culture of *Staphylococcus aureus* and were then subjected to treatment by various germicides. All the abscesses treated with mercurophen, 1 and 2 per cent, healed in a maximum time of eleven days. The abscess treated with metaphen, 1:500 solution, and tincture of iodine, required fifteen days for complete healing. The animals treated with mercurochrome, 2 per cent solution, required a longer period to heal, seventeen and eighteen days. In the control animals wounds healed in from fifteen to sixteen days. It was observed that mercurophen was as efficient in 1 per cent as in 2 per cent solution. Also, there was practically no difference in the wounds of those guinea-pigs treated with the weaker solution of mercurophen (1:500) and with metaphen (1:500) solution. Compared with 2 per cent mercurochrome and tincture of iodine, both mercurophen and metaphen (1:500) solutions were superior. Although the local application of some of these antiseptics was of value, the writers believe that the mechanical cleansing and free drainage of the wound are more important factors in the healing process than the mere application of antiseptic solutions to already infected wounds.—*Annals of Surgery*, February, 1932, xcv, 2.

Pituitary Extract in the Treatment of Hyperchlorhydria and Gastroduodenal Ulcer.—P. L. Drouet and J. Simonin, in a paper read before the Paris Academy of Medicine, (*Bulletin de l'Académie de Médecine* of January 5, 1932), say that they have had occasion to observe the brilliant effects of pituitary extract (posterior lobe) upon gastric hyperacidity. They were led to make a systematic study of its action after one of them, while attending a patient suffering with diabetes insipidus and duodenal ulcer, accompanied by striking hypersecretion of gastric juice, had been in a position to note the striking improvement produced by injection of the extract. On a basis of 9 cases (4 of hyperchlorhydria, 4 of gastric ulcer and 1 of duodenal ulcer), they have demonstrated that this substance has the definite effect of diminishing gastric acidity, and that it brings considerable relief to patients suffering from this disagreeable functional disturbance. In every case from 12 to 20 daily injections of the extract were administered subcutaneously. Moreover, the close relationship between hyperacidity and gastroduodenal ulcer justifies the attempt to utilize this extract in the treatment of ulcers. It is possible in a relatively short time, as one of the cases demonstrates, to cure an ulcer not only clinically but also roentgenologically, without the aid of any other

medication, and subject only to certain dietary restrictions.

Multiple Malignant Growths of the Buccal Cavity.—Lord Moynihan's report of a case of primary carcinoma developing, at intervals, in three different parts of the buccal cavity (*The Lancet*, Jan. 2, 1932) and his statement that he had "never before seen two primary malignant growths in the mouth" prompts J. Bagot Oldham to report the following case. The patient, a man aged 62 years, had an epithelioma of the left floor of the mouth and alveolus, which was apparently cured by radium applications. He returned some six months later for re-examination when an indurated and ulcerated plaque showing the characteristics of epithelioma was found on the floor of the mouth on the right side. Oldham recalls that he reported a case similar to that of Lord Moynihan in *The Lancet* of October 26th, 1929. He also refers to twelve additional cases in the literature. These examples suggest that cases of this kind, though uncommon, occur more frequently than is generally supposed. They raise the question as to whether multiple primary tumors are produced by metastasis or implantation. Oldham considers it highly improbable that multiple buccal carcinomata can be explained as examples of metastasis, for though epithelioma of the tongue shows an almost constant invasion of the lymphatic glands, secondary deposits elsewhere are extremely rare. Over 250 years ago, Tulpius, the Dutch anatomist, said: "Cancer is just as contagious as inflammation of the eyes." Doubtless this is an exaggeration, but there are striking examples showing the spread of cancer from one part of the body to another and occasionally from host to host. Macewen tells of a man with an epitheliomatous ulcer of the lip, who had contracted the habit of rubbing the ulcer and then the tip of his nose with the same finger. Twenty months after the removal of the growth on the lip, he returned with a large ulcer on the tip of the nose identical microscopically with the original tumor. There is no doubt that implantation carcinoma of the alimentary canal has occurred on many occasions and that traumatized tissues are an especially fertile bed for this development. After citing additional instances of implantation cancer, Oldham expresses the opinion that the case which he reported, in which carcinoma developed in the tooth sockets, was doubtless another example of auto-inoculation or implantation.—*The Lancet*, January 23, 1932, ccxxii, 5656.

Modifications in the Blood Immediately Following Pneumothorax.—G. Ferrari points out

in the *Riforma medica* of January 2, 1932, that the modern view with reference to the action of pneumothorax is that it not only causes mechanical and circulatory modifications, but also has a far-reaching and complex biological effect through the humoral pathways, causing a certain amount of nonspecific protein substances to enter the circulation, and, with them, certain tuberculin substances capable of producing a sudden and profound stimulation in the blood constitution and in the tissues irrigated. Carrying out some studies of his own with reference to the physico-chemical characteristics of the blood following pneumothorax, he, like other authors, found that the number of leucocytes, the blood pressure and the refraction index after pneumothorax present constantly the same modifications that are observed in hemoclastic crises: decrease of leucocytes, lowering of the index of refraction, and modifications of color. These symptoms are in no way different after a recent pneumothorax and after an old one. The color of the venous blood, possibly because of the special influence of oxidation, presents a peculiar behavior, becoming first dark, then slightly redder, but the differences are as a rule slight and inconstant, the intensity of the reddening bearing no relation to the degree of lowering of the refraction index or to the increased leucopenia. The author's hope that the suspected passage of antigens set up by the "compression of the lung" would be revealed as the cause of characteristic modifications of the rapidity of sedimentation was doomed to disappointment, for there were no clear and unequivocal results demonstrating a disturbance of colloidal equilibrium. Nothing can as yet be stated with certainty with reference to the mechanism by which pneumothorax lets loose the succession of modifications, but the author points out the facility with which colloidoclastic modifications occur in tuberculous individuals upon slight provocation. It may be supposed that the passage into the blood of the products of disintegration of the protein molecule depends upon various stimuli which, through vasomotor modifications, have a special capacity for acting around diseased foci, where there is probably a particular vascular lability due to disintegration of the tissues. This would explain why in opposite mechanical phenomena (compression in pneumothorax, decompression in thoracentesis) the organism sometimes presents the same reactions.

Contraindications to Winter Climate as a Therapeutic Measure.—While there are few contraindications to a well conducted winter cure, it is nevertheless true, says W. Nonnenbruch, in the *Deutsche medizinische Wochen-*

schrift of December 4, 1931, that high mountain air is overstimulating for certain classes of patients. Tuberculous subjects with fresh infiltrations are known to progress better at moderate elevations than in mountains of great height. Cases complicated with laryngitis should not be sent to the high elevations. The stimulating qualities of the atmosphere at these heights are greater than lower down on the slopes, and are an advantage or a detriment according to the individual case. The condition of the circulation in certain severe types of hyperthyroidism offers a contraindication to a stay among the lofty mountains. This is true too of severe cases of Graves' disease with dilatation of the heart and arrhythmia perpetua. From hyperthyroid subjects it is only a step to the large group of nervous invalids with labile vegetative system, who frequently are sent to mountain climates in the winter to recover their health. One should remember that this is a stimulation therapy, and that labile, weakened bodies and nerves must at first be treated with weak doses, or be denied them altogether. While the choice of a resort must be strictly individual, some of these patients should be sent instead to a warm, southern climate. Palpitation, insomnia and nervous irritability are some of the indications that the elevation is too high, or the effect of the atmosphere too intense. Again, the effect of the exposure in poorly heated trains and cold waiting-rooms is bad in cases of sensitive and elderly nervous invalids. Persons with circulatory disturbances do better in the moderate climates. High blood pressure is a contraindication to high mountain sojourns. Cardiacs in a state of decompensation should avoid these places, as the thinness of the air and the increased metabolism lay too great a burden upon the heart. In all cases of organic disturbances of the heart and blood vessels these conditions are injurious and should be avoided.

Prognosis of Prostatic Enlargement.—Kenneth Walker, writing in *The Lancet*, December 12, 1931, ccxxi, 5650, states that enlargement of the prostate is nearly always progressive, but there may be long periods when the symptoms of enlargement may remain unaltered. Hence we have the question as to

whether future trouble should be anticipated by insisting on surgical intervention. In Walker's opinion an expectant attitude will not increase the risk when the evil day arrives, and in elderly men much may be gained by postponing drastic measures. While the possibility of malignancy, said to occur in some 15 per cent of seemingly innocent enlargement, should be borne in mind, this cannot be advanced as a complete justification of the wholesale removal of all enlarged prostates. Conservatism is further justifiable because, even in the best hands and with the most promising of patients, prostatectomy still remains an operation to which a very definite risk attaches, as is shown by mortality statistics in these cases. A number of factors affecting the mortality rate must be taken into consideration, *i.e.*, age, the presence of renal, cardiac, or pulmonary lesions, of diseases of the bowel or of diabetes, all of which increase the operative risk. With reference to function, the vast majority of patients can be promised that prostatectomy will be followed by complete restoration of function, unless the bladder wall has been irretrievably damaged by distention and sepsis, or a diverticulum exists. Complete restoration of the upper urinary passages is impossible in old and neglected cases. Lack of control is usually only a temporary inconvenience after suprapubic enucleation; there is greater danger of permanency after the perineal operation. Loss of virility is also more common after perineal prostatectomy. Catheter life as a temporary expedient, or as a preliminary to operation, is an excellent treatment; but as a permanent measure it carries a high mortality. When the prostate is much enlarged, when the posterior urethra is tortuous and difficult to navigate, and when catheterization is followed by hemorrhage or accompanied by pain, there is little chance that instrumentation can be carried out for any length of time. A patient for whom prostatectomy is contraindicated is in a far better position as regards life with a permanent drain than when dependent on a catheter. The various forms of electrotherapy are more often palliative than curative. In the small, obstructive prostate surgical diathermy often affords relief when surgery carries too high a risk.



LEGAL

REPORT OF THE COUNSEL

By LORENZ J. BROSNAN, Esq.

Counsel, Medical Society of the State of New York

To the House of Delegates—

Gentlemen:

Your Counsel herewith submits his report of the activities of the Legal Department of the Medical Society of the State of New York for the period from March 1st, 1931 to and including February 29th, 1932.

The past year has been an exceedingly busy one, both in court and in consultation. The appended figures state mere conclusions and give no adequate picture of the amount of work involved or the responsibility assumed.

At the outset your Counsel wishes to acknowledge the splendid support accorded him by your officers, Committees and individual members of the Society with whom he has come in contact during the reporting period. It has been both a privilege and a pleasure to have served under your worthy President Dr. William D. Johnson. Your Counsel wishes also to acknowledge the cooperation and helpful advice of your efficient Secretary Dr. Daniel S. Dougherty. Dr. Dougherty is known to you all. His calm judgment and sage counsel are given without reserve in the solution of your many problems. Your Counsel wishes also to express his appreciation for the cooperation afforded him by the members of your Insurance Committee comprising your Speaker Dr. John A. Card as Chairman, your President-Elect Dr. Charles Gordon Heyd and your Treasurer Dr. Frederic E. Sondern. Your Counsel has greatly enjoyed his relations with the members of your various Committees with whom, at one time or another, he has been in conference and consultation.

During the recording period "Courts and Doctors" by Lloyd Paul Stryker made its appearance. It won the instant approbation of the profession. It fills a long-felt want and should be owned and read by every member of the Society.

In making his report, your Counsel adheres to the convenient category employed in previous years whereby his activities have been divided into three main divisions: (a) the actual handling of malpractice actions before courts and juries and in the appellate tribunals; (b) counsel work with officers, Committees and individual members of the Society; and (c) legislative advice and activities.

Litigation

There is little to be said under this category that has not been written and said many, many times by your present Counsel and his predecessors. We again wish to repeat that the practice of medicine and surgery is an extra-hazardous profession, and that the rights of the physician in the courts are passed upon not by twelve members of his own profession but by twelve ordinary laymen who know little or nothing of medicine or surgery. The possibility of a malpractice suit is a very real danger to the active practitioner. No physician, eminent or lowly, specialist or general practitioner, is immune from attack.

Unless a physician has actually been sued, he cannot have even an incomplete understanding of the nature of the legal work involved in his defense. To translate complicated questions of medicine into language that will be understood by the average lay jury, to successfully convince jurors that a physician is working with factors over which often he has no control, to bring about a sympathetic understanding by our courts and judges of the problems of the active practitioner, to protect and zealously guard the good name of a physician in a malpractice action, is the work of your Counsel in the field of litigation, but it is only part of his work even in that field. To plan and supervise the necessary work in preparation for trial is equally important.

At this point the writer wishes to express his appreciation of the splendid work of his entire office staff and their fine spirit of devotion to duty which is responsible in no small measure for the results shown by this report.

From Table I it will be noted that in the past year 292 cases were instituted as compared with 286 in the previous year, representing an increase of only 6 cases. On the other hand, 227 cases were disposed of in the past year, as compared with 159 in the previous year. This means that 68 more cases were disposed of in the past year than in the previous year. This, however, does not take into consideration the fact that we were successful by negotiation in dissuading a large number of claimants or their attorneys from bringing actions in court. These figures also do not include a large number of claims still pending in which suit has not yet

Societies and in the entire State Society. These figures are sufficiently clear to obviate the necessity of extended comment. It will be noted that there are now 13,195 members of the State Society as compared with 12,812 in the previous reporting period, and that there are now 7,699 insured members as compared with 7,334 in the previous year.

Counsel Work

During the period of this report, your Counsel has prepared for publication in the Society's Journal articles in the nature of editorial comment. These editorials have included the following:

This Year's Chiropractic Bill.
Charitable Hospital—Liability for Negligence of Its Physicians and Nurses.
The Ownership of X-ray Plates.
Privilege Against Self-Incrimination — Waiver.
Retained Foreign Body—Court of Appeals Holds Surgeon Blameless.
Libel—Publication Established by Dictation to Stenographer.
Doctor's Statement Submitted by Insurance Beneficiary not Privileged.
Court's Power to Void Jury's Verdict on Ground of Bias.
Supreme Court Rules on Freedom of the Press.
Corporations—Legal Responsibility of Directors.
Corporate Directors, II.
Operation Without Consent.
Physician and Patient—Operation under Mistake as to Identity.
A Dangerous Precedent.
Physician's Fees—Patient's Ability to Pay.
Confidential Communications—An Interesting Case.
Automobile—Right of Police to Commandeer in Aid of Arrest.
Pharmacies—Power of State to Legislate on Question of Ownership.
Accidental Injury.
Federal and State Taxation of Gifts Made Prior to Death.
A Surgeon Recovers for Disabling Injuries. "Courts and Doctors."
Insanity—Liability of Physicians Making Examination.
Termination of the Relationship between Physician and Patient.
Your Counsel has also digested and there have been published in the Journal reports upon malpractice actions which it has been felt were of special interest to the profession. The case reports published during the previous year are as follows:

Claimed Negligence in Treating Tumor during Pregnancy.

Claimed Negligent Use of X-ray.

Alleged Negligent Operation during Pregnancy.

Claimed Negligent Treatment of Fracture of Humerus.

Needlebreak during Novocaine Injections.

Claimed Negligent Treatment of Fracture of Radius and Ulna.

Claimed Improper Treatment of Fracture of Radius.

Claimed Negligent Post-Operative Treatment of Club Feet.

Alleged Negligence in Tonsil and Adenoid Removal.

Alleged Negligence in Needle Breaking.

Alleged Wrong Diagnosis of Stomach Ailment.

Failure to Be Present at Delivery.

Claimed Negligent Treatment of Infected Finger.

Alleged Negligence in Breaking of Needle and Not Removing Same.

Claimed Negligent Treatment of Osteomyelitis.

Claimed Negligent Operation on Eye, Causing Blindness.

Claimed Negligent Treatment of Fracture of Femur.

Alleged Malpractice in Treating Stab Wound.

Alleged Negligent Treatment of Fracture of Arm.

Burn Claimed Caused by Negligent Physiotherapy.

Alleged Negligent Treatment of Injury to Child's Finger.

Alleged Negligent Tonsillectomy.

Alleged Negligent Diathermic Treatment.

Claimed Negligent Plastic Operation on Nose.

Failure to Be Present at Delivery.

Claimed Negligent Prescription of Ergoapio.

Claimed Negligent Treatment of Cut.

Failure to Detect Fracture and Dislocation.

Alleged Negligent Removal of Uvula during Tonsillectomy.

Claimed Improper Treatment of Fractured Arm.

Negligent Treatment of Empyema.

Alleged Negligent Treatment of Tonsils.

Hot Water Bottle Burn.

Claimed Negligent Abdominal Operation.

Suit for Professional Services—Malpractice Counterclaim.

Alleged Injuries by X-ray Machine.

Claimed Negligence in Administration of Electrotherapy.

Recurrent Hernia.

Alleged Negligence in Treating Fracture.

Burn from Diathermy Treatment.

Claimed Negligence in Treatment of Sinus Trouble.

Broken Needle.

Alleged Negligence in Use of Tourniquet.

In his contacts with the members of your Society your Counsel is pleased to find that these editorials and case reports are read with approval and interest by the members of your Society.

In addition to his other duties, your Counsel receives frequent requests for opinions on various subjects. It should be remembered that the Executive Committee of your Society has ruled that all requests for legal opinion coming from individual members of your Society or from component County Societies must, in the first instance, be referred to that body for action. If the Executive Committee deems the inquiry a proper one for opinion by Legal Counsel, it refers the same back to him for reply. Some of the matters upon which advice has been thus rendered are as follows:

Inquiry from a physician in good standing as to whether it would be legal for him to extract teeth, and the penalty for the illegal practice of dentistry.

Inquiry as to the period of time after treatment is rendered by a physician during which malpractice actions may be brought.

Communication requesting information in regard to hospital records:

- (a) To whom do hospital records belong?
- (b) What rules may a hospital make in regard to access to its records by a patient?
- (c) Is a rule limiting access to its records to the attending physician, proper?
- (d) What attitude should be taken towards attorneys who seek information?
- (e) What attitude should be taken towards physicians who seek information without going through the proper channels?

Inquiry as to whether a foreign insurance company not authorized to do business in this State is financially reliable.

Inquiry as to the criminal and civil liability of a physician who accedes to the request of his patient,

- (a) That her tubes be cut to prevent further pregnancies;
- (b) That her finger or other part of her body be amputated.

Inquiry as to the legal responsibility of a physician who relies on the report of a pathological laboratory.

Inquiry as to the time limit after treatment

is rendered, within which a patient may bring a malpractice action against a physician.

Inquiry as to whether a claim of alleged illegal commitment of an insane person is considered malpractice and, as such, covered by the group policy.

Communication requesting citation of cases discussed in editorial appearing in the NEW YORK STATE JOURNAL OF MEDICINE.

Inquiry regarding the advisability of a charitable hospital carrying insurance to cover:

- (a) The malpractice of its superintendent, physicians and internes;
- (b) The general liability of the hospital in relation to persons other than patients.

Inquiry regarding the legal liability of a physician,

- (a) Where the patient, contrary to the doctor's advice, refuses to permit him to administer tetanus antitoxin for a puncture wound;
- (b) Where serum sickness or other serious consequences develop following its administration.

Inquiry as to whether a physician is legally liable for divulging confidential information to an insurance company, where the privilege has not been waived; also as to when such privilege is deemed waived.

Communication requesting information as to when the Statute of Limitations runs in malpractice actions.

Inquiry regarding a charitable hospital having an X-ray laboratory in charge of a non-medical man:

- (a) What is the liability of the hospital for accidents in the X-ray room?
- (b) Would a general liability policy protect the hospital?
- (c) Would the malpractice policy of a physician protect the hospital or the technician where such physician was not directly in charge of the laboratory at the time of the particular accident?
- (d) Would the hospital policy protect the technician personally?

Communication requesting a form of consent to operation to be obtained by a hospital,

- (a) Where the patient is over age;
- (b) Where the patient is an infant;
- (c) Where the patient is a married woman.

Inquiry as to whether a physician should divulge to an insurance company information concerning treatment, where the patient has applied for disability payments under his insurance policy.

Communication inquiring, where a physician is requested to examine and comment on facial

blemish cases which are being treated by a non-medical person with a secret formula,

- (a) Is the physician becoming involved even with no mention of his name in the publicity?
- (b) Could such secret formula be patented and presented before medical societies in an ethical way, without jeopardizing its financial value?
- (c) Is such person violating the medical practice act?

Communication from a physician who had been called in to treat a woman suffering from the after-effects of a criminal abortion performed by a midwife, requesting advice on how to protect himself against any possible claim of unlawful practice.

Inquiry regarding hospital records:

- (a) Are such records privileged?
- (b) Is it necessary to obtain the patient's consent before they can be submitted in court?
- (c) If hospital records are subpoenaed and a damage suit ensues because of the information divulged, is the hospital or the attending physician liable?

Communication inquiring, where an infant has been injured by an automobile operated by an employee of a company which carries general liability insurance,

- (a) Is the father responsible for the payment of the doctor's bill?
- (b) What is the responsibility of the company whose employee stated to the doctor that it would pay the doctor's bill?
- (c) Is the insurance company justified in refusing to pay the doctor's bill where it has made a direct settlement with the father?

Inquiry regarding the disclosure to an insurance company of confidential information acquired by a physician, where the patient has not consented to the disclosure:

- (a) What information acquired by a physician in treating a patient is considered privileged?
- (b) What information may be disclosed to an insurance company?
- (c) What is the liability of the physician for disclosing such information?
- (d) What precautions should a physician take to avoid suit for disclosing confidential information?

Inquiry regarding the formation of a council composed of representatives from dental, medical and druggist societies:

- (a) Whether it would be necessary for such council to incorporate, if the individual

organizations represented were incorporated;

- (b) Whether the formation of such council is contrary to the constitution of the New York State Medical Society.

In addition to the foregoing, your Counsel has been requested to consider and render advice on the following:

Whether association by a physician with an advertising physiotherapist constitutes a violation of Section 31 of the Principles of Professional Conduct which prohibits advertising by physicians for the purpose of inviting attention to themselves.

Advice in regard to discontinuance by the State Society of an advertisement running in the *NEW YORK STATE JOURNAL OF MEDICINE*, and the sending of a proper notice to the advertiser in question.

Suggested revision in the present form of contracts for advertisements in the *NEW YORK STATE JOURNAL OF MEDICINE* and the *Medical Directory of New York, New Jersey and Connecticut*.

Your Counsel has rendered legal advice and has expressed his opinion to the following Committees appointed by the President of the Medical Society of the State of New York:

Committee to study the petition of the Franklin County Society that the State Medical Society and its Legislative Committee foster such legislation as is necessary to compel insurance companies to assume the payment of hospitals and physicians for attendance on victims of automobile accidents; to which Committee your Counsel gave a resume of previous proposed legislation on this subject, and its outcome.

Committee to consider the matter of hospital records and their availability for the attending staff; to which Committee your Counsel gave his legal opinion on the following:

- (a) Is a hospital within its rights in refusing to permit surgeons to make copies of hospital records in cases operated upon by the surgeon?
- (b) Has a hospital superintendent the right to make arbitrary rules in regard to access to hospital records, and are its physicians and surgeons bound by such rules?

Committee to study the report of the Committee on Medical Economics; to which Committee your Counsel gave his legal opinion on the following:

- (a) Before corporations engaged in the business of bill collecting and financing for sickness and operations can be accept-

able to the Society, they must comply with certain rules which have been formulated with a view to correcting abuses which now exist;

- (b) Recommendation by the Committee that physicians should be subject to mandatory call only from a judge of the court;
- (c) Recommendation by the Committee that physicians should be recognized as experts, and provision for standard compensation should be made by law;
- (d) Recommendation by the Committee that efforts be made to amend the law so as to make the physicians' fees a lien upon the recovered sum in negligence cases, which lien would include a fee for appearance in court.

Committee to study the report of the Governor's Special Health Commission on the administrative and legislative aspects of public health in the State of New York.

Your Counsel has also been in conference and consultation with and has acted as legal advisor to the Committee on the revision of the constitution and by-laws of the State Society. Your Counsel has also examined the proposed revised constitution and by-laws of several of the County Societies and has rendered advice and made suggestions in connection therewith. In addition, your Counsel has been in conference and consultation with the members of the Committee on Insurance with respect to the various matters that have been referred to them for action. Your Counsel also attended a

hearing on the proposed Coffey-Humbar Cancer Foundation Clinic.

Legislative Advice and Activities

Your Counsel's opinion has been requested and has been promptly given with respect to a large number of bills affecting the medical profession that came before the Legislature at its last session.

Every member of your Society owes a debt of gratitude to the Legislative Committee and to Dr. Joseph S. Lawrence, your Executive Officer, for their magnificent work during the last session of the Legislature.

Conclusion

The writer cannot conclude this report without at least a brief comment on the quantity and quality of the work done by your officers and Committees. The amount of work unselfishly done by them for the welfare of your members is indeed great. Personal contact with them demonstrates that you have chosen as your leaders men of character, integrity and industry. Stand by them and support them, and the hopes and aims of your Society will be achieved.

In his own field, the ambition and objective of your Counsel and his entire office staff is to render to your Society and to its individual members the highest possible type of legal service.

Respectfully submitted,

LORENZ J. BROSNAN, Counsel.

March 1, 1932.

TREATMENT OF COLLES' FRACTURE

A general practitioner was called to the home of an elderly lady who had just sustained a fall which had injured her wrist. Upon examination he determined the presence of a Colles' fracture. The doctor undertook to reduce the fracture as best he could, applying an aluminum splint. The patient's wrist was x-rayed and the picture revealed good apposition of the fragments with a slight displacement. The doctor realized that the alignment was not perfect and advised the patient to that effect. Examination of the patient's physical condition disclosed that her heart condition was very poor. He explained to her that a better reduction of the fracture would require an anaesthetic and that it was his judgment that her condition did not justify the administration of an anaesthetic. The patient remained under his care for about twelve weeks during which time he changed the dressings and adjusted the splint as be-

came necessary, and arranged that massage treatments be given to the patient.

When he discontinued his connection with the case the patient had a good functional result, although the wrist was somewhat restricted as to motion.

A suit was instituted against the doctor in which the plaintiff claimed that he had been guilty of malpractice in his treatment of her case. It was claimed that the patient had received a deformity which the doctor could have avoided had he followed the proper and approved practice. The case came on for trial before a judge and jury. At the close of the evidence introduced on behalf of the plaintiff a motion was made by the attorney for the defendant to dismiss the complaint on the ground that a cause of action had not been established. The judge granted the motion, for lack of proof that the doctor in any way departed from proper and approved practice.



THE ANNUAL MEETING



THE ANNUAL MEETING

The one hundred and twenty-sixth annual meeting of the Medical Society of the State of New York will be held on Monday, Tuesday and Wednesday, May 23-25, 1932, in the Hotel Statler, Buffalo, N. Y. There will be five major features as follows:

1. The House of Delegates will meet on the afternoon of Monday, May 23rd, and will prob-

ably hold sessions on that evening and on Tuesday morning.

2. Scientific sessions on Tuesday afternoon, and all day Wednesday.

3. A scientific exhibit, which will be open throughout the meeting.

4. Clinics in the hospitals of Albany on Monday.

5. Technical exhibits by dealers in medical wares.

SCIENTIFIC MEETINGS

The Committee on Scientific Work has arranged a program of unusual interest and practical value. General sessions will be held on the afternoons of Tuesday and Wednesday; and meetings of the eight scientific sections will be held on the mornings of those days.

Special sessions will also be held for the consideration of two additional topics:

1. Radiology on Tuesday morning, under the chairmanship of Dr. Joseph M. Steiner, New York.

2. Physical Therapy, with Dr. Richard Kovacs, New York, Chairman.

The following notice will appear on the program of each section:

"Essayist will please leave the original copies of their papers with the Secretary of the Sec-

tion when they finish reading them. All papers read before the Society by its members shall become the property of the Society. Discussers must type their remarks and hand them to the same officer if they wish to have them published in the Journal."

The Committee on Scientific Work:

Arthur J. Bedell, M.D., Albany, Chairman

David A. Haller, M.D., Rochester

Arthur M. Wright, M.D., New York

Albert D. Kaiser, M.D., Rochester

George H. Bonnefond, M.D., Utica

Irving J. Sands, M.D., Brooklyn

Richard T. Atkins, M.D., New York

Edward R. Maloney, M.D., New York

Frank W. Laidlaw, M.D., Middletown

George W. Kosmak, New York

SCIENTIFIC PROGRAM

GENERAL SESSIONS

Presiding, William D. Johnson, M. D., President, Medical Society State of New York

Tuesday, May 24th, at 2:00 P. M.

Place of Meeting, Ball Room, Hotel Statler

Address by the President of the American Medical Association, E. Starr Judd, M.D., Rochester, Minn. "Some of the Problems Associated with Peptic Ulcer." Illustrated with Lantern Slides. (By invitation.)

SYMPOSIUM ON THE THERAPEUTIC USE OF BIOLOGICAL PRODUCTS

A concise résumé of personal experiences.

Introductory remarks, William H. Park, M.D., New York City.

1. "The Serum Treatment of Poliomyelitis," William H. Park, M.D., New York City.

2. "The Serum Treatment of Meningitis," Josephine B. Neal, M.D., New York City.

3. "Antitoxin Treatment of Erysipelas," Kenneth M. Lewis, M.D., New York City.

4. "Antitoxin Treatment of Acute Gangrene," John E. Jennings, M.D., Brooklyn.

5. "Serum Treatment of Scarlet Fever," Lawrence A. Kohn, M.D., Rochester.

6. "The Use of Convalescent Serum in the Treatment of Measles, Chicken Pox and Mumps, including the Prophylactic Value of Parental Blood," Jacques M. Lewis, M.D., New York City.

Wednesday, May 25th, at 2:00 P. M.

Place of Meeting, Ball Room, Hotel Statler

A THERAPEUTIC SYMPOSIUM

1. "The Treatment of Acute Rheumatism," William W. Herrick, M.D., New York City.
2. "The Care of Coma from Unknown Cause," Emanuel D. Friedman, M.D., New York City.
3. "The Therapeutics of Hypertension," James F. Rooney, M.D., Albany.
4. "The Treatment of Common Vaginal Discharges," James E. King, M.D., Buffalo.
5. "The Treatment of Gonorrhea," Frederick J. Parmenter, M.D., Buffalo.

SECTION ON MEDICINE

Chairman.....David A. Haller, M.D., Rochester
Secretary.....Edward C. Reifenshtein, M.D., Syracuse

Tuesday, May 24th, at 10:30 A. M.

JOINT SESSION WITH SECTION ON
PEDIATRICS

Place of Meeting....Fillmore Room, Hotel Statler

1. "Prognosis of Diabetes of Childhood," Priscilla White, M.D., Boston, Mass. (By invitation.)

Discussion opened by John R. Williams, M.D., Rochester.

2. "The Clinical Results in Children of the Use of B.C.G. in New York City," Camille Kereszturi, M.D., New York City.

Discussion opened by Bela Schick, M.D., New York City, Konrad E. Birkhaug, M.D., Rochester.

Wednesday, May 25th, at 9:00 A. M.

Place of Meeting....Fillmore Room, Hotel Statler

1. "Requisite Data for Adequate Blood Sugar

Control," Floyd R. Wright, M.D., Clifton Springs.

Discussion opened by Agnes L. Brown, M.D., Rochester.

2. "Experience with a New Non-Surgical Method of Treatment for Gastric and Duodenal Ulcer," L. Winfield Kohn, M.D., New York City.

Discussion opened by Libby Pulsifer, M.D., Rochester.

3. "Effect of Liver on the Cord Lesions of Pernicious Anaemia," Paul H. Garvey, M.D., Rochester.

4. "Insulin in Hypoglycemia: Two Cases with Convulsions; One Necropsy Report," Byron D. Bowen, M.D., Buffalo, and Gilbert M. Beck, M.D., Buffalo.

Discussion opened by Charles B. F. Gibbs, M.D., Rochester.

SECTION ON SURGERY

Chairman.....Arthur M. Wright, M.D., New York City
Secretary.....Edward R. Cunniffe, M.D., New York City

Tuesday, May 24th, at 10:30 A. M.

Place of Meeting....Terrace Room, Hotel Statler

SYMPOSIUM ON EMPYÆMA

1. "Medical Aspects," John J. Rooney, M.D., Rochester.

2. "Pathology," Harrison S. Martland, M.D., Newark, N. J. (By invitation.)

3. "Surgical Treatment," Carl Eggers, M.D., New York City.

4. "Treatment by Packing," John F. Connors, M.D., New York City.

SYMPOSIUM ON ANESTHESIA

Wednesday, May 25th, at 9:00 A. M.

Place of Meeting....Terrace Room, Hotel Statler

1. "Inhalation Anaesthesia," John H. Evans, M.D., Buffalo.

2. "Avertin," Herman E. Pearce, Jr., M.D., Rochester.

3. "Sub-Arachnoid Anaesthesia," Hippolyte M. Wertheim, M.D., New York City.

4. "Experimental Studies in Sub-Arachnoid Anaesthesia," Frank CoTui, M.D., New York City. (By invitation.)

5. "Resuscitation," Paluel J. Flagg, M.D., New York City.

SECTION ON OBSTETRICS AND GYNECOLOGY

Chairman.....George H. Bonnefond, M.D., Utica
Secretary.....Edward C. Hughes, M.D., Syracuse

Tuesday, May 24th, at 10:30 A. M.

Place of Meeting.....Room 1870, Hotel Statler

1. "A Summary of the Physiology of the Female Reproduction Organs," Nathan P. Sears, M.D., Syracuse.

2. "Further Results in the Use of the Rabbit Ovulation Test for the Diagnosis of Pregnancy," Karl M. Wilson, M.D., Rochester, and George W. Corner, M.D., Rochester. (By invitation.)

Discussion opened by Francis C. Goldsborough, M.D., Buffalo.

3. "Special Functions of the Supra-renal in the Female," Frank A. Hartman, Ph.D., Buffalo. (By invitation.)

4. "The Use of the Pessary in Post-Partem Cases as a Prophylactic Measure," Louis A. Siegel, M.D., Buffalo.

Wednesday, May 25th, at 9:00 A. M.

Place of Meeting.....Room 1870, Hotel Statler

1. "Clinical Evaluation of General Hyperthermia with Heat Localization by Radiotherapy in Pelvic Inflammatory Disease," Isidor C. Rubin, M.D., New York City, and Edward A. Horowitz, M.D., New York City.

2. "The Technical Aspect of General Hyperthermia with Heat Localization by Radiotherapy in Pelvic Inflammatory Disease," William Bierman, M.D., New York City.

3. "Problems of Labor," E. Everett Bunzel, M.D., New York City.

4. "Arrested Shoulders in Vertex Presentation," Lantern slide demonstration, Mark Hornstein, M. D., New York City.

SECTION ON NEUROLOGY AND PSYCHIATRY

Chairman.....Irving J. Sands, M.D., Brooklyn
Secretary.....Henry W. Williams, M.D., Rochester

Tuesday, May 24th, at 10:30 A. M.

Place of Meeting.....Parlor B, Hotel Statler

1. "The Role of the Child Guidance Clinic in the Prevention of Schizophrenia (Dementia Praecox)," Hyman L. Levin, M.D., Buffalo.

Discussion opened by Albert B. Siewers, M.D., Syracuse.

2. "Prevention of Neuropsychiatric Problems in Municipal Employees with Special Reference to the Members of the Police Department." Sylvester R. Leahy, M.D., N. Y. City.

Discussion opened by G. Kirby Collier, M.D., Rochester.

3. "Psychoanalytic Factors in Family Discord." Clarence P. Oberndorf, M.D., N. Y. City.

Discussion opened by Philip R. Lehrman, M.D., New York City.

4. "The Scope and Limitations of a Psychoanalytic Approach to the Psychoses," Bernard Glueck, M.D., New York City.

Discussion opened by Harry A. Steckel, M.D., Syracuse.

5. "The Influence of Trauma in Chronic and Latent Encéphalitic Disorders," Abraham M. Rabiner, M.D., Brooklyn.

Discussion opened by Noble R. Chambers, M.D., Syracuse.

6. "Lumbar Puncture; A Re-evaluation of its Clinical Values," Sol W. Ginsburg, M.D., New York City.

Discussion opened by Eugene N. Boudreau, M.D., Syracuse.

Wednesday, May 25th, at 9:00 A. M.

Place of Meeting.....Parlor B, Hotel Statler

1. Chairman's Address: "Superspecialization in Neuropsychiatry," Irving J. Sands, M.D., Brooklyn.

2. "Essential Criteria for the Diagnosis of Brain Tumor," Lantern Slide Demonstration, Michael Osnato, M.D., New York City.

Discussion opened by E. Jefferson Browder, M.D., Brooklyn.

3. "Neurological Aspects of Suprarenal Insufficiency," Leon H. Cornwall, M.D., New York City.

Discussion opened by James W. Putnam, M.D., Buffalo.

4. "Lead Encephalopathy; A Clinical and Pathological Study," John L. Eckel, M.D., Buffalo, and Nathaniel W. Winkelman, M.D., Philadelphia, Pa. (By invitation.)

Discussion opened by Edward A. Sharp, M.D., Buffalo.

5. "Painful Affections of the Face with Special Reference to the Diagnosis and Treatment of Trigeminal and Glossopharyngeal Neuralgias," Byron Stookey, M.D., New York City.

6. "The Clinical Picture Following Septic Infarction of the Medulla," Lantern Slide Demonstration, Edward L. Hunt, M.D., New York City.

7. "The Treatment of Cysts of the Fifth Ventricle and Cavum Vergae," William P. Van Wagenen, M.D., Rochester.

SECTION ON PEDIATRICS

Chairman
Vice-Chairman
Secretary

Albert D Kaiser, M D, Rochester
Brewster C Doust, M D, Syracuse
Adolph G DeSanctis, M D, New York City

Tuesday, May 24th, at 10 30 A M
JOINT SESSION WITH SECTION ON
MEDICINE

Place of Meeting Fillmore Room, Hotel Statler

1 "Prognosis of Diabetes of Childhood,"
Priscilla White, M D, Boston, Mass (By invitation)

Discussion opened by John R Williams, M D, Rochester

2 "The Clinical Results in Children of the Use of BCG in New York City," Camille Kereszturi, M D, New York City

Discussion opened by Bela Schick, M D, New York City, Konrad E Birkhaug, M D, Rochester

Wednesday, May 25th, at 9 00 A M
Place of Meeting Iroquois Room, Hotel Statler

1 Chairman's Address "Value of Immune

Adult Blood in the Treatment of Measles and Whooping Cough," Albert D Kaiser, M D, Rochester

2 "The Management of Hemorrhagic Problems in Infancy and Childhood," I Newton Kugelmass, M D, New York City

Discussion opened by B Winston Jarvis, M D, New York City

3 "Why a Child Refuses to Eat," Douglas P Arnold, M D, Buffalo

Discussion opened by Marvin Israel, M D, Buffalo

4 "The Significance and Treatment of Pyuria in Children," James R Wilson, M D, Syracuse

5 "Nirvanol Treatment of Chorea," Roger H Dennett, M D, New York City

Discussion opened by Samuel W Clausen, M D, Rochester

SECTION ON DERMATOLOGY AND SYPHILOLOGY

Chairman
Secretary

Edward R Maloney, M D, New York City
George C Andrews, M D, New York City

Tuesday, May 24th, at 10 30 A M

Place of Meeting Room 1815, Hotel Statler

1 "Ringworm of the Toes in Students and Dispensary Patients," Emanuel Muskatblit, M D, New York City

2 "Are X-rays of Value in the Treatment of Ringworm of the Hands and Feet?" Richard J Kelly, M D, New York City

Discussion opened by Howard Fox, M D, New York City

3 "Lichenoid Sarcoid (Boeck) Report of a Case with Review of the Literature," Joseph L Morse, M D, New York City

4 "Avian Tuberculosis of the Skin," Ray H Rulison, M D, New York City

Discussion opened by Louis Tulipan, M D, New York City

5 "Pustulosis Vacciniformis A Complicating Disease of Infantile Eczema," Colored Lantern Slide Demonstration, Hermann Feit, M D, New York City

Discussion opened by Herbert H Bauckus, M D, Buffalo

Wednesday, May 25th, at 9 00 A M

Place of Meeting Room 1815, Hotel Statler

1 "Acne Methods of Treatment for Various Types," Albert R McFarland, M D, Rochester

Discussion opened by George M Fisher, M D, Utica

2 "The Role of Sulphur in Dermatology," Frank C Combes, Jr, M D, New York City

Discussion opened by Paul E Bechet, M D, New York City

3 "Squamous Cell Epitheliomata of the Skin on the Face," Eugene F Traub, M D, New York City, and Jesse A Tolmach, M D, New York City

Discussion opened by Jerome Kingsbury, M D, New York City

4 "An Evaluation of the Arsphenamines for General Use with Special Reference to Sulpharsphenamine," Earl D Osborne, M D, Buffalo, and Raymond J Rickloff, M D, Buffalo

5 "The Spinal Fluid in Syphilis," Leo Spiegel, M D, New York City, and Joseph Jordan Eller, M D, New York City

Discussion opened by Harry C Saunders, M D, New York City

SECTION ON OPHTHALMOLOGY AND OTO-LARYNGOLOGY

Chairman.....Richard T. Atkins, M.D., New York City
 Secretary.....David F. Gillette, M.D., Syracuse

Tuesday, May 24th, at 10:30 A. M.

Place of Meeting....Georgian Room, Hotel Statler

SYMPOSIUM ON EXOPHTHALMOS

1. "Incidence in Nasal Sinus Infection,"
 Raymond W. Hawkins, M.D., Rochester.

Discussion opened by Albert M. Rooker,
 M.D., Niagara Falls, Frank A. Laurer, M.D.,
 Syracuse.

2. "The Ocular Symptoms," Harold H. Joy,
 M.D., Syracuse.

Discussion opened by Charles A. Hargitt,
 M.D., Brooklyn, Jason L. Wiley, M.D.,
 Auburn.

3. "Pathology and Intraocular Changes,"
 Lantern Slide Demonstration, Algernon B.
 Reese, M.D., New York City.

Discussion opened by Macy L. Lerner, M.D.,
 Rochester, Walter S. Atkinson, M.D., Water-
 town.

4. "Treatment," Lantern Slide Demonstra-
 tion, Webb W. Weeks, M.D., New York City.

Discussion opened by Harry M. Weed, M.D.,
 Buffalo, John F. Gipner, M.D., Rochester.

Wednesday, May 25th, at 9:00 A. M.

Place of Meeting....Georgian Room, Hotel Statler

SYMPOSIUM ON RETROBULBAR NEURITIS

1. "Ocular Symptoms," Lantern Slide Dem-
 onstration, Arthur J. Bedell, M.D., Albany.

Discussion opened by Thomas H. Johnson,
 M.D., New York City, R. Paul Higgins, M.D.,
 Cortland.

2. "Rhinological Symptoms," Gordon D.
 Hoople, M.D., Syracuse.

Discussion opened by William P. Hall, M.D.,
 Utica, Frank H. Valone, M.D., Rome.

3. "The Medical and Neurological Symp-
 toms," Wardner D. Ayer, M.D., Syracuse.

Discussion opened by Frank J. Montrose,
 M.D., Buffalo, John W. Pennock, M.D., Syra-
 cuse.

4. "Pathology," Albert C. Snell, M.D.,
 Rochester.

Discussion opened by Anton S. Schneider,
 M.D., Plattsburg, Searle B. Marlow, M.D.,
 Syracuse.

SYMPOSIUM ON MAXILLARY SINUSITIS

1. "Pathology," Lantern Slide Demonstra-
 tion, Andrew A. Eggston, M.D., New York
 City.

Discussion opened by David Robb, M.D.,
 Ithaca, Leon C. Cote, M.D., Newburgh.

2. "Symptomology," John F. Fairbairn,
 M.D., Buffalo.

Discussion opened by Edwin P. Hall, M.D.,
 Syracuse, John H. Atkinson, M.D., Watertown.

3. "Diagnosis," Lantern Slide Demonstra-
 tion, Marvin F. Jones, M.D., New York City.

Discussion opened by Otto S. McKee, M.D.,
 Buffalo, Fred G. Fielding, M.D., Glens Falls.

4. "Treatment," Frank M. Sulzman, M.D.,
 Troy.

Discussion opened by Sandford H. Kinne,
 M.D., Binghamton, Austin G. Morris, M.D.,
 Rochester.

SECTION ON PUBLIC HEALTH, HYGIENE AND SANITATION

Chairman.....Frank W. Laidlaw, M.D., Middletown
 Secretary.....Daniel R. Reilly, M.D., Cortland

Tuesday, May 24th, at 10:30 A. M.

Place of Meeting.....Room 1869, Hotel Statler

1. "Poliomyelitis," A Plan for a study and
 aftercare of the 1931 Brooklyn Epidemic, Mur-
 ray B. Gordon, M.D., Brooklyn.

2. "The Epidemiology of Septic Sore
 Throat," Paul B. Brooks, M.D., Albany.

3. "Septic Sore Throat," Report of Outbreak
 in a Small Village, William L. Munson, M.D.,
 Granville.

Wednesday, May 25th, at 9:00 A. M.

Place of Meeting.....Room 1869, Hotel Statler

1. "The Significance and Detection of Tuber-

culosis in School Children," William J. Ryan,
 M.D., Pomona.

Discussion opened by Robert E. Plunkett,
 M.D., Albany.

2. "Relative Advantages of Toxin-Antitoxin
 and Toxoid," William A. Holla, M.D., White
 Plains.

General Discussion: (Participants limited to
 5 minutes each).

(a) Recent Developments in Serum therapy.

(b) The Poliomyelitis Outbreak in 1931.

(c) Problems of Rural and Small Village
 Health Officers.

SESSION ON RADIOLOGY

Chairman.....Joseph M. Steiner, M.D., New York City

Tuesday, May 24th, at 10:30 A. M.

Place of Meeting.....Room 1806, Hotel Statler

1. "The Accessory Nasal Sinuses in Scarlet Fever," Donald S. Childs, M.D., Syracuse.

2. "Roentgenological Study of Arteriosclerosis of the Aorta in Heart Disease," Lantern Slide Demonstration, Joseph H. Green, M.D., Rochester.

3. "The Correlation of Roentgenological Findings and Pathological Specimens of Gastric Cancers and Ulcers with their Differentiation," Lewis G. Cole, M.D., New York City.

4. "The X-Ray as an Aid in the Early Recognition of Serious Disease of the Colon," William H. Stewart, M.D., New York City, and H. Earl Illick, M.D., New York City.

5. "Chronic Duodenal Stasis," Ross Golden, M.D., New York City.

6. "Scope and Application of Radiation Therapy," Douglas Quick, M.D., New York City.

7. "Some X-Ray Evidences of Intracranial Pathology," Charles W. Schwartz, M.D., New York City.

8. "X-Ray Findings in the Diagnosis and Treatment of Pulmonary Tuberculosis," Lantern Slide Demonstration, Oswald R. Jones, M.D., New York City.

SESSION ON PHYSICAL THERAPY

ChairmanRichard Kovacs, M.D., New York City

Wednesday, May 25th, at 9:00 A. M.

Place of Meeting.....Room 1806, Hotel Statler

1. "Physical Therapy in Gynecological Office Practice," Virginia Tannenbaum, M.D., Buffalo.

2. "Artificial Hyperthermia by High Frequency Currents," Charles Carpenter, Ph.D., by invitation, Rochester.

3. "Painful Shoulder," Charlton Wallace, M.D., New York City.

4. "Artificial Light in Tuberculosis," George C. Martin, M.D., Buffalo.

SCIENTIFIC EXHIBIT

Foyer—Hotel Statler

NEW YORK STATE MEDICAL LIBRARY, ALBANY, N. Y.

The New York State Medical Library will have in its exhibit some recent books and current journals of general interest. One of the Librarians will be at the exhibit and will be glad to answer questions concerning the use of the Library by physicians of the State. There are over 40,000 volumes in the Medical Library at Albany and over 500 periodicals are received

currently. Special books are sent to the borrower on request or selected material will be sent if the subject desired is given. This service is extended, without charge, to physicians and nurses registered in New York State. The only obligation imposed on the borrower is the payment of the return postage and insurance.

THE CLINICAL DIAGNOSIS OF SYPHILIS

James N. Vander Veer, M.D., Albany, N. Y.; Albert Pfeiffer, M.D., Albany, N. Y.; Rudolph Ruedemann, Jr., M.D., Albany, N. Y.

The Exhibit consists of moulages demonstrating the syphilitic manifestations of skin, mucous membrane and dermatological conditions simulating syphilis.

Moving pictures will show active, early and late syphilis.

The lesions and stigmata of congenital syphilis will be demonstrated by slides.

Differential diagnosis and modern treatment will be discussed by the Exhibitors.

THE RABBIT OVULATION TEST

Karl M. Wilson, M.D., and G. W. Corner, M.D., Rochester, N. Y.

Specimens of Rabbits' ovaries showing positive and negative reactions in small jars, (3 or 4 jars).

Colored plate showing reaction. Hanging wall chart showing results.

BUFFALO CITY HOSPITAL

An Extensive Exhibit Including the Work of all Departments of the Hospital.

UNIVERSITY OF BUFFALO**THE KIDNEY OF THE LIVING ANIMAL AS SEEN UNDER THE MICROSCOPE**

J. Graham Edwards, Ph.D., University of Buffalo, Buffalo, N. Y.

The preparation shows (a) the circulation of in blood pressure. (c) The two main segments of the renal tubule and the functional differences between them.

CORTIN

Frank A. Hartman, Ph.D., University of Buffalo, Buffalo, N. Y.

The function of Cortin as demonstrated in son's disease and other clinical conditions is experiments on animals is shown by means of illustrated by photographs and charts. The therapeutic use of Cortin in Addi-

DRAWINGS OF GYNECOLOGICAL GROSS PATHOLOGY

James E. King, M.D., University of Buffalo and Buffalo General Hospital, Buffalo

Drawings of Gynecological Gross Pathology.

THE PROPHYLAXIS OF RINGWORM OF THE FEET

Earl D. Osborne, M.D., University of Buffalo Medical School, Buffalo

The exhibit will consist of photographs illustrating the use of one per cent sodium hypochlorite in rubber pans in the High Schools of the City of Buffalo. A chart showing the results of the fungicidal tests with six of the common fungus organisms will be shown. Results of two years experience will be given.

UROLOGY

Frederick J. Parmenter, M.D., Department of Urology, University of Buffalo and Buffalo General Hospital, Buffalo, N. Y.

Exhibition of Lesions of the Urinary Tract with their Symptoms and Methods of Treatment, illustrated by Charts, Specimens and Case Histories.

Topics to be covered:

Kidney Trauma

Non-Tubercular Kidney Infections
Tuberculosis of the Urinary Tract
Tumors of the Urinary Tract
Cysts of the Kidney

Ptosis and Hydronephrosis of the Kidney
Calculus of the Urinary Tract

DEACONESS HOSPITAL**THYROID EXHIBIT**

Alfred H. Noehren, M.D., E. Theodor Mueller, M.D., Oscar H. Stover, M.D., Leon H. Smith, M.D., Chester D. Moses, M.D., Elmer T. McGroder, M.D.,
Deaconess Hospital, Buffalo Thyroid Clinic, Buffalo, N. Y.

Charts showing simplified classification of goiter with histology, symptoms and treatment of each class, together with corresponding photographs of patients, pathological specimens and microscopic slides. Charts showing immediate and ultimate results of series of thyroidectomies. Moving picture of thyroidectomy.

EPITHELIOMA OF THE LARYNX

Leon H. Smith, M.D., Deaconess Hospital, Buffalo, N. Y.

Photographs of patient, one stage laryngectomy, complications, adjunct radiation therapy, micro photograph of biopsy-material, clinical cure over period of five years in man age twenty-three.

Notions, age of patient, high degree of malignancy, importance of repeated biopsies and artificial larynx.

X-RAY PRINTS OF MEDIASTINAL TUMORS

Clarence Kummer, M.D., Deaconess Hospital, Buffalo, N. Y.

X-Ray prints of eight cases of Mediastinal Tumors.

CLINICAL DAY—PRELIMINARY PROGRAM

Monday, May 23, 1932

NEW YORK STATE INSTITUTE FOR STUDY OF MALIGNANT DISEASE

9:00-12:30—

(a) Presentation of Cases of Malignant Disease: Diagnosis and Treatment, Dr. Burton Simpson, Director and Staff.

(b) Demonstration of Bone Lesions: A Comparative Study to Include Diagnostic Features Both Clinical and X-Ray. (Four lanterns will be used in this demonstration.)

(c) Inspection of the Institute: Includes Emanation Plant with Preparation of Radium Seeds, the Radium Pack and the High Voltage X-Ray.

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MILLARD FILLMORE HOSPITAL

9:00-11:00—Obstetrical Clinic: Management of Dystocias, Dr. Irving Potter.

9:00-12:00—Surgical Clinic, Drs. Lothrop, Critchlow and Storck.

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BUFFALO GENERAL HOSPITAL

9:30-10:30—Medical Clinic, Dr. Nelson G. Russell.

9:00-10:30—Surgical Clinic, Dr. Marshall Clinton.

10:30-12:00—Surgical Clinic, Dr. Thew Wright.

9:30-11:00—Dermatological Clinic, Dr. Earl Osborne.

10:30-12:00—Medical Conference, Drs. Aaron, Terplan and Rose.

BUFFALO CITY HOSPITAL

9:00-11:00—Surgical Management of Pulmonary Tuberculosis:

- Principles Involved
- Selection of Suitable Cases
- Results

Drs. Donnelly, Orr and Kenwell.

10:00-11:00—Medical Clinic, Dr. Thomas Walsh.

10:00-12:00—Surgical Clinic, Dr. Herbert Smith and Associates.

10:00-12:00—Gynecological Clinic: Common Cases in Practice, Dr. James E. King.

MONDAY AFTERNOON

The clinics of the afternoon will be concentrated at the Buffalo Children's, and the Buffalo City Hospital and will be continuous between two and five.

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BUFFALO CHILDREN'S HOSPITAL

The work will be arranged by Dr. Harry Lohnes to include clinics in the various branches of pediatric practice.

* * *

BUFFALO CITY HOSPITAL

Clinics will be presented by certain of the Special Departments and will be especially arranged to embrace the more common conditions met with in practice.

THE TECHNICAL EXHIBITS

Booth 22—Bilhuber-Knoll Corp., Jersey City, N. J., will display a complete line of its "Council accepted" medicinal chemicals, which include some important new therapeutic agents.

The display will include regular trade packages of *Theocalcin* and of *Metraxol*. *Lenigallol* and *Lenigallol-Zinc Ointment* will be shown, and that product so widely used in scalp lotions, namely *Euresol*. *Bromural*, the sedative and hypnotic that is neither a bromide nor a barbituric acid derivative, will be on show. This is a particularly interesting product, as it is free from the state restrictions governing the barbiturates.

Booth No. 7—Cameron Surgical Specialty Co., Chicago, Ill., will exhibit "*Surgimold*," a new insulating material used on Electro-Diagnostic and Operating Instruments manufactured by the

company. This material is light in weight, sterilizable by heat, and is not affected by chemicals.

Booth 23—Crookes Laboratories, Inc., New York, N. Y., representative members of the well-known series of stable and uniform colloidal preparations for medicinal use, *Collosols*, will be featured by Crookes Laboratories, Inc. These products offer numerous advantages over similar drugs in the crystalloid form. Colloids are almost inert chemically, and may be injected without the acute discomfort and sloughing which so often follows the injection of crystalloid solutions. By reason of their slow diffusibility, they are very slowly excreted, breaking down very slowly in contact with tissues into molecules and ions, and thus exerting a prolonged therapeutic action. They possess interesting physical properties the

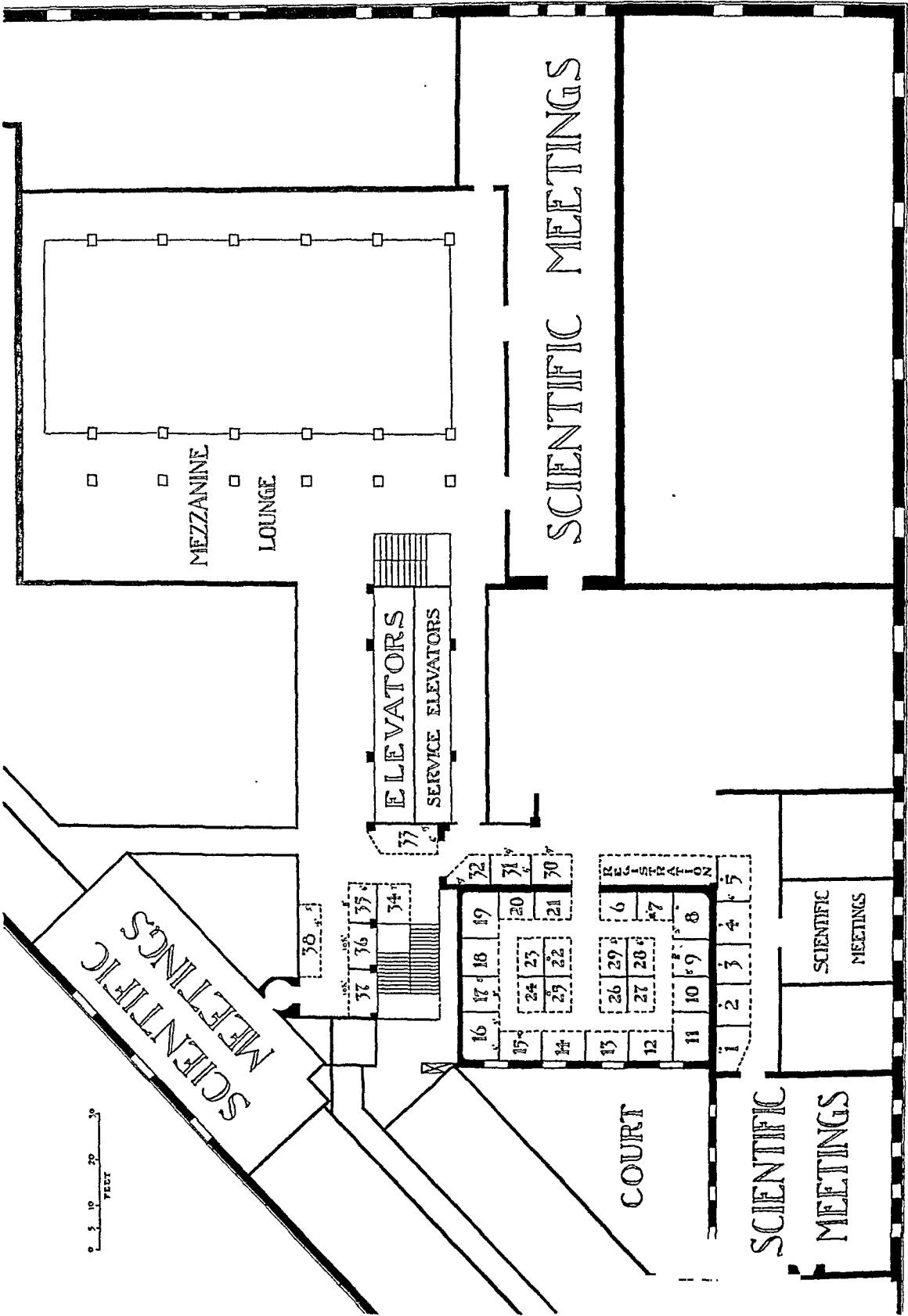


Diagram of Exhibit Hall, Hotel Statler, Buffalo, New York.
Annual Meeting, Medical Society of the State of New York, May 23-24-25, 1932

most well-known of which, the Brownian Movement, will be demonstrated by means of a dark-field microscope. A well-informed representative, Mr. S. L. Scott, will be in charge of this exhibit and will welcome the opportunity of discussing *Collosol* preparations with interested physicians and will be pleased to explain the principles involved in the therapeutic use of colloids. Samples and literature will be available.

Booth 12—R. B. Davis Co., Hoboken, N. J. Visiting physicians and their friends are invited to stop at our booth where they may secure full information relative to *Cocomalt*.

Cocomalt is a scientific food concentrate in powder form. It is a delicious food drink composed of natural food ingredients in correctly balanced proportion to provide essential elements required for the well being of the body. *Cocomalt* is prescribed and used by physicians in their private, hospital and clinical practice with a very high degree of success.

Cocomalt will be served either hot or cold to all persons in attendance so that they may judge as to "its quality and flavor."

The booth is in charge of Mr. George Dowding who will be pleased to answer questions concerning *Cocomalt*.

Booth 21—The Denver Chemical Mfg. Company, New York, N. Y., will exhibit *Antiphlogistine*. This preparation, which has been called "inflammation's antidote" and "the perfect poultice," is forty years old. It is employed by physicians in all parts of the world. There is only one way in which an ethical product can attain this distinction, and that is through merit. It is always well to remember that *Antiphlogistine* has never been successfully imitated. Physicians are invited to visit our exhibit and register for a package of *Antiphlogistine*.

Booth 26—De Vilbiss Co., Toledo, Ohio, will be welcomed as an old friend of physicians. The Company will demonstrate its well-known line of atomizers.

Booth 17—Ferment Company, New York, N. Y., will demonstrate its acidophilus milk, and explain the standard method of its use in correcting intestinal putrefaction.

Booth 29—The General Electric X-Ray Corporation, Rochester, N. Y., will exhibit radiographs made with the new KX-1, KX-2 and KX-4 (*Kenotron*) equipment. This exhibit will consist of radiographs of different parts of the body, showing the ease of duplication and marvellous control of this latest most useful development of the *General Electric X-Ray Corporation's Research Laboratories*. This equipment

promises a new era in x-ray. Complete details will be obtainable at our booth.

New *Physical Therapy* developments will be displayed, among which will be the new *Victor Electro Surgical Unit* with the exclusive three-step foot control, making it possible for the surgeon to have direct control of current intensity while operating, without the need of help from trained technical assistants.

A trained technical staff will be in attendance at the booth throughout the meeting.

Booth 36—The Gerber Products Division of the Fremont Canning Company, Fremont, Michigan. The unseasoned, strained vegetables of the Gerber Products Division are of interest because they offer an opportunity for better control of infant and special diets, and insure uniformity in feedings and diets.

Visitors at the Gerber Products booth will be given any information wanted concerning the special process used in the manufacture of these products.

New booklets are available: one on infant feeding for distribution by physicians in their practice; and one on therapeutic diets for professional use.

Booth 30—Kalak Water Co., New York, N. Y. Doctors that are faced with the problem of maintaining normal water and alkali balances in patients under treatment should visit booth No. 30 and discuss this problem with the Kalak representative.

The Kalak formula presents a chemical balance of essential alkalizing salts as a properly carbonated non-laxative water that is delicious and refreshing to the patient.

Booth 25—The Kellogg Company, Battle Creek, Michigan, will serve Kaffee Hag Coffee with *All-Bran Muffins* to visitors at its booth.

Kaffee Hag Coffee is a blend of fine coffees from which ninety-seven per cent of the caffeine, together with the indigestible wax have been removed. The fine flavor and aroma are not impaired and doctors will find *Kaffee Hag Coffee* a satisfactory non-stimulating beverage to suggest for special diets.

Kellogg's All-Bran contains valuable quantities of assimilable iron and Vitamin B, and because of its bulk, is valuable in correcting cases of atonic constipation.

Mrs. Mildred Day from the Home Economics Department will be in charge of the exhibit.

Booth 31—Mellin's Food Company, Boston, Mass. The source, nature and amount of nutritive elements that enter into the making of *Mellin's Food*, the composition of the finished product, the caloric value of various quantities

by weight and by measure, and what *Mellin's Food* accomplishes as a modifier of milk in the feeding of infants and adults, are subject matters for discussion at the booth of the company. All physicians are cordially invited to call, to ask questions, and to offer suggestions that will lead to a thorough understanding of *Mellin's Food* and its purpose.

Booth 28—Merck & Co., Inc., Rahway, N. J., include in its display such well-known preparations as *Pyridium*, *Arsphenamines*, *Tryparsamide*, *Stovarsol*, *Digitan*, *Erythrol*, *Tetranitrate*, *Arsenoferrato*se and *Bismosol*.

The oral administration of *Pyridium* affords a quick and convenient method of obtaining bactericidal action when treating gonorrhea, pyelitis and other genito-urinary infections.

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This Association makes no distinction as to sex, race, creed, or color, welcoming all that are eligible to its membership at the actual cost of the service it performs. Its officers and trustees receive no salaries or other financial recompense, feeling honored in being chosen by their colleagues to manage its affairs. They are elected each year at the annual meeting of the Association. Information may be had from the headquarters of the Association, New York Academy

of Medicine, 2 East 103rd Street, New York City.

Booth 38—James Picker, Inc., Cleveland, Ohio. The joint exhibit of *Picker X-ray Corp.* and *Waite & Bartlett X-ray Mfg. Company* will feature a complete line of shockproof x-ray equipment.

Dr. H. F. Waite, president of *Waite & Bartlett X-ray Mfg. Company*, is the inventor of oil immersed shockproof x-ray apparatus. However, the efforts of the Waite organization have by no means been confined to shockproof equipment of this one particular type, and the company has available today a complete line of shockproof equipment utilizing a number of different shockproof features. Among other items exhibited will be the *shockproof fluoroscope*, which is fully protected whether energized by its own power plant or connected to an overhead aerial system.

This exhibit will also feature a line of *Waite valve tube rectified apparatus* incorporating oil sealed rectification, a design exclusive in Waite equipment.

Booth 5—Charles H. Phillips Chemical Co., New York, N. Y. *Effective, palatable, convenient*—these qualities are typified in *Phillips' Milk of Magnesia Tablets*.

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Booth 33—Saratoga Springs Commission, Saratoga Springs, N. Y. The work that has already been done on the State-owned spa at Saratoga Springs, New York, and the work that is under way for its further development, will be graphically displayed at the annual meeting of the State Society. One of the large booths on the convention floor of the Hotel Statler will be given over to this display. Large photographs of the two great bath houses, the Lincoln and the Washington, already in operation by the State, and of scenes in the beautiful 1,000 acre reservation surrounding them will adorn the walls of the booth. There will also be perspective and ground views of the plans drawn by Joseph H. Freedlander, the architect of the Commission, for the development in Geyser Park on which work was begun this spring. The two buildings first to be erected in this development are the \$900,000 Hall of Springs, and the \$400,000 laboratory and administration building. Contracts for the former have

been let and contracts for the latter will be during the summer.

The Saratoga Springs Commission display also will include the service of the widely known naturally carbonated *Geyser water*, which is bottled and distributed by the State. Delegates and professional visitors to the meeting will be invited to have samples of *Geyser water* and of *Hathorn water* sent to their homes.

Booth 34—S. M. A. Corporation, Cleveland, Ohio, will display its powdered milk for infant feeding, and will explain its adaptations in all conditions, including sensitiveness to the protein of cow's milk.

Booth 15—E. R. Squibb & Sons, New York, N. Y. The New York physicians attending the meeting of the Medical Society of the State of New York will find much of interest at the Squibb Exhibit Booth No. 15. Among the products which will be particularly featured will be *Iodobismitol*, the new antisyphilitic preparation developed by Drs. Hanzlik, Mehrrens and associates, of Stanford University, and which is distributed only by E. R. Squibb & Sons under license from that institution. The other products featured will include *Squibb Adex Tablets*, which contain a concentrate of the vitamins of *Squibb Cod-liver Oil with Viosterol*—10 D, and *Squibb Chocolate-Vitavose*. Many physicians will be interested in *serenium*, a chemo-therapeutic agent for the treatment of genito-urinary infections. There will also be on display *Follutein*, a physiologically tested preparation of the anterior pituitary sex hormones. A complete line of *Squibb Vitamin Glandular, Arsenical*, and *Biological Products* will be exhibited, and competent attendants will be present to furnish any information concerning these and other Squibb products.

Booth 35—Tailby-Nason Co., Boston, Mass. Tailby-Nason Company of Boston again present *Nason's Palatable Cod Liver Oil*. Real fishing scenes from the Lofoten Islands of Norway where Nason's Plants are located are on exhibit. The *Giant Cod* is also on hand to greet you.

Booth 32—George Tiemann & Co., New York, N. Y. Besides the usual line of fine surgical instruments, George Tiemann and Company will this year again exhibit some of the newer developments since the last annual meeting. The

wide-spread interest in the use of living sutures, make the *Grace Fascia Stripper*, and the *Gratz Fascia Needle* particularly interesting.

Some of the other new items are the instruments used by Dr. Jamison in his recession operation; also the new pharyngeal dilators so successfully used by Dr. Yankauer.

The new *Bailey Chlodian Forceps*, the *Montague Rectal Speculum* and a *hypodermic needle* made of a newly developed stainless steel which will not break, has superior stainless qualities and has a supersmooth surface, will also be interesting exhibits.

Booth 10—The Westinghouse X-Ray Company, Rochester, N. Y., will have on display at the forthcoming meeting several items of equipment of major interest at the present time to the medical profession.

The Model F *Endotherm*, now in use in many leading hospitals, will be exhibited in a cabinet model for office use. New instruments for tonsil coagulation, cognization of the servix and excision of the prostate will be shown in connection with the *Endothermy* equipment.

Probably of greatest interest will be the new Westinghouse No. 4 *Diathermy Apparatus*, a recent product of the Westinghouse research laboratory, which, it is claimed, eliminates all possibility of obtaining any faradic sensation during diathermy treatments irrespective of settings or manipulation of controls.

The exhibit will also include a display of *Westinghouse Diagnostic and Therapy X-ray Tubes* and the new *Grenz Ray Apparatus*.

Booth 4—Winthrop Chemical Co., and H. A. Metz Laboratories, New York, N. Y., have a diversified and interesting display which includes painless retrograde pyelography with *Skiodan*; clinical material on the treatment of syphilis with the *Salvarsans*, including *Silver Salvarsan*; a wide range of synthetic sedatives and hypnotics to meet various degrees and types of neurosis, *Luminal Adalin*, *Phanodorn* (the new hypnotic), etc.; *Suprarenin*, the synthetic epinephrine; *Oscodal*, the first cod liver oil concentrate; *Novocain*, including crystals for spinal anesthesia; *Salrgan* and *Theocin*, the new diuretics; *Pyramidon*, the valuable analgesic antipyretic; and other items of interest to the specialist and general practitioner.



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9. All of these items are relevant, material, and competent to the question of "what constitutes a fair and reasonable income for a doctor?" Our work may be ever so *noble* with a high yield of personal gratification. But it is sheer hypocrisy to allege that our labors are free and independent of any thought of financial reward. It is the "love" of money and not money that is the root of all evil. A fair wage for honest labor is honorable and good economic sense. Our problem is the provision of adequate, available care within the financial range of the average citizen—with-out paternalism or communism. A2, A77, A48.

10. The problem of the shortage of physicians in rural communities can be explained most reasonably by the fact that few men, with large investments, will locate where the probability of fair returns is impossible.

11. These discussions lead to the question of the economic soundness of our present system of medical education.

(a) Should scholastic idealism make concessions to economic expediency? A46.

(b) Does the student physician labor too long on a purely speculative relationship to his true objectives?

(c) Can the program be rearranged to introduce more realism into his intellectual growth?

(d) Is the continued status of "dependent" detrimental to the better development of professional character?

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(g) Qualification for specialists. A2, A48.

12. It seems sound economics that when any enterprise does not accumulate a "good will" value with salable tangible assets, then that enterprise, in the span of its existence, should return the original investment. A2.

13. Income tax authorities allow depreciation on equipment. Should we seek an "amortization" allowance on the intellectual equipment? This would be good public policy since it would encourage ample investment in professional education.

In his student and intern years, the physician has labored with a constant "outgo" where others enjoy an "income." Is it not simple fairness to

argue for credit for the accumulation of deferred "income allowances"?

14. We recommend:

(a) That the succeeding committee on Medical Economics be instructed to continue the study and report of paragraphs 6, 7, 8, and 9.

(b) That in the composition of the budget the Trustees give consideration to the costs incident to these studies.

(c) That the Committee on Public Health and Medical Education and the Committee on Medical Economics jointly consider paragraphs 10 and 11.

(d) That the Committee on Medical Economics investigate the possibility of a new departmental ruling concerning the allowance on amortization on intellectual equipment. Paragraphs 12 and 13.

COST OF "MAINTENANCE AND DELIVERY"

15. What is the average daily expense of maintenance and delivery of a physician's services?

What is the average cost of a consultation in the office, home of the patient, and in the hospital? A5.

Nobody knows.

16. It has been authoritatively established that it costs from \$94 to \$1.26 for a visiting nurse to make a call upon a patient. What does it cost a physician to visit a patient? A new book, dealing with the "cost analysis" of public health nursing, gives the picture of the development of this study over a period of ten years. There is much food for thought in this book; and some consolation to your Committee. The results of our brief effort do not seem so small. A6, A7.

17. Thru a questionnaire, addressed to each County Committee, we undertook to learn the average expense of our members. From a few of the Counties the response was excellent; from some we have had no reply; and from two, New York and Monroe, came refusals to cooperate. A5.

18. In a cursory reading of "the methods of computation" followed in the cost analysis of nursing, it becomes evident that we shall require study, time and money to make a thorough job of "cost analysis" of medical service. Need of such study from the physician's point of view becomes imperative when we contemplate the activities of others along a similar line—the field work of which is being done under the guidance of a "public health economist" and under the supervision of "public health nurses." A6, A33, A53.

19. Pending the more complete study, a circular questionnaire to each of our members for "income tax data" would provide valuable material quickly, and at minimum expense.

20. The economics of office equipment, office administration, and kindred matters deserve consideration. Doctors need constant inspiration and

REPORT OF
THE COMMITTEE ON MEDICAL ECONOMICS

To: *The House of Delegates.*

Gentlemen:

The Committee on Medical Economics respectfully submits the following record of its activities for the current year.

1. *This Report.* First comes a statement of organization, work-plan, a retrospect of our efforts, a prospect of medical economics. And then follows the discussion of our work-plan topics, with results of our observations and deliberations, suggestions for further investigations, proposed pronouncements of principles, and our specific recommendations.

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"A" followed by a numeral refers to the bibliography at the end of the report.

2. *Organization.* The standing committee and the auxiliary have been in fact one committee, organized as such June 30th, 1931. Four meetings have been held in Albany and two in New York. Attendance, average for year, over 80 per cent.

3. *Work Plan.* The meaning and scope of *economics* as applied to our duties was accepted in the wider modern ideology of the term—"The study of problems and the science of principles

connected with the growth and well-being of organized society." A46, A88.

We were without inheritance from the work of previous committees other than information from their annual reports; without instructions from this House; and without adequate and authentic data upon which to proceed with the study of any problems. A60.

We first discussed an outline or general scheme for the survey of the economics of medicine. A1.

This plan presents an array of obvious objectives which no committee could hope to attain within the span of one year. It was adopted with the thought that in it we might develop an orderly program upon which our efforts and the work of our successors could realize a tangible and permanent gain in this field.

4. *In Retrospect.* Reflecting upon the work of the year, now as at the beginning, we are conscious of the very great need for the accumulation of a library of factual data. Our accomplishments are diminutive when compared with our ambitions and the challenges of present day circumstances. At least, we have undertaken to lay a foundation, and in many ways to suggest the architecture of the structure to be erected above it.

5. *In Prospect.* If the physician is to hold his place in organized society there must be a better planned unity and continuity of thought among doctors. There must be clearer orientation within the profession and between Medicine and Society. Society is in the process of advolitional growth. Economic readjustments, in particular, are in the making. We have a responsibility to shape that growth. A2.

If collectively we shirk that civic-social obligation, we individually shall suffer loss of economic security and justice. We must choose to play a master part in the community life or accept the humble servant's lot. There is no middle ground. A44.

WHAT DOES IT COST TO PRODUCE A DOCTOR?

6. A medical education has a cost in money and labor. A healthy relation between "investment and return" is necessary to growth and healthy intellectual and moral fiber in the medical profession. A2, A87.

7. Calculation of the cash outlay incident to the actual study of medicine has been very ably undertaken by our sub-committee. A3, A17.

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9. All of these items are relevant, material, and competent to the question of "what constitutes a fair and reasonable income for a doctor?" Our work may be ever so *noble* with a high yield of personal gratification But it is sheer hypocrisy to allege that our labors are free and independent of any thought of financial reward It is the "love" of money and not money that is the root of all evil A fair wage for honest labor is honorable and good economic sense Our problem is the provision of adequate, available care within the financial range of the average citizen—without paternalism or communism A2, A77, A48

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suggestions in this direction. We have made little progress in broadcasting such thoughts. A9, A44.

21. We recommend:

(a) That the Committee on Medical Economics be authorized to question by individual circular letter and card.—Paragraph 19.

(b) That the Committee on Medical Economics submit a plan for "cost analysis" of medical service to the next House of Delegates.—Paragraphs 15, 16, 18.

(c) That the Committee on Medical Economics provide the editor of the Journal with suitable articles for publication in the Journal.—Paragraph 20.

ECONOMICS OF HOSPITALIZATION

22. Hospitalization of the sick is a composite function consisting of three elements. Hotel accommodations, nursing care, and medical service.

23. *Hospital.* Coordination of these three activities is properly reposed in a board of administration. Its composition and the scope and limitation of its duties are of economic interest.

24. Institutions prosper and grow under ownership and administration of physicians. They pay real estate tax and assessments, State and Federal Income Taxes, and interest on mortgages and invested capital. Yet, without solicitation of donations, they render equal service and compete successfully with their tax-exempted neighbors. Comparison of efficiency of administration is economic and pertinent. The medically trained mind is competent to evaluate the essential in expenditures of funds and in the adjustment of means to ends. A2, A10.

25. Therefore, at least thirty-three per cent of all boards of administration should be medical men, representing, if possible, all of the types of medical service carried on in the institution. A5.

26. The duties of such board should be custodial as to property, and a coordinating supervision of activities. The existence of a hotel-hospital is justified only as an auxiliary to augment the efficiency of medical care. This fact defines the natural limitation of the Board's prerogatives: paragraph 32 defines its limitations as to Medical Staff. A2.

27. Since the hospital is virtually a hotel for the sick and injured, its superintendent is practically a hotel manager. He is the executive officer to carry out orders and regulations of the governing board and its medical staff. Dictatorial intrusion into matters of medical practice or organization on the medical staff is a violation of principles hereinafter (paragraph 32) stated. A2, A11, A85.

The executive officer, superintendent, should be a graduate in medicine with some clinical experience—if the size of the institution permits. Smaller institutions, operating under a nurse or lay person, should have one member of the medi-

cal staff elected as "Councilor to the Superintendent," who shall function to give medical orientation to the solution of executive problems. A5.

28. Originating as a refuge for the sick traveler, wayfarer, friendless and the homeless, the idea of hospitalization has been inseparably confused with the idea of charity. On this premise abuses have grown. Money raised in the name of charity is not always spent judiciously; yet, in the public mind it is subconsciously charged up to medical care. Every individual serving in the hospital is compensated for his labor, except the physician. A8, A12, A36.

29. Moneys raised for charity should be segregated and paid from that account to the hospital general treasury, if, as and when charitable care and accommodation is rendered. Losses through wasteful and incompetent administration are not a proper charge against funds raised for charity, nor are they a proper charge against the cost of medical care. A2.

30. All hospitals, erected or maintained in whole or in part by the public, whether with money from the public treasury or raised by general public solicitation, are in fact public institutions and alike in their obligations.

31. Such hospitals are naturally obligated:

To provide accommodations for sick care without special privilege to any class;

To provide to the medical profession of the community equal opportunity in the pursuit of the practice of medicine; and equal opportunity to improve in the knowledge and skill of medical practice;

To recognize the layman's natural right of free choice of physician, such right not to be abridged by pretext or over zeal in the supervision of medical practice.

These obligations subject only to such qualifications as are stated in paragraph 32 of this report.

32. Professional eligibility, organization, discipline, promotions and demotions, and all measures, rules, etc., regulatory to the practice of medicine with the hospital, are properly the function of organized medicine, as represented by the local County unit or other incorporated medical body, or the medical staff of an established and going institution; who should have the full and sole responsibility and power in such matters. Paragraphs 46, 47, and 48.

33. We recommend:

(a) That paragraphs 22, 23, 25, 26, 27, 29, 30, 31 and 32 be pronounced the expressed thought and opinion of organized medicine in this State.

(b) That these principles (a) be recommended to the consideration of all authorities engaged in the grading or classification of sick-care institutions.

(c) That a general acceptance of paragraphs 30, 31 and 32 be urged, by the exercise of all reasonable and proper pressure within our power, upon all governing authorities, especially upon the Heads of Departments of Hospitals and of Health of the State, Counties and Municipalities

(d) That the methods of hospital accounting be the subject of study, paragraphs 24, 29, by the Committee on Medical Economics

34. Nurse. The profession of graduate nurse made its advent into the field of sick-care less than 70 years ago. In the original concept it was intended to provide expert assistance to be complementary to the physician's services A13

35. The development of the "training program" and the extroverted expansion of the psychology of nursing, and the study of the cost of sick care raise certain economic questions A13, A14, A51

36. Should the "cost of medical care" carry the cost of education and training of the nurse, —the price of her education? Does the student-nurse at this time render services adequately to compensate for her food, clothing, shelter, and schooling? A5

37. The regulation of details of nurse training by a centralized authority through long distance remote control, without personal contact knowledge of, and regard for, the variations in local conditions, leads to much lost motion in the practical work of sick care. It distorts and often defeats efficiency and economy of administration by the local hospital heads, and accordingly is wasteful and unsound A5, A13, A51, A55

38. The constant interruption going and coming, for classes, time off, quizzes, etc., incident to zealous compliance with exacting rules results in a transcendental position of nurse training to the real objectives, sick-care and assistance to the physicians. Care of the sick, not technical training, is the primary and paramount aim of hospitalization A5, A13, A56

39. Didactic instruction, therefore, should be given more intensively and apart from practical training. The training will be more effective if student attention is not subjected to constant interruption and irregularity of application A5

40. The desertion of the Nightingale philosophy for an acquisitive purpose is condemned. On the other hand, a proper reward for good service and reasonable regard for the "investment" in expert training should be insured insofar as we may influence it A7, A13

41. Out of the transcendency of "training" in counter point to actual sick care, there is a growing idea of professional equality. An idea of equal importance in the program of sick care subverts subordination to authority. If the doctor accepts the denial of his ranking position he must expect the repudiation of his absolute authority. Without discipline in the sick room and in the

hospital, can we discharge our entire obligation to the patient?

42. The increasing number of "specials" has added material burdens to the expense of sick-care A13, A14, A15, A39. Here are a number of pertinent questions

(a) At what price per bed or per room, should a patient receive that nurse-service which precludes the necessity for a special nurse?

(b) Do ward patients take the time of the floor nurse to the neglect of the private room patient?

(c) Is this increased call for specials the sign of a gradual let-down in the regular floor nurse service?

(d) Is such let down, if any, the result of un-economic administration?

(e) How often is the "special" suggested to the family, as a hand-out to the unemployed?

(f) How often is the demand for a special merely the emotional or theatriac reaction on the part of the family to surgical medicine?

(g) Where is the dividing line between necessity and luxury? Should the attending physician be the judge of need for special nursing?

(h) Is it sound economics to permit the dissipation of the patient's resources for luxury nursing service, at the possible or probable sacrifice of a prompt, just compensation to the physician?

(i) The "eight hour day" for specials is being widely discussed. The economics of it must be studied

43. For the type of patient whose affliction is not hazardous, who needs simple attendant care we should take steps to provide an attendant with sufficient training to the purpose. Such person would be qualified to better service than the untrained "practical nurse" and would work at a price within the pocket-book range of the average citizen A5, A14, A49

44. We should return the supervision of this training within the hands of local organized medicine to be directed to the exact needs of the locality A49

45. We recommend

(a) That paragraphs 34, 37, 38, 39, 40 and 41 be pronounced the expressed thought and opinion of organized medicine in this State

(b) That paragraphs 36 and 41 be referred to the Committees on Nurse Education and Medical Economics for joint consideration and specific recommendations

(c) That paragraphs 43 and 44 receive further study and joint consideration of the Committee on Medical Economics and the Committee on Public Health and Education

(d) That the Committee on Medical Economics continue analytic and statistical study of the "special" nurse problem and report at the next annual meeting—Paragraph 42

46. *Medical Service.* Hospitalization has one true objective. This is service to the sick and injured. To this the entire personnel are alike obligated and committed.

47. Medical intelligence, as represented in the personnel of the medical staff, must be the pre-dominant factor in this formulæ of forces. It is the guiding, essential force. A8.

48. The creation, the culture and the promotion of effective use of this intelligence is the prime economic aim. In its fulfillment, the hospital is destined to be both benefactor and beneficiary. The physician, because he is the personification of that intelligence, must command all other persons in the organization; to his intelligence they must concede subordination. This principle is necessary to discipline and an orderly coordination of efforts. A2, A13.

49. A casual observation in the daily life of almost any general private hospital will prompt certain economic questions:

(a) What is being done to conserve the time and energies of the physician—the most highly specialized and the most costly and the most difficultly produced unit of the whole “set up”?

(b) Is the vast amount of “paper clerk” work, exacted of him, a sound economic regulation?

(c) Should we distinguish between the minutiae of a research laboratory work-sheet and the mere notation of facts, to satisfy the purposes of an applied practice? Should we have more common sense and fair appreciation of what is essential in the composition of a chart record?

(d) Should our methods of making records be revised with the introduction of trained typists and the elimination of the illegible scrawls?

(e) Should there be a universal adoption of a system of records suited to “machine analysis”?

(f) What percent of the charts so laboriously compiled are consulted for scientific analytical purposes?

(g) Would pure science be served better if we concentrated upon definite clinical problems—instead of spreading our minute record of observations so widely and without coordination of analysis? How can team play and collective thought be made to supplant individualism in this field? Broad-scope chart reviews and analysis.—Paragraph 49d. e.

HOSPITALIZATION IN GENERAL

50. Has the idea of hospitalization been over-developed? Do physicians ship patients into the hospital for personal convenience rather than for a real need on the part of the patient? Should we weigh the matter of relative costs between home and hospital in the border line cases who might stay at home? A58.

51. Superintendents, directors and boards of administration should not attempt to abridge the rights of any physician to enjoy the privileges of

any other institution. Any intimidation or reprisal for failure to support the hospital census or for diverting patients to another institution shall be considered a violation of public policy. (See paragraph 27.) A2, A11.

52. When a physician has enjoyed the privileges of a hospital, for private patients, for one year or more, even though only as a courtesy, he shall be considered to have acquired a right to continue. Such privilege shall thereafter be terminated only by choice of the physician, or for cause, after due hearing, and by consent of a majority opinion of the medical staff at a meeting called for the purpose of consideration of such action.

53. Contribution to “building funds,” and tickets for benefits, fairs, bazaars, card parties, etc., constitute a constant drain upon physicians’ pocket-books. All do not respond to these solicitations, nor do they contribute in proportion to benefits enjoyed. Should we acknowledge our appreciation and establish a definite per cent of hospital case fees, as a routine contribution? This would provide equalization of the burden, proportion it to the benefits, and should be made only on condition of release of physicians and their families from all obligation to support, with money or personal effort, any money raising activity. A2.

The solicitation of funds in any manner by a physician’s wife, or any member of his family from his community-public, in the name of hospital charity, is not good medical economics.

54. Cribbing of gratuities by interns, especially on emergency and ambulance service, raises the question of the wisdom of compensation for their services. Should they be left as “dependents” throughout this period of their development? If rewarded with sufficient compensation to meet the small social and personal needs, would not development of professional pride correct the “habits of their ways”? A2.

55. The practice of medicine by hospitals:

(a) Anaesthesia is commonly administered by an employee, generally a nurse, who carries on under the responsibility of the surgeon, for a stipulated monthly salary paid by the hospital. The patient pays a fee; such fees aggregate a total far in excess of expenses. The physician has the responsibility and the hospital takes the profits. Who is practicing medicine?

(b) A similar problem obtains in the pathologic laboratory, the physical therapy, and roentgen-ray departments. In these a physician is not always in charge; technicians carry on and actually practice medicine under the terms of the present Medical Practice Act.

(c) When “accident or emergency room” first aid services are continued by subsequent daily dressings, for a fee, is the hospital practicing medicine?

56. We recommend:

(a) That principles stated in paragraphs 46, 47, 48, 51, and 52 be pronounced the expressed thought and opinion of organized medicine in this State.

(b) That questions in paragraphs 49, 50, 53, 54, and 55 be continued for consideration of the Committee on Medical Economics, for subsequent report.

(c) That the text of paragraphs 46, 47, 48, 50, 51 and 52 be recommended to the consideration of authorities engaged in the grading and classification of sick-care institutions.

"OUTLET FIELD" FOR MEDICAL KNOWLEDGE

57. The engagement of physicians in other than sick-care employment deserves extended consideration.

58. Is it desirable; is it essential, that the clinical mindedness be preserved? "Full time" employment in a non-clinical activity or in commercialized or industrialized clinical activity deadens the "common touch" and may diminish the value of the well-trained mind in treating the ills of persons?

59. Discrepancies between scope-of-duties and the rate-of-compensation of physicians in non-clinical employment should be studied.

(a) *In Civil Service.* Is there frequent political interference with the attainments of this system?

First Example: A Medical Inspector in a State Department was appointed in 1907 by competitive examination. The appointee was required to have special knowledge regarding special work and to relinquish all teaching and hospital connections. The salary was \$2,500 per annum. The activities required special and research work done successfully, resulting in laboratory facilities where he perfected special new apparatus advancing the work. In 1912 he was made Chief and Director of the Division, salary \$4,000. In 1916 came political change, whereupon despite legislative appropriation and the fact that position and salary were statutory, the Governor cut this position out of the budget, while the incumbent had been called to military service (Mexican Crisis) and then immediately into the World War over-seas, and was unable to defend himself or secure legal action. Returning in 1919 he continued as inspector at \$2,500, increased by legislation to \$3,000 in 1920. In the same year, the position of Director was re-created for a former quarantine officer. In 1921 the former director was made Assistant at a salary of \$3,750. The Assistant Director (former Director) reorganized the Division and directed all activities, and was then required by law to give up all other work. His salary remained same although others doing like work in another Division were increased to \$5,000. In 1929 a new lay

director, without academic or professional training or degrees, and without examination, was made Director, salary \$5,000. Later a farcical examination was held before a man without academic or professional training or degrees, and the lay imposter was reappointed "according to law." This was openly condemned by the State Civil Service Association. In the new classification just effected, 1932, it appears that *no physician* can be promoted to position of Director in this Division of *professional work*. The physician in question, in service for 25 years, an outstanding man nationally in his line, is still a subordinate at \$3,750 per annum. A59.

Second Example: In one township two reputable physicians are employed for different tasks. One receives fifteen cents per capita for making wholesale examinations, a considerable task for insufficient remuneration. The other receives an annual stipend of \$2,500 for a few perfunctory duties occupying very little time. Justice to public and physicians should be determined.

(b) As Interpreters and Statisticians.

(c) As administration officers and executives in General Hospitals, State Hospitals, Municipal Institutions.

(d) As Commissioners and Deputies in Public Health and Hospital systems.

(e) As Insurance Medical Directors, Examiners, and Consultants—full time and part time.

60. All of the positions referred to in paragraph 59 are created, it is assumed, to render genuine 100 per cent service to the public. Is this accomplished? In each of these positions physicians are supposed to have opportunities for service, development, and growth in specialized non-clinical work. Are such opportunities there? The public pay their money which is assigned to these positions by political leaders and institutional boards. The economic questions are:

(a) Is service rendered to the public equal in value to money expended?

(b) Are the positions occupied necessary for the public good, the good of the State, County, or Municipality, or the good of the institutions involved?

(c) Are physicians employed given real opportunities and proper monetary reward?

(d) Do laymen occupy positions requiring medical qualifications?

(e) Do these laymen collect salaries for work done by underpaid medical subordinates?

61. We recommend:

(a) That the succeeding Committee on Medical Economics be instructed by the House of Delegates to continue intensively the study of the questions presented in paragraphs 58, 59 and 60 and report to the next session of the House, with recommendations.

(b) That the House request the Executive Committee and the Trustees to consider this

study in making up the budget for the ensuing year.

COMMERCIALIZED AND INDUSTRIALIZED MEDICINE

62. Congregated. The congregation of subjects for medical practice (wholesale business) flourishes under various guises. Medical aid societies, lodges, insurance schemes, and the syndicates for compensation-law service constitute one general class. The "first aid" stations and their outgrowth in large industrial systems constitute another. So-called "pay clinics" and the quasi-beneficent "health examination service" of the large insurance companies is another.

63. The contracts between members of this Society and any lodge, society, or other schemes which provide for medical service, should be surveyed. A2.

(a) To determine possible violation of Section 31 of the Rules of Professional Conduct, laid down by this Society?

(b) To determine whether the practice of medicine under the contract is bonafide, adequate and competent?

(c) Is the contract a mere subterfuge, a means of making contact for the opportunity of collecting fees on the "extras"?

(d) Exploitation of the patient's confidence?

(e) Contracts for medical service—which, if any, are unethical?

64. Syndicated. Syndicated medical practice is one product of the Compensation Law operation. These institutions cannot survive if the prohibition of solicitation is put into effect. This Committee has caused a bill to be drawn. It follows word by word a section of the law which prohibits the solicitation of law practice cases under the Compensation Law. (This has received the approval of the Executive Committee, Representatives of insurance companies and the Labor Department.) A2, A16, A50.

65. Incorporated Pay Clinics. Dr. Charles Gordon Heyd has inscribed twelve pertinent questions. A3, A8, A36. Among these in substance are:

(a) What is the evidence of need for the clinics?

(b) Is the service adequate and effective?

(c) Is a high standard of diagnosis sustained?

(d) Are the physicians responsible for service rendered?

(e) Are clinic physicians compensated?

(f) Are services free to the indigent and at cost to the poor?

(g) Are they open to all, at a sliding scale of prices?

(h) Do they provide specialized service, when needed?

(i) How does the service compare with the service of the average private office physician?

(j) Is the free treatment of a million patients without danger to society?

(k) Are the fees in truth calculated "at cost"?

(l) Is \$98,000 profit by one hospital dispensary in one year a square deal to the citizens or the profession of medicine?

(m) Research—when does it become paternalistic competition?

(n) Does any regulation or law prohibit the occupation of a "free" bed by a person able to "pay"? What effort is made to enforce such regulations? Have any penalties been enforced?

66. One large company, for many years, has commercialized health examination practice. The economic relation of this activity to the practice of preventive medicine by individual physicians deserves study. A63, A67.

67. Medicine in Industry. The thought has been expressed that medicine in industry may threaten local practice and pave the way for arguments in favor of state medicine and that it may also exploit the physician participating, without what is judged an adequate financial return. A45. The comments have followed two lines of development.

1. That which centers about the adequate logical limitations of what might be called industry's need for medical, surgical and personnel endeavor to be injected into its processes or services.

2. Where such endeavor goes beyond the boundaries of the industry's need.

68. Where work of this kind has developed under reasonably skilled supervision, it is liable to achieve an excellence not obtained under average community medical facilities. Such a service as this is perfectly capable of being adequately controlled by being confined to the actual demands of industry. The objectionable extreme may be the outgrowth of such unusual medical service resulting from well supervised development, and leading naturally to further expansion, with business methods, and unusual physical equipment (such as the average physician and hospital cannot afford). Hence diagnostic and treatment service of a high order may be available, with less and less individual and group limitation and at a surprisingly low cost. It is but natural that the economic appeal here should be strong both to the employer and employee, particularly where inferior local facilities are available. Examples of such trends are seen in the excellent services rendered by such medical departments as those of the Endicott Johnson Company, the Milwaukee Light, Power and Traction Company, Solvay Process, Tennessee Coal and Iron Company and others. This second development of industrial medicine is contrary to the tenets of the profession as over a period of time there will inevitably develop opportunities for impersonal, unmoral and unsocial practices. We believe that the loss of the traditional professional

relationship between patient and physician, which naturally would follow, and the exploitation of the physician to his economic, social and scientific limitation are to be deplored.

69. Industrial Injury. Medicine in industry originated as a natural solution to the injury problem. In the beginning it was confined to first aid facilities alone, administered by lay talent, later followed by the trained nurse and finally by the doctor. Obviously, in certain industries situations exist where, because of location of plants or distribution of forces, medical facilities will be unavailable. First aid training under such conditions partially answers the problem. As an example, the American Telephone and Telegraph Company had until recently in the neighborhood of 75,000 men well trained in the principles and practice of first aid. The steel, power, transportation and mining industries probably double this number. The development of first aid surgical endeavor in many industries has grown out of the lack of adequate local medical talent in the vicinity of such centers, the bulk of the abler and better connected medical people, being in the residential districts with office facilities far removed from factory sections or who by reason of unsatisfactory economic, social or compensation-law experience have refused to accept industrial cases.

70. Industrial Sickness. It has been but a step from the accident first aid situation to that of sickness. Here the objectives may be stated in the beginning to be of the first aid character and to consist of

- (a) Enabling the employees to remain at work.
- (b) Making them more comfortable while at work.
- (c) Diagnosis for protection of themselves as well as other employees.
- (d) Exclusion from work and remanding to family physician.

71. Management Interest. The spread of compensation laws and the paternalistic trend of their administration have seemed to many executives to call for measures of protection. This takes the form of

- (a) Pre-employment physical examination.
- (b) Continued treatment of accident cases arising out of or in the course of employment.
- (c) Examination of both sickness and accident cases before return to duty for purposes of protecting the individual as well as the industry.

72. Diagnostic Service Available to Employees. This phase of medical endeavor has grown out of a well understood inadequate medical service rendered the average industrial employee. Such inadequacies have not been the result of lack of interest by the medical profession, but are due to

- (a) Ignorance on the part of the public as to disease, physicians, hospitals, clinics, etc.
- (b) Real or imaginary lack of economic re-

sources to buy or otherwise obtain necessary diagnostic service.

(c) The widespread publicity of the cults, isms and commercially active health experts and their availability.

(d) The existence of benefit plans or other sickness provisions maintained either by employees, or by industries, or jointly. It has become increasingly evident through experience that there is need for justification of money expenditures based on diagnoses made as adequately as possible. This accrues to the advantage of

1. The agency paying the money.
2. The employee.
3. The doctor caring for the case.

73. The traditional and somewhat provincial attitude of the medical profession as well as economic demands have gradually compelled industry to seek a satisfactory solution not only to its accident problems but to that of sickness. It is apparent that the general answer has not been satisfactorily reached regardless of the complacency shown by certain industries. This committee sees the evolution of medicine in industry and senses an attitude of constructive criticism according to the following outline.

74. Control by Organized Medicine. Medicine in industry has come to stay and its relation to the public and the profession may be properly defined and its ethics established only through adequate recognition. The physician as well as the public must be educated as to social boundaries of medicine as applied to industry. There should be incorporated into the curricula of medical schools subjects dealing with the medical, surgical and social aspects of the population with respect to industry, including among others, the principles of first aid, traumatic surgery and industrial disease. This Committee believes that the services available in industry for the furthering of the medical arts can become of real value to the general practitioner both scientifically as well as economically where development of medicine in industry is confined within the following limits:

- (a) First aid problem in sickness and accident.
- (b) Pre-employment, post-illness and periodic health examination.
- (c) The diagnostic services in selected cases where economics and professional limitation make need.
- (d) Continued treatment of accident cases under certain conditions.
- (e) Medical advice and counsel.

75. We recommend that paragraphs 68, 69 and 74 be pronounced the expressed thought and opinion of organized medicine in this State.

76. It is rumored that "medical clubs" exist, the members of which pass patients around the circle, "as long as the funds hold out." If true, it is an outrageous abuse of the lay confidence in

the profession. If not true, it is a slander upon our profession. The truth should be established by thorough investigations. A17, A24.

77. The Cooperstown experiment in community medicine has been surveyed, recently. A17.

78. "It is very evident that the residents of Cooperstown appreciate that they are getting more than their money's worth in the 'Guild' and that to continue such a plan the Hospital will have to be subsidized." (\$175,000 last year.)

We also conclude that such a plan as practiced by the Guild of the Imogene Bassett Hospital is not economically sound, and will be of no value in solving the problems of the 'cost' of sickness." A17.

This experiment has tended to train respectable solvent members of a community in semi-pauperism.

79. Physicians who advertise in "the foreign language" newspapers are doing so in defiance of violation to Section 31 of the Principles of Professional Conduct, adopted by this House of Delegates, June 1, 1931. A70.

Any physician guilty of such practice, should be ineligible for membership in this Society for one year from the time of such act; and any physician member who continues such practice, after due warning, should be suspended for at least one year.

80. The prescribing and treating of sick and injured by drug clerks and pharmacists is in violation of the Medical Practice Act. Prosecution is the only remedy. Your Committee requests information of specific instances which have resulted in disaster or harm to the patient.

81. We recommend:

(a) That a survey be made of the various forms of contract under which individual medical service is rendered, as suggestively outlined in paragraphs 62, 63, 64, and 66 by the Committee on Medical Economics with the aid of the Counsel of this Society.

(b) That a survey be made of the free and pay clinics along the lines indicated in paragraph 65, by the Committee on Medical Economics.

(c) That the draft of the law prohibiting the solicitation of medical work under the Compensation Law be introduced at the next meeting of the State Legislature,—paragraph 64,—by the Committee on Medical Legislation. A16, A50.

(d) That investigation be made to determine the activities of clubs, if any, of this type, by the Committee on Medical Economics.—Paragraph 76.

(e) That observation of this experiment be continued by the Committee on Medical Economics; with instruction to promote due publicity of its demise, if and when.—Paragraphs 77 and 78.

(f) That this, paragraph 79, interpretation of the Rules of Professional Conduct be approved, and that the County Societies be given due notice

that offenders under this Rule will be liable to the regulations of Chapter 1, Article 2 of the By-Laws of this Society. A2.

(g) That the professional status of physicians who contract to work for firms, clinics and institutions, who advertise to the public for patronage of the service which they, the physicians, render, be a subject of study by the Committee on Medical Economics.—Paragraphs 62 and 63. A2, A47.

(h) That the Committee on Medical Economics be instructed to report any violation of the Medical Practice Act (paragraph 80) to the Department of Education for investigation and action.

WORKMEN'S COMPENSATION LAW

82. The agreement between Carriers and State Society has fulfilled hopes in its operation. Arbitration meetings and *preventive* settlements, by our sub-committee in charge, have been notably successful in disposing of contentions and in promoting cordial understandings between Insurance Carriers and our membership. A2, A18, A64, A86.

A new arbitration center has been established in Buffalo. Another is promised for Onondaga County, where the agreement was ratified at the December meeting. Oneida County adopted the agreement at the January meeting. Delays may cause temporary misgivings and disappointments, but when the National Bureau, representing the Carriers, secures adequate machinery for various local operations of the agreement, all expectations will be exceeded. A19.

83. With elementary data in hand, the agreement and the machinery for arbitration are not difficult to comprehend or manage. This Committee has been represented in various parts of the State where interest has demanded conference. More meetings and conferences are desirable, either at regular or special meetings of County Societies, or District Branches.

84. Compensation Clinics. Many of these offer unfair competition to regular physicians; give inadequate service to the patient resulting in delayed or incomplete recovery, or both; use questionable methods in obtaining authorizations, advertise by placards, cards and letters; employ cheap, poor, and inefficient help; all of which increases the cost of care to the insurance carriers. They afford the most disturbing factor in the relationship of our members and the insurance carriers. Advertising and solicitation is essential to their success. (See paragraphs 64 and 81c.) A20.

85. Paper work is a *sine qua non* to the smooth operation and administration of the Compensation Law, because the Labor Department *must have complete C4 forms upon which to base all action* in any case. "Compensation Clinics are

tolerated by the Labor Department and Insurance Companies largely because they are prompt in paper work. Occasional workers under the Compensation Law often fail to recognize or appreciate the importance of it, and too commonly delay forwarding the C4 form."

86. The use of the word "agreement" misleads to thoughts of a contract. There will be less confusion of thought if we substitute "understanding" where we have been in the habit of referring to the "agreement." It was a gentlemen's *understanding*. A2

87. Governor Roosevelt's Committee to Review Medical and Hospital Problems, in connection with Workmen's Compensation Insurance, appointed March 2, 1931 has offered majority and minority reports. A20, A21

88. Hospital Problem—recommendations to the Governor include

(a) Provision for charges for bed commensurate with reasonable cost service without regard to established rates in wards or elsewhere

(b) Elimination of necessity for authorization for hospitals

(c) Lien Law for hospitals to enforce charges in "third party actions"

(d) Preventing of delay of payments or notification of contest of charges by Carriers—allowing Carriers two weeks on bills outstanding thirty days

89. Medical Problem—recommendations to the Governor include

(a) All industrial diseases to come within scope of Workmen's Compensation Law. (Now only 27 are compensable)

(b) Exclusion of Carrier's physician from examinations by State Labor Department physicians

(c) Disapproval of the "lifting" of cases with penalties

(d) Elimination of insurance company clinics

(e) Exclusion of case records furnished by insurance company physicians

(f) Rating or licensing of physicians of same qualification or capacities for work under the Compensation Law, by Board of Regents

(g) Increased professional personnel in the Labor Department

(h) Increase of clerical staff

(i) Definition of "total disability" to mean—a workman unable to return to occupation in which he was employed when injured

(j) Creation of Medical Supreme Court of Physicians, for cases difficult for decision

(k) Establishment of Clinics under the direction of the State

90 We recommend

(a) Substitution of the use of "understanding" for "agreement" to avoid confusion (Not a contract) (Paragraph 86)

(b) Renewed approval of the *understanding* with the Insurance Carriers because of the ex-

perience of the past year (Paragraph 82) A18

(c) Approval of suggestion of County Societies and District Branches, that more programs include discussions of the "understanding" (Paragraph 83)

(d) Amendment of Workmen's Compensation Law making it a misdemeanor for any person, firm or corporation to solicit the professional treatment or care of an injured employee or make it a business to solicit the employment of or for a physician in connection with a clinic for treatment or care. (This has been approved by the Executive Committee at its February meeting) (Par 64, 81c, and 84) A18, A22, A33

(e) That the House of Delegates urge the members of the State Society to be prompt and complete in furnishing C4 forms and other paper work demanded by the Workmen's Compensation Law (Paragraph 85)

(f) Approval of the report of the Governor's Commission in its recommendations regarding "hospital problems" (Paragraphs 87 and 88)

(g) Disapproval of the exclusion of the insurance carrier physician from examination by Labor Department Physician, since this is unjust to the carrier, limits desirable consultation, and provides for prolonged contests and delays in benefits to the injured (Paragraph 89b)

(h) Disapproval of the "rating and licensing" of physicians for compensation work by Regents or any other authority (The State of New York has already licensed and registered its physicians) (Paragraph 89f)

(i) Disapproval of the extension of the provision of the Workmen's Compensation Law in occupational disease until further study, in which this State Society shall be adequately represented with voice and vote in the Committee deliberations (Paragraph 89a)

(j) Approval of the disapproval of "lifting" cases with provision for penalties (Paragraph 89c)

(k) Approval of the elimination of the insurance company clinics (Paragraph 89d)

(l) Disapproval of the exclusion of the case records from insurance company physician (Paragraph 89e)

(m) Approval of a Supreme Court to review, provided the suggested panel of 75 physicians be named by or is subject to the approval of the Medical Society of New York State (Paragraph 89j)

(n) Vigorous, unanimous disapproval of the suggestion for the establishment of clinics under the direction of the State. Our reasons are given in paragraph 156—Paragraph 89k

PUBLIC HEALTH AND INDIVIDUALIZED MEDICAL SERVICE BY PUBLIC AGENCIES

91. Public Health has spilled over from sanitation and the control of communicable disease by

108. Banking applied to loans for sick care must be humane, must preserve a friendly relationship between the physician and his patient, must be done with a bit of the heart and not with two cold, unsympathetic "glass eyes," a new idea in banking, in which life and deep seated appreciation, the essence of human nature, furnish and govern the theme rather than acquisitive merchandising and gainful bargaining.

109. This type of banking can be regulated by the volunteer acceptance of our supervision. It is practicable, possible and comparatively easy of accomplishment. The Sage Model Loan Law, as worked out in Massachusetts, may well be taken as a model from which to draft suitable regulations. A22, A32.

110. Both banking and bill collecting should be safeguarded by some regulations and by "bonded guarantees" to insure the security of money collected for the physicians, and to guarantee performance of contracts. A22, A90.

111. A survey of present financing possibilities presents:

(a) The conventional "small loan" companies operating under the "bank laws" of the State. They require two acceptable co-makers, and have no concern with preservation of friendliness, when a note is past due. A28.

(b) A second type of firm is the "broker" or agent firm, who market the patient's note to a small loan bank or to the commercial paper institutions. A29.

(c) A third type is one which advances to physicians part of the face of the note on the date of acceptance, and follows through on collection of deferred installments, with final payment, less commission, when the note is redeemed. A30.

All of these firms propose a "financial rating" service of one sort or another which will tend, if used, to definitely curb the dead-beat.

112. In our report to the Executive Committee at its November meeting we made specific recommendations relative to these types of financing sickness. A22.

113. In a report of a sub-committee of the Executive Committee, appointed to consider our recommendations, the recommendations were rejected on the ground that "it is outside the province of the State Society to endorse any company." A33.

114. Your Committee on Medical Economics feels that there should be some ready means or method for the citizen, who desires to remain in the self-respecting and self-supporting class, to provide himself and his family with medical care if the emergency overtake him when he has no ready cash. We conceive that, in this way, in a measure, we may combat one great argument for socialized sick-care. The importance of it justifies further consideration. A2, A22.

115. We recommend the reconsideration of the subject.—Paragraphs 112, 113, 114, 116.

116. The supervisory regulation (without financial responsibility or liability), proposed by the Committee on Medical Economics, sets up the following conditions to be met by any concern dealing with bill collection for physicians or the financing of the sick, who desire to voluntarily accept such advisory supervision. A22, A32, A33.

"1. Submit to the Economics Committee a brief history of the firm and brief statement with names of all principle owners (10 per cent or more).

"2. A statement of previous business connections of each director or owner and to advise us immediately of all subsequent changes of ownership.

"3. Names of banks where the firm does business, financial references, and other business associates.

"4. Name of bonding company, amount and date of bond which covers each employee who handles money.

"5. Statement of what there is to guarantee stability of the firm and to guarantee performance of contract (a bond or its equivalent).

"6. Supply the Committee on Medical Economics with copies of all printed forms and advertising matter as or when issued and agree to immediately delete or recall anything which is not approved by the Committee.

"7. Contract between doctors and firm must be standard and submitted for approval of the Committee. No change shall be made without the approval of the Committee.

"8. Present financial statements showing

"a. Resources and liabilities on date of application for recognition.

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"c. File with this Committee monthly, quarterly, or yearly statements, as required, showing total of new accounts received; total of payments to doctors; total remaining in process of collection; total of abandoned accounts; number of cases carried to court action; and such other items as may be specified.

"9. Agree to confidential review of books and records of the firm by the Committee or a representative thereof. A certified, public accountant may be employed by the Committee at the company's expense.

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"11. They shall provide credit information service to all physicians registered by them for service.

"12 That accepted firms be permitted to use a standard legend or form in advertising display, the legend to be determined by this Committee

"13 These regulations to be subject to revision, addition and extension to conform to the provisions of the Massachusetts Small Loan Law"

117. We recommend

That the Committee on Medical Economics be instructed to proceed with the business of establishing the regulation and supervision of firms engaged in collection of physicians' bills, and of financing sickness through the various plans of deferred payments, in accordance with the general plan outlined in paragraphs 105-116, and in the Appendix A22, A28, A29, A30, A33

And provided that nothing shall be done to involve this Society, in any way, in any financial responsibility (Paragraph 116)

118. The "National Health Plan Inc" is a scheme built on the "Christmas Club Account" idea. Perhaps the philosophy of putting away in a savings account for the unexpected illness might be fostered and made to reach many. Another possibility is that when the account has accumulated to its full maturity the income from it could be used for the annual health examination, which would foster the practice of preventive medicine A34

119. We recommend

That the Committee on Medical Economics investigate this plan and report to the Council with recommendations (Paragraph 118)

120. In Brattleboro, Vermont a community insurance plan, which provides hospital and medical service, has been in operation for a sufficient time to show its worth and any possible flaws

121. We recommend

That this Plan be surveyed by personal observation by at least one member of the Committee on Medical Economics, and that the Committee report to this House at the next annual meeting (Paragraph 120)

122. *Split Fees* The present general prohibition of any division of fees operates to the entire satisfaction of the Specialists and Surgeons but operates with considerable injustice to the other members of the profession A35 A76 A91, A92

Diagnosis and the problems of 'after care' frequently require a skill and experience quite equal in professional evaluation with that of the surgical technician

In the instance of the family where the affluence permits adequate and full compensation there is no problem

In that vast majority of families where there is a limit of ability to compensate professional service if there has been *bonafide participating service* and responsibility, then with the knowledge of the patient the lump sum which is possible should be divided between the participants according to their mutual satisfaction

123. When the doctor merely refers a patient for consultation or care, and *does not participate* in the service, any division of the fee is reprehensible and both the giver and the receiver of the "split" should be suspended or barred from membership in organized medicine, for violation of Section 32 of the Rules of Professional Conduct adopted by this House, June 1, 1931

124. Some hospitals undertake to regulate the physician's fee in accordance with the accommodations occupied by the patient

Some hospitals are advertising to the public, a "lump sum" service to include both hospitalization and professional care A82

125. We recommend

(a) That Paragraph 122 be pronounced the expressed thought and opinion of organized medicine in this state

(b) That Paragraph 123 be pronounced the expressed thought and opinion of organized medicine in this state

(c) That component societies be advised and urged to institute such disciplinary regulation as called for in Paragraph 123, 125(a), 125(b) 125(e)

(d) That the problems presented in Paragraph 124 be studied by the Committee on Medical Economics with instructions to refer any question of "institutional practice of medicine" to the Counsel

(e) That the taking or receiving of rebates from truss makers instrument dealers, drug stores pathologic and x-ray laboratories, from payments by a referred patient shall be considered a "split fee" (Paragraph 123), and that the participant shall be subject to the same penalties

SOCIALISM, PATERNALISM, AND MEDICINE

126 One feature stands out above all else, in every casual or extended survey of the "Foundations" and of so called "Public Health" and 'Public Health Nursing' carried under the direct money power or direct influence of these agencies A6 A7

It is the universally alleged need of the American people for education and instruction on how to live, the need for the particular brand of intellectual culture conceived by the "Foundations" A7

127. They allege our need of this ministering service even before we are conceived, in fact many souls are said to be unborn because of this new "instruction," and we never outgrow that need—those of us who get by the first lesson A2

128. What does the Department of Education of the State of New York have to say in answer to this implied indictment? After the expenditure of millions of tax money and the employment of thousands of "teachers" over the past half century can it be true that any considerable part of our citizenship lacks reasonable degree of knowledge in the simple ken of living? Page the spokesman of this Department!

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128. What does the Department of Education of the State of New York have to say in answer to this implied indictment? After the expenditure of millions of tax money and the employment of thousands of "teachers" over the past half century, can it be true that any considerable part of our citizenship lacks reasonable degree of knowledge in the simple ken of living? Page the spokesman of this Department!

129. On more than one college campus the word has gone around that there are "great opportunities in Public Health," and each graduation sees a new swarm scatter for the harvest. Schools for the training of "welfare workers" have sprung up and are sending out their recruits to meet this American need. What need? Whose need? A24, A36.

130. The donors of these vast sums of money have been actuated, undoubtedly, by the most beneficent of motives. Many of them have had the experience of real hardships. An innate nobility of spirit would save others or soften the blows. That they have not been possessed of superhuman wisdom; that the perfect workable way to their purpose is not charted, is not a cause for condemning them. A37.

131. Neither can we blame the army of "meal ticket hunters," who have seized opportunity by the pocket-book. Our non-medical philosophical "docs" have tried to keep faith with the endowment's purpose. A2.

132. But "health" and "sickness" are not so much a matter of philosophy as they are a matter of medical science. And no program of "public health" can possibly succeed without a "clinically-minded" pilot at the helm, and without the cooperation of the whole clinical profession of medicine. A2, A38.

133. There is a definite trend of the Foundations to turn to organized medicine for leadership and for cooperation with the whole of the profession. If organized medicine will forget "the Greeks bearing gifts," and meet the new turn half way, the foolish noble experiments in socialized medical nonsense will cease. A25, A37, A38.

134. The intellectual carpet-baggers, who have threatened American medicine with paternalism, are centering their interest in the "white collar class." Why? The poor cannot pay, the rich will not tolerate their ballyhoo, and their only hope of finding a friendly pay-roll is in some scheme which will catch the fancy of the average American citizen who is able and always pays for what he wants. Behind window dressings, included in which are some distinguished members of our own profession, the plans take shape. A2, A39.

135. A full report of the National Committee on the Survey of the Cost of Medical Care has not been issued. From matter already in hand, it seems that physicians have no reason to fear any radicalism. On the other hand, many platitudes will be sprinkled along the discourse, to which speakers, on occasion, may refer. But undoubtedly, this report will be loaded with propaganda material for use in the campaign for larger appropriations from the public treasury, for a "larger and better" army of health workers, who rarely get into the sick room, and who have never yet demonstrated any real value in reducing the incidence of morbidity or mortality. A12, A40.

136. "Cheap medical care" is the bait. Barnum said, "a sucker is born every minute." Are they in the majority today? Europe has cheap medicine, and an ultra-scientific profession, whose members seem satisfied to live just above the pauper class, and who discuss an autopsy with greater fervor than they do the "recovery" of an interesting case. A24.

137. Life is so precious; death so permanent. America, where more is spent for tobacco and cosmetics than for physicians, is not interested, at heart, in cheap medicine. What the man in the street wants is a better brand of medicine, and when he finds it he will be ready and glad to pay a right price for it. A2.

138. Wake up, don't let the carpet-baggers teach our neighbors to be humbugged into liking the thing which you and I know will be found to be "rotten" when he gets it. "Buying cheap things to save money is like stopping your watch to save time."

139. The State cannot give back more than it takes from the people. The interposition of social workers, welfare workers, public health brigade of nurses, and a lot of political job holders in the administrative machinery cannot have but one consequence: greater cost of sick care, and a poorer quality inevitable to employment of "cheap professionals". Increased taxation!

140. We recommend:

(a) That the Department of Education of the State of New York be requested to survey and determine if there is such an ignorance among our citizenry as common reports, in certain prints, would indicate.—Paragraphs 126, 127, 128. A6, A7, A13, A51.

(b) That it is the sense of the House of Delegates of this State Society that organized medicine is ready to cooperate with and counsel any Foundation, on condition that the pre-eminence of clinical medicine in the health field is acknowledged; and that any program of activity in any locality of this State will be undertaken or continued, only when approved by the local County unit of organized medicine. That upon these terms we hold out the hand of friendship to any who will meet us on-the-square.—Paragraphs 132, 136, 137, 139.

(c) That it be the expressed thought and opinion of the House of Delegates that organized medicine, with the economic support from the Foundations, can put over a real health program in which everyone can find satisfaction and gratification. (Paragraph 132.)

(d) That it is the opinion of organized medicine that a socialized and paternalized sick-care, presided-over by or through the tin-box type of politician, even though cheap, is no more to be desired than a state religion. (Paragraph 139.)

PHYSICIANS AND COURTS

141. We have familiarized ourselves with the

crystallized legal mind on the matters of subpoenas, witness fees, etc. We know that it will be necessary to cause fundamental changes in the "rules of evidence" and in the regulation of "procedure," if physicians are to be given intelligent and just consideration in their relation to the "trial court" A33

142. The life of a physician is primarily one of service to the sick and injured. It is painful, that he may sustain himself in that occupation—gun is secondary to a true professional instinct.

The Law, in the exhibition of its supreme majesty, holds, "at the very root of our judicial system is the power to compel attendance of witnesses by subpoena," quoting the words of Legal Counsel

The negligence claim is not too petty or poorly alleged but that any attorney may exercise the authority of the Court "to command" the attendance of a physician, as commonly occurs even to the neglect of his paramount duties. The claim of the plaintiff and his contingent fee attorney are made a first demand over the needs of the sick. Is this Justice? Is it good common sense?

143. This and other complaints were cited to the Executive Committee with the recommendations for relief. We were perfectly familiar with the Law on the various parts. We desired to voice our complaints and initiate action toward amendments of the Civil Practice Act A74

These recommendations were disapproved on the advice of Counsel A33c

144. There are evidences on every hand that the old order of things will undergo considerable revision

145. Judge Frederick E. Crane of the State Court of Appeals, addressing the New York City Bar Association, is quoted in the public news as saying "The people have grown impatient with the delays, the technicalities and the refinements of law which impede rather than further the ends of justice—Our system is being challenged" A41

146. Judge Crane further suggested extension of the Compulsory Arbitration Law to automobile accident cases. "What a speedy disposition there would be of all these automobile accident cases when the court would appoint arbitrators without limit—a lawyer, and a doctor and a layman—who would dispose of the case as satisfactorily, yes, even more satisfactorily than most of the courts and juries" A41

147. Presiding Justice Edward Lazansky of the Appellate Division, has announced the appointment of a permanent committee of five judges and five lawyers, "to receive suggestions helpful to the betterment of general and calendar practice and procedure and in the general administration of the law" A41

148. In consideration of information contained

in paragraphs 145, 146 and 147 of this report, we consider the time opportune to initiate action as previously recommended A68

We recommend the reconsideration of the subject and we amend our bill of complaints A68

149. We recommend

(a) That this House of Delegates approve of the principle of Compulsory Arbitration of automobile accident case claims (Paragraph 146)

(b) That we approve the inclusion of a doctor on such arbitration board (Paragraph 146)

(c) That the Secretary of this Society transmit the expressions of our approval (Paragraph 149a-b) to Justice Frederick E. Crane

(d) That the House of Delegates request Justice Edward Lazansky of Appellate Division to include in the "permanent committee" to receive suggestions helpful to the betterment of the general administration of the laws, four representatives from the Society, the Counsel of this Society, and the Chairmen of the three standing Committees of Public Relations, of Public Health and Medical Education, and of Medical Economics (Paragraph 147)

(e) That the President of this Society be instructed to appoint representatives to appear before the Committee appointed by Judge Lazansky (Paragraph 147), and that this Committee be instructed to take up the complaints enumerated in the Appendix A41

(f) That the recommendations presented by the Committee on Medical Economics to the Executive Committee at its November meeting, be approved by this House, as here quoted A22, A33

"(a) Concerning relief of physicians from ordinary routine subpoena, we recommend that in this State physicians should be subject to a mandatory call issued only by a judge of a court"

"(b) Physician witnesses are in fact expert and in no sense ordinary witnesses of fact only. They should be recognized as expert"

"(c) We recommend that for such expert witness there should be standard provision for compensation made by Law"

(d) We recommend that there be an effort so to amend the laws as to make the physician's fee a lien upon the recovered sum in all negligence cases" A83

"(e) The amendment regarding the lien on verdict recovery or settlement, to include fee for appearance in court"

PRACTICE OF MEDICINE BY CORPORATIONS

150. Practice of Medicine by Corporations which is illegal in the State of New York seems to merit the attention of the Society. Groups of lay people incorporate and conduct clinics, bureaus and services employing physicians (licensed and unlicensed) to do their work. Is this

the Practice of Medicine by Corporations? Lay people provide for corporations which conduct health examinations and afford diagnoses for apparently healthy persons for a fee. Hospitals make contractual arrangements with employers or insurance companies to treat compensation cases. A few insurance companies have established clinics for treatment of compensation cases. A2, A79, A94.

151. Such practice of medicine is invariably for the purpose of diverting work which is inferentially assigned by the Medical Practice Act to practicing physicians. The main object of such diversion is to make money for lay persons or organizations. Employed physicians are in the main, poorly compensated. The public, as a rule, is inadequately served. A2.

152. This Committee in its February report to the Executive Committee presented an extended consideration of this matter. (Practice of Medicine by Corporations.)

153. In this field also we include organized group practice, sanatoria, etc., which do not commercialize medical service. A47, A79.

154. We recommend:

(a) That the Medical Society of the State of New York, through its Counsel, institute an action at law against some corporation practicing medicine, in order to establish respect for the laws of the State by all such corporations and to secure authoritative decision which shall be sufficient to stop injustice to the people of the state and their physicians.—Paragraphs 150, 151. A2.

(b) We recommend that the Practice of Medicine by Corporations be continued on the program for study by the Committee on Medical Economics. (Paragraphs 150 and 151.)

ORGANIZED MEDICINE

155. An elementary reason for the *economic* position of medicine in world opinion is the ridiculously small financial contribution of physicians to organization work. Compare with contributions of Labor Union, other professional associations, and even irregular cults. A54.

The tremendous difference in principle is that the other groups are organized solely in selfish interests to force higher wages, less hours of work and less quantity of work. We desire organized control of Medicine and public health primarily because it is good for the people at large. Secondly and subconsciously we know that for adequate satisfactory work under such conditions a reasonable reward will be ours. A54.

156. Political and other lay control of medicine has always meant:

(a) Deficient service to the people with lowered morale and unlimited malingering. A69.

(b) Enslavement of physician.

(c) Decline in science and art of Medicine.

(d) Increased cost to industry or taxpayer or both.

(e) Lessened reward for physicians.

The United States is not Europe. We must show Europe the way back to medical sanity. Organization funds collected primarily for the public good cannot justly be condemned.

The work needed cannot be done without funds.

157. Your Committee is of the opinion that the funds for organized medicine in its various branches must be quickly forthcoming and zealously safeguarded. With only one year of study we are not competent to recommend a specific amount or its distributive assignments among County, State, and National Organizations. Our study thus far, combined with opinions secured from sympathetic leaders in the business world, leads us to suggest that the sufficient necessary figure is between *one hundred and two hundred and fifty dollars* per capita per annum throughout the country.

158. We recommend that your next Committee on Medical Economics be instructed to confer with the Bureau of Medical Economics of the American Medical Association and with the Committees on Medical Economics of neighboring states with the aim of securing concerted action as quickly as may be, regarding increased funds for organization work. (Paragraphs 155, 156.)

PROGRAM TO BRING LOCAL COUNTY ECONOMICS COMMITTEES INTO ACTIVE LIFE

159. Contemplation of this matter, coupled with a single experience of effort at cooperation with another committee of this Society, prompts a wider consideration of organized-medicine activity. A43, A65.

160. "The physician, as an individual, needs to give more thought to the civic responsibility facing him as a citizen. Through the Committee on Medical Economics, the Committee on Public Health, the Committee on Illegal Practice, this phase of our communal existence is receiving considerable attention. Results are being obtained. They are difficult of measurement." The 12,000 physicians of this organization should have an administrative machinery. A52, A93.

(a) To find facts and classify them for analysis and ready reference.

(b) To devise and operate the orientation of organized medicine in the application of its "collective thought" whenever and wherever the civic and social welfare of the people of this State demands.

(c) To coordinate the work of all of its committees and of its component County units.

(d) To constitute the intelligence of our profession into a real and full-powered force throughout the realm of this State.

(e) To exercise a constant and inclusive

watch, over the whole field of events. A machinery which will make organized medicine fully alive to its sociological and civic environments.

161. We recommend

(a) That a committee be appointed to study and make a preliminary report to the Council not later than November 10, 1932, on organization and administrative machinery for fact finding, policy-planning, and coordination, with a plan and program to make this organization a unit of power and to give its collective thought a real value (Paragraphs 159, 160)

(b) That the Budget Committee and the Trustees be requested to consider the financial needs of this special committee, and include it in the budget (Paragraph 161(a))

PERORATION

162. Basic Principles Economics is not acquisitiveness. Medical Economics involves the application of the broad policy of maximum benefits to our neighbors—the public who surround us and need us—and the re creation and maintenance of their confidence and good will. High class service should be provided. The public must be happily impressed with the service. It must not only be but also be recognized as adequate, complete, humanly kind, earnest, interested and obtainable at a cost reasonable and negotiable by

persons served. The great public—our neighbors—must be given *what they need*, and be intellectually led to like it by men whose consideration of self gain or self aggrandizement is never obvious or obtrusive. However, every civilized person knows that such service costs training, time, equipment, and money, and must be adequately rewarded.

Wide differences in rewards demonstrate inadequate application of the principles of economics.

163. We recommend the adoption of Paragraph 162 as a part of the *Credo* of The Medical Society of the State of New York.

Respectfully submitted and signed by the Standing Committee and the Special Auxiliary Committee on Medical Economics

CHARLES H. GOODRICH,
Chairman
FREDERIC E. ELLIOTT,
Secretary

DONALD S. CHILDS,
LOUIS A. FRIEDMAN,
JOSEPH P. GAREN,
FREDERICK M. MILLER,
HOMER L. NELMS,
JOSEPH C. O'GORMAN,
MORRIS ROSENTHAL,
CASSIUS H. WATSON

April 15, 1932

INDEX TO RECOMMENDATIONS

Recommendations are to be found in the following paragraphs: 14, 21, 33, 45, 56, 61, 75, 81, 90, 97, 104, 115, 117, 119, 121, 125, 140, 148, 149, 154, 158, 161, and 163.

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REPORT OF THE COMMITTEE ON PUBLIC HEALTH AND MEDICAL EDUCATION TO THE HOUSE OF DELEGATES

Gentlemen

Your Committee on Public Health and Medical Education begs leave to submit the following report for the current year

The resolution of the House of Delegates adopted at its last annual meeting on June 1, 1931 directing the Committee on Public Health and Medical Education with the Committee on Public Relations to make a study of the preliminary report of the Governor's Special Health Commission assigned a task to this committee which occupied the major part of its attention until January first of this year. Despite the amount of time devoted to this special study this committee has carried on its usual amount of work in graduate education and has been concerned with more public health activities than in any previous year

GRADUATE EDUCATION

Table 1 is a report of the graduate courses sponsored by the State Society for county medical societies under the direction of this committee during the current year. The title after each county refers to the subject of the course and the figure refers to the number of lectures given in that course

TABLE 1
Courses Given in 1931-1932

County	Subject	No of Lectures
Cortland	Traumatic Surgery	Six
Monroe	Preclinical Medicine	Four
Otsego		Eight
Schohar		Seven
Seneca	Traumatic Surgery	Six
Wayne	Traumatic Surgery	Six
Onondaga		Four
New Yc		Five
Orange	Traumatic Surgery	Seven
Sullivan	Internal Medicine	Four
Herkimer	Internal Medicine	Seven
Montgomery (and Fulton)	Internal Medicine	Seven
Tompkins	Dermatology	Six
Jefferson	Preclinical Medicine	Five
Saint Lawrence	Preclinical Medicine	Five
Chemung	Internal Medicine	Six
Steuben	Internal Medicine	Six
Rockland	Internal Medicine	Four
Oswego	Internal Medicine	Six
Madison	Internal Medicine	Six

(At the time of writing this report definite arrangements for the courses in Jefferson Saint Lawrence

Chemung, and Steuben Counties have not been completed but seem well enough assured as to be included in the above list.)

The committee has continued to keep detailed records of each course and submits herewith a comparative report of this work for the four previous years. It is impossible to include the work of the current year in this table in as much as several of the courses have not been completed at the time of writing this report. (Table two.)

was given twice. The latter course, which deals with practical subjects and especially emphasizes treatment, is being prepared under the general direction of the committee and will be arranged so that uniform lectures can be given on the same subjects by different lecturers in different localities. Standard lantern slides will be prepared for this course and mimeographed outlines of each talk will be given to all in attendance.

Twice during the past year two adjoining counties have

TABLE 2—COMPARATIVE SUMMARY OF WORK IN GRADUATE EDUCATION UNDER THE AUSPICES OF THE COMMITTEE ON PUBLIC HEALTH AND MEDICAL EDUCATION FOR THE PAST FOUR YEARS

	1927-28	1928-29	1929-30	1930-31	1931-32
Total number of courses.....	21½	21½	16	21	20
Total number of lectures.....	116	105	91	116	115
Number of county medical societies before which courses were given	22	31	19	25	25
Total attendance of all courses	3268	4809	3296	3520	
Largest attendance for one course.....	(Albany) 495	(Monroe) 836	(Monroe) 841	(Monroe) 566	
Smallest attendance for one course.....	(Greene) 42	(Herk.) 66	(Rock.) 57	(Tioga) 59	
Total cost of all courses.....	4524.82	4777.07	3705.42	4898.33	
Average cost per course	215.47	217.96	231.59	233.25	
Average cost per county.....	205.67	154.10	195.02	155.93	
Average cost per attendance.....	1.38	.98	1.12	1.39	

A table which has been prepared to show the attendance of all courses during the past four and a half years is herewith submitted. As has been mentioned before it is impossible to furnish the figures for the last half of the current year as several courses have not been completed at the time of writing this report. In studying these figures such conditions as the size of the county, its geography, and the distribution of physicians according to age and type of practice must be considered. (Table three.)

Perhaps one of the best indications of the value of graduate education is evidenced by the repeated requests for courses in several counties each year. In the twenty counties in which courses were given during the current year twelve had courses last year. Four of these county societies, Tompkins, Chemung, Saint Lawrence, and Jefferson, have had a course each year during the past five years which covers the period that this work has been sponsored and financed solely by the State Society. Two societies, Monroe and Onondaga, have had courses annually during the past four years. Five societies have had a course this year after a lapse of two years of such work and one society after a lapse of four years. Two county societies, New York and Madison, for the first time, have had a course arranged by the State Society this year. The Bronx County Society should also be included with these as it participated in the course arranged for New York County.

The twenty courses given during the current year represent a total of 115 lectures. There were four 4 lecture courses, three 5 lecture courses, nine 6 lecture courses, three 7 lecture courses and one 8 lecture course. Eleven courses dealt with internal medicine, again demonstrating this topic to be the most popular subject of graduate lectures. This is also proof that the majority of the profession want instruction in that type of work with which they are most concerned. Five different courses in internal medicine were given during the current year two of which were given three times. One course on traumatic surgery, however, was presented on four different occasions. One course in dermatology was also given on three occasions. This was the first year that this course was held although it had been suggested by Doctor George M. MacKee at a previous time. Three new courses in internal medicine were added this year to the list of courses offered by the committee. One, outlined by Doctor Nellis B. Foster, was given three times; one, outlined by Doctor Luther Warren, was given three times; and, one planned by Doctor Clayton W. Greene,

combined for one course. Two nearby counties have agreed on the same course six times so that it has been possible to have the same lecture in one place in the afternoon and in another place in the evening, resulting in considerable saving of time and expense. In one instance the New York Central Railroad arranged for three special stops of its trains on the days of the lectures in order that such a plan might be carried out.

The Committee has continued to allow the different county societies to make their own selection of courses although it has gladly offered to advise them regarding their choice, an offer which has been cordially accepted. The committee has made changes in the outlines of some courses to suit the wishes of some of the county societies where this has seemed advisable and has otherwise modified its plans to comply with the needs of some societies. Fifteen counties have had lectures at weekly intervals. In one county the lectures were given twice a week, in another every second week and in two other counties once a month. The lectures in Monroe County were given on consecutive days as has been the custom in the past. One of these lectures was held at the time of the meeting of the Seventh District Branch in that county in order that the lecture might be available to the members of all the county societies in that District.

In connection with one course the committee arranged two clinical days and with another course one such day. All three days were available to the members of both county societies. Doctor Arthur W. Elting conducted a surgical day, and Doctor Nellis B. Foster a medical day in Otsego County, and Doctor Henry L. K. Shaw a pediatric day in Schoharie County. These clinical days proved to be instructive and of practical interest to both county societies. In association with both courses in physical therapy a seminar for the practical demonstration of this subject to small groups was arranged with local men acting as instructors. Both of these courses were available to the members of more than one county society.

Realizing the interest which county societies have maintained in graduate education and the demand for extension of this work which is apparent, the committee has considered favorably a plan to establish, in connection with some of the medical colleges of the state and in cooperation with the medical society of the county in which such college is located, clinical periods of from one to four weeks instruction. Although under such a plan those attending the clinical period would have to reside at the place of instruction during the time of the

TABLE 3—PERCENTAGE OF MEMBERS OF COUNTY SOCIETY ATTENDING COURSES IN GRADUATE EDUCATION

	Fall 1927	Spring 1928	Fall 1928	Spring 1929	Fall 1929	Spring 1930	Fall 1930	Spring 1931	Fall 1931
Albany									
Cayuga	45%	37%	44%	14%				45%	
Chemung		84%		73%		45%		64%	
Clinton	77%			73%		63%		59%	
Columbia		32%							
Cortland		X	X				58%		76%
Chenango	44%			47%					
Delaware			95%			72%			
Dutchess-Putnam								34%	
Franklin								34%	
Fulton	41%								
Genesee					43%		51%		
(Surgery)		49%							
(Internal Medicine)		52%							
Greene		45%							
Herkimer	55%			23%					
Jefferson		61%		55%		46%		61%	
Monroe					38%		25%		27%
(Surgery)			27%						
(Internal Medicine)			36%						
Montgomery		40%		27%					
Oneida	21%								
Onondaga			35%			39%		22%	
Ontario		30%		22%			11%		
Orange	25%								
Oswego			71%						
Otsego		38%						50%	
Rockland					30%		39%		36%
Saint Lawrence		*		55%		39%		52%	
Schenectady		35%							
Schoharie		55%						58%	
Seneca							75%		45%
Steuben			38%		22%			29%	
Sullivan			96%		75%		75%		
Tioga	57%				78%		71%		
Tompkins		66%				34%		37%	
Washington		70%		41%					
Wayne	60%			38%	35%		27%		52%
				36%			35%		

* Inasmuch as half of this course was given in the spring and the other half in the fall a percentage can not be given for the full course.
* Cards reporting the details of the lectures were not returned, and, therefore, a final report can not be given.

session, nevertheless, more extended education could be provided along lines not now possible. While it is not expected, because of the personal expense and the time involved, that the same number of members of even nearly by county societies would avail themselves of such an opportunity as do now of the weekly lecture course in their own immediate locality, it is believed that a sufficient number would register to justify the establishment of such a course. The committee has no thought of abandoning its present plan of taking the weekly lecturer to the county society but rather to supplement this with more extended work. It feels that an absolute essential to such a plan is the wholehearted cooperation of the society in the county in which such a course of instruction would be offered and that that society should actively partake in the work. In as much as such a plan has been carried on satisfactorily and successfully in one county your committee feels that it could extend this work to other parts of the state providing that the House of Delegates votes its approval of such a project.

The details of this report indicate the time and the attention which your committee has given in order to provide the members of this society with as satisfactory post-graduate education as means and conditions will allow. In return for its labors the committee has received excellent cooperation from the officers and committees of the various county societies. The committee has been fortunate in the advice which has been extended most cordially to it by experienced medical educators.

To these gentlemen, to the different lecturers and to all others who have contributed their efforts to the success of this work the Medical Society of the State of New York is indebted and we believe expresses its sincere thanks. Not only the importance of this work but also its need is expressed repeatedly by the individual physician, the teacher, and the health worker alike. Where state university exists this work has become a well recognized function of such institutions. Where no state university exists, the State Medical Society must accept this responsibility.

PUBLIC HEALTH

The committee's participation in public health matters has been especially marked by its cooperation with other organizations. A growing tendency to recognize the value and necessity of the cooperation of the medical profession in these affairs is most apparent. Certain organizations are to be especially commended for strictly adhering to this policy. Your committee has made every effort to work harmoniously with such organizations and by results has demonstrated to others the desirability of united effort.

MATERNITY CENTER ASSOCIATION

A cooperative venture for the dissemination of a better knowledge of adequate maternity care which has been developed during the current year between the

Maternity Center Association of New York City and the State Medical Society especially merits a word of comment. The desirability of the movement seems to us unquestionably essential. It is an effort through the medium of ethical publicity to instill into the minds of the public the need for early consultation in pregnancy and the advisability of securing satisfactory medical and nursing care.

The Maternity Center Association is a well sponsored lay organization which has attracted a great deal of attention by its work in New York and elsewhere. Its policy has always been one of close association with the medical profession. The campaign referred to is entirely financed by the organization and the state-wide publicity given to the same has evidently met with an encouraging response from all sides. A venture of this kind should be encouraged by the organized medical profession of the State because it will further develop a spirit of cooperation and community activities which is most desirable for all concerned.

A summary of the salient features of this cooperative venture includes the following: On January 15th, the NEW YORK STATE JOURNAL OF MEDICINE published a brief article entitled "Teaching the Public the Need for Proper Maternity Care." Five reprints of this article were mailed to each of the 21,000 physicians in the state. A release signed by Mrs. John Sloane, the President of the Maternity Center Association was sent to every newspaper published in New York State, as well as to a selected list of medical journals. A reprint and letter describing the plan were sent to 2,024 presidents and secretaries of County Medical Societies throughout the country, as well as to presidents and secretaries of all State Medical Societies, and to about 1,200 Commissioners of Health—State, county, and local.

Among the results of this campaign we may note that the physicians of this State have ordered over 5,000 copies of the circular for distribution to their patients, and many letters were received from various sources commending the plan. The cooperation of the newspapers was excellent—200 clippings have been collected to date. The movement likewise has extended elsewhere, and doctors in 32 states have voiced their approval of the scheme and have asked for the circulars to be distributed in their local societies.

SARATOGA SPRINGS COMMISSION

The Saratoga Springs Commission, which has under its direction the development of Saratoga Springs as a health resort, has accepted as an underlying principle in its work, the approval of its plans and aims by the medical profession. Your committee was therefore very glad to cooperate with this commission, which is ably represented by its medical members, in arranging for its special advisor, Doctor Ernest Groedel, to address medical groups in various parts of the state. Unfortunately several of these meetings had to be cancelled due to the necessity of Doctor Groedel returning to Germany on account of the sudden death of his wife.

STATE DEPARTMENT OF HEALTH AND POLIOMYELITIS

This committee has continued to cooperate in a cordial manner with the State Department of Health. On July twenty-ninth the chairman of the committee met with Commissioner Parran of the State Health Department at his request to consider matters pertaining to the spread of Poliomyelitis through the state which disease at that time was showing a sharp increase in New York City. At this conference Doctor Lawrence, Executive Officer, was also present. It was suggested to Commissioner Parran that it might be well to have a sub-committee on Poliomyelitis appointed by the President of the State Society and composed of physicians who for some particular reason would be especially qualified to act as

advisers regarding the disease. Commissioner Parran readily approved of this plan and requested that such a committee be appointed. Accordingly the following men were nominated to the President of the State Society to serve on this committee:

Dr. Charles Hendee Smith—New York.
Dr. Walter D. Ludlum—Brooklyn.
Dr. Henry L. K. Shaw—Albany.
Dr. John A. Card—Poughkeepsie.
Dr. Stanhope Bayne-Jones—Rochester.
Dr. Clayton W. Greene—Buffalo.
Dr. Wardner D. Ayer—Syracuse.

The entire committee with the exception of one member whose notification was delayed met with Commissioner Parran in Albany on August sixth, eight days following the conference of the chairman with the Commissioner at which time this matter was first discussed. This sub-committee considered with the Commissioner the question of collection and control and use of immune serum, arrangements for consulting diagnostic service, and arrangements for medical meetings at which talks on poliomyelitis were to be given. A letter was promptly sent to officers of all county medical societies and the chairmen of the Public Health Committees of the same societies advising them on matters regarding poliomyelitis and requesting the arrangement of special meetings when an outbreak of the disease seemed eminent in their locality. Meetings were immediately arranged for all the county societies in the region of the Hudson River. These meetings were addressed by Doctor Draper whose services were secured by the State Department of Health. The meetings, however, were arranged by Doctor Shaw for this committee and included the following county societies: Schenectady, Albany, Rensselaer, Saratoga, Warren, Washington, Ulster, Sullivan, Orange, and Dutchess-Putnam. Doctor Ayer of Syracuse addressed the counties of Broome, Tompkins, and Chenango. Doctor Ludlum arranged for a meeting in Kings County and a meeting was held in New York County.

Fortunately, the disease throughout the State was not as extensive as was first thought probable. Nevertheless, the Medical Society of the State of New York can take credit to itself for the way its members prepared themselves to handle a greater outbreak of the disease had it occurred. Commissioner Parran has been notified that the sub-committee on Poliomyelitis would be ready to meet with him again to review the records of the 1931 outbreak of this disease and make recommendations for the control of future outbreaks. The Commissioner has not availed himself as yet of this offer.

STATE DEPARTMENT OF HEALTH AND MATERNAL MORTALITY STUDY

At the request of the State Commissioner of Health Doctor Kosmak and the Chairman of this committee met with Commissioner Parran, Doctor Gardiner, Director of the Division of Maternity, Infancy and Child Hygiene of the State Department of Health, and Doctor Griswold of the State Department of Health on January twenty-seventh in New York City for a conference regarding a proposed study of maternal mortality to be conducted by the State Department of Health. This conference occurred at the same time and place as did the January meeting of the Public Relations Committee, the Chairman and the members of which were invited to participate in the conference. The subject of maternal mortality has occupied the attention of this committee for several years as noted in its annual report of 1928 and the Committee has regretted that it lacked the necessary facts upon which to base a definite report dealing with this matter. Therefore in view of the fact that the State Department of Health was desirous of making this study in conjunction with the State Medical Society, that the final report would be a joint publication of both organizations, that the plans must first receive the approval of

the appropriate committees of the state and county medical societies and that all moot questions should be referred to the Public Health Committee of the State Society and the Commissioner of the State Department of Health, the committee recommended that the Executive Committee give their approval to this study and that county medical societies be asked to cooperate in this investigation. The secretary and the chairman of the public health committee of each county medical society except the counties of greater New York have been notified of the intention to make this study by the State Department of Health and have been asked to cooperate in this work. With this letter of notification was sent an outline of the plan of the contemplated study. Your attention is particularly directed to the fact that the first call of the interviewer in any county will be made upon the President and Chairman of Public Health Committee of the County Society acquainting them with the purposes and method of conducting the study, that the results of the local inquiries and conclusions to be drawn therefrom are to be discussed and agreed upon by the Chairman of Public Health Committee of the County Society and representative of the State Department of Health and that all moot questions are to be submitted by the Commissioner of Health to a reference committee comprising the Public Health Committee of the State Medical Society, the State Commissioner of Health and such other members as suggested by the Reference Committees. Twenty-six county medical societies have replied as to whether their society will cooperate in this study of maternity mortality. Nineteen have already answered in the affirmative, three indicate that they probably will cooperate in this investigation and in four county societies the answer is delayed pending a meeting in the near future of that society.

STATE DEPARTMENT OF HEALTH AND REPORT OF TUBERCULOSIS

The committee is studying the subject of the reporting of cases of tuberculosis for the purpose of advising the State Department of Health in this regard and a conference, to be held at a date subsequent to the writing of this report, has been arranged between representatives of that department and Doctor Whipple, representing this committee, to consider this matter.

OTHER ACTIVITIES

As in the past the committee has aided several county societies, some of the district branches and various medical organizations in preparing their programs and securing capable speakers. The committee has been represented at many county society and district branch meetings. The chairman has attended meetings of some of the other standing committees when so requested.

The committee has held nine meetings during the current year, eight of which were meetings of the Joint Committee to study the report of the Governor's Special Health Commission. Despite the added expenditures due to making that study, the committee hopes, by the practice of wise economy, to finish its work for the year within its usual appropriation. As a result of its

experience in meeting with representatives of county societies throughout the state, while engaged in studying that report, the committee is in a position to advise and direct these societies in regard to their health plans and problems. The committee has considered with representatives of several county societies the advisability of establishing county health departments under the present permissive law, and has offered its services in arranging meetings of such societies to discuss that subject. The committee has delayed further work in education regarding county health departments because of a recent ruling of the Public Health Council as to the qualifications for county health commissioners which, it believes, would make difficult the appointment of a health commissioner from the local medical profession, and is therefore not in harmony with the ideas and intent of the House of Delegates when they acted on the report of the joint committee. Consequently, at its last meeting this committee and the Committee on Public Relations, which met jointly with it and approved such action, directed the Chairman of this committee to appoint a sub-committee to appear with him before the Public Health Council to oppose such ruling. This is a proper place to call to the attention of the House of Delegates that as now constituted there is only one practicing physician on the Public Health Council and also to the fact that whereas the rulings and regulations of that body are binding only in that part of the state outside of New York City, its public hearings are held in that place. This action should be strongly objected to by the House of Delegates as being manifestly unfair by reason of distance to those most affected by its actions.

The members of the committee have given an increasing amount of time and service to the work of the committee. Their spontaneous and continued interest in the activities of the committee have been an inspiration to the chairman.

During the past year the committee lost by death one of its most influential members, Doctor John O. Polak. Doctor Polak had been most faithful in attending the meetings of the committee and was always ready to accept any extra task out of the usual routine duties. Because of his gifted ability as a medical teacher and his years of experience as an obstetrician he was a most valued member of the committee.

The cordial relations with the other standing committees have continued to exist during the past year especially with the Committee on Public Relations because of the close association of the two committees in making in a harmonious way the joint study of the preliminary report of the Governor's Special Health Commission. The chairman wishes to acknowledge the cooperation which he has received from the President, the President-elect, the Secretary, the Treasurer, and the Executive Officer of the society. The latter has relieved the chairman of many arduous details by his helpful activity. The chairman acknowledges to the House of Delegates the secretarial help which has been offered him and which has greatly facilitated the routine work of his office.

Respectfully submitted,
THOMAS F. FARMER, M.D., Chairman,

April 15, 1932.



REPORT OF THE COMMITTEE ON PUBLIC RELATIONS

To the House of Delegates —

Gentlemen:

Your Committee respectfully reports that the membership of the Committee remains the same as of the previous year, except that Dr. William H. Ross of Brentwood, Long Island, was appointed to the position left vacant when Dr. William D. Johnson became your President. Dr. Ross was elected Secretary of the Committee, and Dr. Joseph S. Lawrence, Field Officer.

Throughout the year the Committee has endeavored to carry on its many activities developed during the preceding years, and to effect proper cooperative and coordinate relationships with the various State Departments, and the voluntary and social agencies that are devoting attention to health and welfare work in the counties of the State.

It is a pleasure to report that all efforts made by this Committee towards harmonizing the health interests in the State have been appreciated by those with whom we had to deal; hence we were able to confer upon many problems in an amicable manner, and in no instance has there been lack of harmony or lack of that cooperating spirit which must exist if the health interests of the public are to be conserved, cooperative relationships established, and the standards of medical practice upheld.

We still consider the work of this Committee as having a most important bearing upon the future standing of the medical profession, as well as upon the health of the people of the State; nevertheless we are convinced, after several years of experience, that it is not at all difficult to establish proper cooperative relationships with the governmental and lay agencies, or to impress upon them the importance and wisdom of the medical profession leading in such matters.

Lecture to Medical Students. Early in the year a letter was submitted to the Deans of the medical schools in the State suggesting that they provide some facilities for senior students to become acquainted with the various laws having to do with medical practice especially the Public Welfare Law. This letter was most favorably received and four of the medical schools requested that the Public Relations Committee furnish from its membership a physician to deliver these lectures. The Committee thereupon invited Dr. William H. Ross to accept this responsible position. We are pleased to report that our former President is delivering the lectures and instructing the third and fourth year medical students upon all laws having to do with medical practice in this State.

We regard this as an important advance since it means that in the future our medical students, before graduation, will have a theoretical knowl-

edge of the laws governing the practice of medicine in the State of New York.

The following contribution by Dr. William H. Ross defines the plan and scope of these lectures:

"This talk will undertake to show the influence of organized medicine on medical education and upon medical science, the protection of the public from the impositions of untrained persons assuming a knowledge of medicine, and the influence of a proper adjustment of relationship to changing conditions. It is the first effort on the part of the profession of medicine to talk to those about to become a part of it regarding the practical things that will confront them when they begin private practice and will show the influence of medical societies upon all medical laws and codes.

"Organized medicine is undertaking to interest advanced students of medicine in its activities and in the protection of the economic interests of the profession of medicine. The Public Relations Committee will discuss with the graduating classes the value of membership in the county, State, and national organizations. This message will be from the viewpoint of the private practitioner of medicine and the purpose is to make the transition from the fields of scientific training into the fields of the practical application of that training easier than it would otherwise be.

"There will be a discussion of existing medical laws and the value of medical leadership in the administration of these laws. There will be an effort to show that organized medicine owes the obligation of leadership in the solution of social problems connected with sickness; that the activities of medical laws to meet social needs coordinate with the work of the practicing physician when the service is rendered by the family physician; and that the economic welfare of the profession is advancing by cooperation with the administration of medical laws under the leadership of medicine.

"The purpose of this talk is to give medical students an idea of what is meant by organized medicine. It is an effort to help a fuller realization of the fact that they are soon to become a part of the profession of medicine, and that they have the opportunity to secure certain valuable privileges and protection from membership in their county and state societies. It will touch upon the increasing complexities of social and economic needs, and will point out that it is quite likely that we are in an era when an increasing number of laws will be enacted, and that the profession of medicine should prepare itself by better organization to take its place in the administration of these laws and to pay attention to its own *economic relation to them.*"

Cooperation with the Committee on Public Health and Medical Education. This Committee feels that Medical Public Relations and Public Health are so interlocked that it is difficult at times to separate the two; hence in our deliberations throughout the year we have been favored by having with us the Chairman of the Committee on Public Health and Medical Education, whose advice and counsel have been of very decided value, and we wish to express to Dr. Farmer our thanks and appreciation for the assistance rendered to this Committee.

At your last Annual Meeting held in Syracuse, you instructed that the Committee on Public Health with the Committee on Public Relations study the report of the Governor's Special Health Commission and make recommendations upon all or any of the subjects presented, and that the said Committees report their recommendations to the House of Delegates not later than January 1, 1932.

To comply with the instructions of the House of Delegates adequately and properly involved a vast amount of work extending over a period of nearly eight months during which time the two Committees acted as a Joint Committee. The Joint Committee met to discuss the health report, here and there in various sections of the State in order to get the full view-point of the medical profession.

Dr. Thomas P. Farmer of Syracuse was Chairman of the Joint Committee. Under his leadership the meetings were conducted in a way which received approval of all. At this time the members of the Public Relations Committee desire to express their appreciation of the service he rendered to the Committee and the Medical Society of the State of New York.

Inasmuch as the meetings of the Joint Committee were held weekly and the interval between the meetings necessitated a large amount of study of the material developed, it was necessary for your Committee on Public Relations to omit for the time being much of the other work which would normally have been carried on. Nevertheless, the study made by the Joint Committee was likely to have such a wide bearing upon the question of future Medical Public Relations and Public Health in this State, it seemed essential to devote our best energies to the fulfillment of this task which resulted in the final report of the Joint Committee which was submitted to, and, in the main, received favorable action from the House of Delegates at its special meeting in Albany, January 14, 1932.

The study of the Report of the Governor's Special Health Commission gave the Public Relations Committee a splendid opportunity to become more intimately acquainted with the activities of all the county medical societies. It was apparent that leaders in the medical profession are influencing health and welfare programs by ad-

vocating measures which are sound, scientific and economical.

The Committee is convinced more than ever of the need of an active, progressive Public Relations Committee in every county medical society.

While this study took many months of hard work as well as an expenditure of a very considerable sum of money, it is thought that both the time and the money were well expended and that both Public Health and Public Relations in the State of New York have been advanced as a result thereof.

At a conference of the Governor's Special Health Commission, to which Dr. Farmer and myself were invited, much commendation was expressed over the attitude taken by the Medical Society of the State of New York with reference to the report of the Governor's Health Commission; and the general expression seemed to be that there had been a cooperation developed which would mean much of worth to the future of Public Health and preventive medicine.

Cooperation with the Department of Social Welfare. Upon invitation from the Chairman of the Department of Social Welfare our Committee has assisted in formulating rules and regulations with reference to the recently enacted amendment to the Social Welfare Law placing all hospitals of the State, irrespective of public or private ownership, under certain rules and regulations of that department. We feel that this indicates the establishment of an important cooperation, and especially so since your President in his Annual Report of 1928 suggested the need for some governmental control of the privately owned hospital.

Greater New York Coordinating Committee. The Committee has taken an active interest in the work of the Coordinating Committee of the Five Counties composing Greater New York. Its monthly meetings have usually been attended by the Chairman of this Committee and the Executive Officer of the State Medical Society. The medical problems confronting the counties of Greater New York, while not so different from those of the up-State counties, vary greatly in magnitude and have a vast influence on the practice of medicine, not only in their own locality but throughout the state and nation.

Examination of School Children. The Committee has recently held an important conference with representatives from the Department of Education with reference to developing a greater interest by the family physician in the pre-school examination of children. It is a lamentable fact that throughout the up-State section only 15 per cent of these examinations are made by the family physician. The Department of Education deplores this lack of interest upon the part of our profession, and would welcome the development of such plans as would result in a large number of these examinations being conducted by the

physician of the family. Your Committee on Public Health and this Committee in conjunction with the Department of Education will endeavor to formulate some methods whereby this defect upon the part of the medical profession will be corrected, thus inculcating in the minds of the children during their formative years the thought of an annual health examination, by the regular medical attendant of the family, thereby preparing the future adults for a continuance of this care of and attention to health matters and the necessity for an annual health audit.

Regional Conferences of County Chairmen. Your Committee has deemed it wise to abandon the plan of an annual meeting of the chairmen of the County Public Relations Committees and in its stead have adopted the plan of having several regional conferences where the Committee would meet with the chairmen of some ten to fifteen counties and discuss their problems in a more direct and intimate manner than would be possible at a large conference. We are finding that this plan is much more satisfactory and is productive of greater stimulation to the County Chairmen, all of whom desire to take their work seriously and to carry home some additional plan for their Committee to act upon. At these regional conferences your State Committee has become impressed by the volume of work that is being actually performed along the line of Medical Public Relations by some of the counties, this being especially so where the Public Relations Committee of a county society is led by a man who exercises his leadership and impresses upon other groups working in the health field the importance of their being directed by the Medical Society of the county. The report from one of our counties (Warren) printed in the April 1st issue of the NEW YORK STATE JOURNAL OF MEDICINE speaks in no uncertain terms of how all health questions in that county are referred to the Medical Society of the county for adjustment. This is only one of many counties throughout the state where this most desirable condition exists.

Personnel of County Committees. Your Committee is occasionally embarrassed in its work by county medical societies changing the personnel of their Public Relations Committees. We recognize that this may at times be essential, but in the main, it disrupts the work in that particular county, therefore it should not occur except for a sufficient reason.

Your Committee would appreciate any assistance from the House of Delegates along the line of encouragement of County Medical Societies in selecting their County Public Relations Committees, to observe the following:

1. Select men who have outstanding qualifications as leaders in medical thought in their community and who will give of their time to the work entailed.

2. When such County Committee, and especially the Chairman, is carrying on the work in a satisfactory manner there should be as little change in personnel as possible.

3. All chairmen of county committees, and when possible, the entire committee, should attend the regional conferences with the State Committee and become acquainted with the work required.

We believe that as a State Committee we should be in close touch with our sub-committees in the county medical societies; and that they should be shown the advantage of working harmoniously with the lay organizations. Such harmonious action is best accomplished by having a prominent member of each county medical society a member of one or more of the lay organizations which are working in that county. In this way any feeling which may exist between the medical profession and any one of these societies may be overcome and the health work carried on more successfully to the advantage of the public and the medical profession.

By repeatedly urging our County Relations Committees to coordinate the health activities in their respective counties much can be accomplished.

Cooperation. We are thoroughly convinced that a constant contact must exist between the Public Relations Committee, the State Department of Health, and the many lay organizations working in the health field.

As yet we have made no direct contact with the New York State Institute for Cancer Research, and believe that this should be accomplished during the coming year.

We desire to express our appreciation to the Editors of the NEW YORK STATE JOURNAL OF MEDICINE for giving space and publishing all articles submitted relating to the work of the Committee; also to our President, Dr. William D. Johnson, for his faithful attendance at our meetings and wise counsel in helping to direct the work of the Committee. Through the courtesy of the Executive Committee, Dr. Joseph S. Lawrence, Executive Officer, has been allowed to give much of his time and effort to the work of this Committee, and we wish to express to him our keen appreciation for his untiring efforts.

Many complex and disturbing conditions arise throughout the year, some of them of importance to a local group, others of great importance to the medical profession as a body. Our endeavor has always been to adjust these matters upon the broad principle of doing what is best for the welfare of the people and still uphold and advance the future of medical practice in our State.

Respectfully submitted,
JAMES E. SADLIER, *Chairman.*

April 15, 1932.

REFERENCE COMMITTEES FOR 1932

Dr John A. Card, Speaker of the House of Delegates, has appointed the committees to whom the reports of the officers and committees are referred for consideration and suggestion of action. The early publication of both the reports

and the personnel of the reference committees will afford the members of the State Society the opportunity to express their opinions, and their representatives in the House of Delegates to reflect the attitude of their constituents.

THE REPORT OF THE PRESIDENT

Lloyd S. Winslow, *Chairman* Rochester Monroe County
Louis A. V. Nassau
Hyzer W. Oneida
Cornelius J. Bronx
John A. Hatch Albany Yates

Luther C. Payne
Leon M. Kysor
Romeo Roberto

Liberty Sullivan
Hornell, Steuben
Yonkers, Westchester

THE REPORT OF THE LEGAL COUNSEL

Augustus J. Hambrook, *Chairman*

Charles C. Trembley
Mary J. Kazmierczak
Carl Boettiger
Willard H. Veeder

Troy, Rensselaer County
Saranac Lake, Franklin
Buffalo, Erie
Long Island City, Queens
Rochester, Monroe

THE REPORTS OF THE COMMITTEE ON MEDICAL RESEARCH AND THE COMMITTEE ON PERIODIC HEALTH EXAMINATION

DeWitt Stetten, *Chairman*

C. Knight Deyo
Walter A.
Edwin H.
Guy S. Carpenter

N. Y. City, New York County
Poughkeepsie, Dutchess Putnam
Monroe
Kings
Troy, Rensselaer County

THE REPORTS OF THE TREASURER AND TRUSTEES

Frederick H. Flaherty, *Chairman*

Edward R. C. Syracuse Onondaga County
Edward A. V. Bronx Bronx
Francis M. Kings
Samuel J. Erie
York

THE REPORT OF THE COMMITTEE ON LEGISLATION

Walter D. C. Albany Kings County
B. Wallace New York
Joseph B. Orange
Claude C. Ontario
Norman L. Jefferson

THE REPORTS OF THE COMMITTEE TO STUDY THE NURSE PROBLEM AND THE COMMITTEE ON PHYSICAL THERAPY

John E. Je
Aldelbert I.
Frederick
George S.
Ralph T.

Albany, Kings County
New York
Niagara
Saratoga
Westchester

THE REPORT OF THE COMMITTEE ON SCIENTIFIC WORK AND THE COMMITTEE ON ARRANGEMENTS

Luzerne Coville, *Chairman* Ithaca, Tompkins County
David W. C. Schenectady
Sylvester Fulton
Morris Warren
Albert Suffolk

CREDENTIALS

D. S. Dougherty

NEW BUSINESS (A)

Edward M. Cole, Jr., *Chairman*

Aaron Sobel
George A. Leitner
Harry Aronow
Lucius H. Smith

N. Y. City, New York County
Poughkeepsie, Dutchess Putnam
Piermont, Rockland
Bronx, Bronx
Palmyra, Wayne

NEW BUSINESS (B)

George Kosmak, *Chairman*

Edwin C. P.
Milton
John
O. P.

N. Y. City, New York County
Bronx
Erie
York
Kings

NEW BUSINESS (C)

J. Lewis Amster, *Chairman*

George M. Fisher
Henry S. Patterson
Frederic E. Elliott
Earl W. Wilcox

Bronx, Bronx County
Utica, Oneida
N. Y. City, New York
Brooklyn, Kings
Norwich, Chenango

THE REPORT OF THE COMMITTEE ON MEDICAL ECONOMICS

Terry M. Townsend, *Chairman*
Horace M. Hicks
George B. S.
William P. I.
Albert A. G.

N. Y. City, New York County
Amsterdam, Montgomery

THE REPORT OF THE COMMITTEE ON PUBLIC RELATIONS

Luther F. Warren, *Chairman* Brooklyn Kings County
Andrew Sloan Utica Oneida



NEWS NOTES



CONFERENCE ON HEALTH CENTERS

The Tenth Annual Health Conference of the Milbank Memorial Fund received from its section on Health Centers, of which Surgeon General Hugh S. Cummings, U.S.P.H.S., was chairman, the following summary of the deliberations of the section, which were accepted.

The health center movement in New York City was briefly reviewed. Emphasis was given to the value of intensive organization in this city as an effective method of assuring greater public health protection to the people in every section of New York. The Committee on Neighborhood Health Development of the Health Department was created in 1929 to study the work and to assist in establishing a city-wide and intensive program of neighborhood health service. Already, in the development of this policy, a health center for Harlem has been established. An appropriation for one million dollars for four additional health center buildings has been made.

A health center is a community agency engaged primarily in preventive medicine and public health education, centering around an organization of physicians, health workers, and laymen. It aims to reach all people within a district who need the services, and to coordinate the health, and often the recreation and social service activities of the area. A health center building has been defined by the Neighborhood Health Committee as a neighborhood headquarters from which all health and related social services are administered for a specified district.

In planning the program for a health center district, several factors are considered, including the size, constitution, social, and economic status of the population, as well as the principal health problems of the community. The health center is one of the important intermediate links in the chain of influences beginning at the hospital and extending to the individual home. The types of service to be rendered depend upon local condition. More and more, however, is the family being regarded as the fundamental biological and sociological unit. To be fully effective therefore, a health center program must be developed with the aim of serving the family as a whole.

The plan for district health centers, operated in conjunction with a central health department, involves some realignment and strengthening of field work on a neighborhood basis that will recognize the particular needs of the area. Medical treatment is reserved for existing hospitals and clinics, but through improved organization more adequate services are stimulated. Persons of a sufficient economic level

are encouraged to a greater use of their family physician when conditions indicate the need.

In order that district health center services may be developed and function effectively, there should be a Director of Health Centers in the City, directly responsible to the Commissioner of Health. This Director should be a trained and experienced medical officer of health. He should be in a position to visualize the health center needs and opportunities in the city as a whole in relation to the organization and resources of the City Department of Health. Each health center should be in charge of a district health officer. He should have the benefit of counsel from a local neighborhood health committee and from local medical and dental organizations.

From the presentation of experiences of health centers in different localities, including Boston, Los Angeles County, and New York—East Harlem, Bellevue-Yorkville, and Central Harlem,—several important suggestions were obtained, as follows:

1. Through a Neighborhood Health Center Plan, it is possible to bring together both health and welfare agencies, official and non-official, on a team-work basis, with results of coordination of district services, promotion of constructive health work, and improved understanding among the workers.

2. The principal functions of a health center are to provide:

- (a) Administrative service, official and non-official, including neighborhood health and vital statistics studies.
- (b) Health Education.
- (c) Medical and Dental participation, e.g. Maternity and Child Hygiene, Mental Hygiene, Diagnostic Services, Tuberculosis, Venereal Diseases.
- (d) Preventable Disease Control.
- (e) Public Health Nursing.
- (f) Inspection.

3. Several new and desirable health services may result in a district from the establishment of a health center.

4. It may be desirable to promote treatment service in a district where it is not available or accessible, and to aid in coordination where such service is available and the opportunity is presented.

5. Provision should be made for the current analysis of health needs in a district by trained workers.

6. Close relationships should be established with the local medical and dental professions (See vote of the Committee below).

7. Neighborhood health center committees are essential.

8. Careful plans should be formulated to secure the integration of a district program with central health department service.

While it is possible to develop certain fundamental principles of health center organization and service which may be generally followed, it was emphasized that no single uniform plan will suit in detail all districts. A health center plan must be adapted to fit the local needs of each district. Furthermore, there should not only be studies of the needs of a district before a health center is established, but there should also be developed methods of evaluation of services rendered.

It may be appropriate to state that following a request from the Neighborhood Health Com-

mittee, the Division of Research, on recommendation of the Technical Board of the Milbank Memorial Fund, has undertaken a series of studies in regard to the needs in certain districts, the best public health procedures and types of administrative organization for the new municipal health centers in New York City.

Considerable discussion was given in the conference to the importance of close cooperation with the Medical Profession in the planning and conduct of health center work. As a result, the following statement was adopted:

"Every health center should have as one of its important functions a definite program for the development of cooperation between families and physicians to the end that there shall be more universal participation (outside of official health work) in preventive medicine and health promotion.

"This would involve the development of such a program through county medical societies and the adequate provision of personnel for the organized medical profession."

ON TO NEW ORLEANS

President Johnson has appointed Drs. John A. Card, of Poughkeepsie, and Arthur W. Booth, of Elmira, a Transportation Committee for the American Medical Association meeting in New Orleans, beginning May 9, 1932.

The Committee has arranged for the New York delegation to leave New York on the Pennsylvania Railroad, Saturday, May 7, 1932, at

8:10 A.M., Eastern Standard Time, arriving in New Orleans Sunday evening.

Several Pullman cars have been placed at the disposal of the Committee and tentative reservations for drawing rooms, compartments, or berths may be made by applying to Dr. John A. Card, Poughkeepsie, N. Y.

RENSSELAER COUNTY

A regular meeting of the Rensselaer County Medical Society was held at the Troy Hospital on March 8, 1932. There were forty-five members present.

After a short business session a scientific program was carried out by the members of the hospital staff as follows:

1. Acne Keloid—Dr. F. J. Fagan.
2. Cardiac Arrhythmias—Dr. John J. Quinlan.
3. Post Encephalitic Parkinsonism—Dr. C. J. Handron.

4. Interstitial Keratitis—Dr. J. D. Carrol.

5. Tuberculosis of the Breast; Tuberculosis of the Prostate—Dr. John H. Reid.

Lantern slide demonstrations of gross and microscopic sections—Dr. J. J. Jaffarian.

6. Hydrocephalus—Dr. J. O. Sibbald.

The scientific session was followed by a luncheon provided by the hospital.

WM. B. D. VAN AUKEN, *Reporter.*

(Continued from page 504)

compensation for services to the needy poor are provided for in Section 3480, General Code.

"It is mandatory under this section that a physician attending a person entitled to relief under the poor laws shall notify the township trustees or municipal authorities within three days after medical care is given or such services begin in order to obtain compensation for his services.

"Obviously, in some instances physicians have been put to considerable difficulty to notify the proper officials in writing within the three-day limitation. In some communities, this provision has been liberally construed by township and municipal officials, especially when it has been possible for the physician rendering service to explain why a delay in notification was unavoidable.

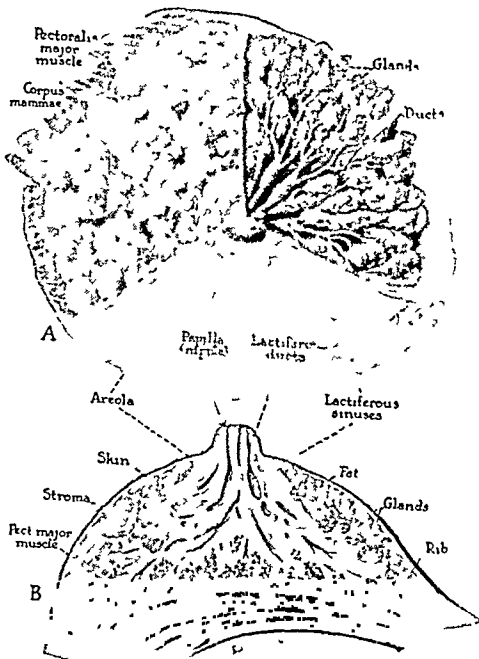
"In some parts of the state, physicians have had considerable difficulty in securing adequate payment for service rendered under the poor law, due to an unsympathetic attitude on the part of township trustees or city officials, or to their lack of a realization of what is adequate compensation for various types of medical service.

"Some county medical societies have ren-

dered their members valuable service in this connection by holding conferences with township and municipal officials at which the questions of fees and other problems having to do with the poor laws have been discussed and a proper understanding reached as to the responsibilities of public officials, not only to indigent persons requiring medical service, but to the physicians rendering such service. In most of the counties where a spirit of understanding and cooperation has been developed by effective and concerted effort on the part of the local medical profession, little difficulty and misunderstanding regarding fees and other functions of both officials and physicians have resulted.

"Any effort to have written into the law a definite fee schedule or a reference to any existing fee schedule has always been discouraged by the Committee on Public Policy of the State Association. That committee has been of the opinion that, if such a fee schedule should be adopted by law, the public generally might feel that those were the standard legal fees for various types of medical services. Also, that such enactment might eventually result in legal involutions of an undesirable and embarrassing nature."

ANATOMICAL STUDIES



MAMMARY GLANDS

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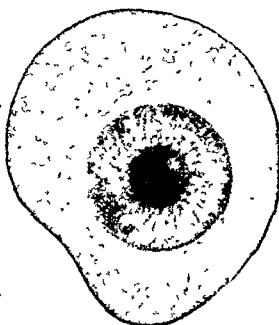
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THE 126TH
ANNUAL MEETING
OF THE
MEDICAL SOCIETY
OF THE
STATE OF NEW YORK
BUFFALO, N. Y.

+*+*+

MAY 23, 24 AND 25
1932

(Continued from page 507—adv. xv)

Ohio and cooperate with local units in coordinating all work in child health and protection, announced that the committee was not prepared as yet to announce the names of organizations selected, but that it hoped within the next few weeks to have compiled a complete list of organizations and agencies. These groups will be asked to name representatives on the central committee which will then undertake the formation of a tangible program to stimulate activity throughout the state in the questions discussed by the conference. Dr. J. H. J. Upham, dean of the College of Medicine, Ohio State University, is a member of the committee undertaking the selection of the groups which will be requested to name representatives to the permanent state-wide committee."

HEALTH EDUCATION IN NEBRASKA

An editorial in the March number of the *Nebraska State Medical Journal*, by Dr. J. S. Welch, Chairman of the Committee on Medical Education of the State Association, sets forth some of the demands upon the Committee, as follows:

"On every side and in the most innocent manner, one sees social medicine pushing itself in upon the practice of the medical profession. Illustration No. 1:

"Lady over phone: 'Hello, Doctor. This is Mrs. Gray. I want to ask you a question. My boy came home from school today with a note from the school nurse. It says he should be immunized against diphtheria, and that we should take him to our doctor and have this done, or if we wish, the school doctor and nurse will do it for us. Now what I want to know is, is this O.K.?' You say it should be done. 'Well, can you do it for us?' Yes. 'What will it cost?' 'Five dollars?' 'Well, if this school (public tax money) will do it for us, why not let them do it? Can they do it safely?' 'Well, thanks, Doctor. If you think they can do it and it should be done, we'll let them do it. Five dollars is five dollars these times. Thanks. Goodbye.'

"Here you have the doctor making the final sale to the patient of a perfectly proper piece of practice, but instead of getting the professional business himself he not only loses the work but pays the school district for doing it.

"Illustration No. 2:

"A letter to Dr. G. B. C. The envelope bears the return sign of the Secretary of the Y. W. C. A. The letter within reads: 'Dear Dr. C. Would it be imposing to ask you to teach a few

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classes for us this season? The Public Health Department has sent us some literature which seems to have resulted from the Child's Welfare Conference at Washington last year, and they urge us to get this information to our women. The facts in the matter are, several women have asked for pre-natal instruction and some others for sex hygiene, some of the very subjects the Public Health Department wish taught. We asked the County Medical Society, and they said neither they nor the State Association had any provision for such instruction. One woman volunteered to get a nurse to do the teaching, and I find she is a good intelligent woman with much practical experience, but she is not even a registered nurse. What can you . . . , etc.

"Here we have the tax-provided school district paying one of our profession to advise them what is safe and sane and proper for the health of our children, and yet we as a profession have set up no machinery even to meet the need, when in reality we should have conceived, first the way to handle it, and then next put the execution in process.

"What evil influences are resulting?

"You say it is taking work away from the doctor to whom it belongs. Yes, but that's not new. Doctors constantly do things for humanity which lessen their practice—prevention rather than cure, constantly illustrates that factor. A much greater evil lies in the constant tendency to 'Hired Doctors,' 'State Medicine,' 'Industrial Medicine,' 'Charity Clinics' (often where charity is not needed). It tends more and more to municipal, county, state and federal hospitals and doctors. And I ask you again to stop and estimate how much the practice of medicine and the care of the sick and injured will degenerate as we go farther into this type of practice. I ask you who will suffer most—the doctor or the people; and every doctor will answer in the same usual altruistic way, 'the people.'

"What can be done about it? Take at once some active step in health education leadership. Set up an organization in the State Association to direct this leadership in county societies, with the Extension Departments of our universities and colleges, who are literally begging the State Medical Association to come to their aid, with health education in meeting thousands of women in mothers' clubs, children and youth 4-H clubs, parent-teacher groups, etc.

"Your committee on Medical and Health Education and your Public Activities Committee are literally shouting these things at the Council and the State Association. These two illustrations are actual facts and can and will be duplicated as space and opportunity present.

(Continued on page 510—adv. xviii)



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(Continued from page 509—adv. xvii)

As a member of both of these committees, I consider it my duty to bring again and again these convictions before your minds. There is no haste and no heat behind this conviction. We respectfully request you to weigh carefully these problems and do some constructive planning. Our plan may not be the best. If not, please help us improve it."

MEDICAL DIRECTOR IN NEBRASKA

The appointment of a Medical Director was discussed at the Annual Councillors' meeting of the Nebraska State Medical Association as reported in the March Journal of the State Society. The Committee on Medical Education sponsored the suggestion, as follows:

"Your committee recommended two important things at the last State Medical Association meeting:

"1. Postgraduate work for doctors over the state.

"2. Early selection of an Executive Secretary or Director, to serve under the Council.

"We were pleased with the earnest consideration given our recommendations. We feel certain they are constructive. We expected difficulties. These appeared. Some were financial. Some based on difference of opinion. Some men felt the plan contemplated too rapid and too big a change. Doubt and general uncertainty necessitated further consideration before obligating our organization. Our committee was pleased to have these recommendations referred for further consideration to a group comprised of the president of the Council, the president of the Association, the secretary of the Association, and one member of our committee.

"It is believed that such an officer (Director) would be of great value to the Nebraska State Medical Association. In addition to the promoting of the educational plan his relationship with the personnel of the organization would enable him to foster a better state of professional health in the county societies, to increase the membership, to interest the members in the vital necessity of adequate protection and to advance the standard of ethical relationship between the members.

"The work of such an officer under the direct control and supervision of the Council could offer relief from much of the drudgery now required of other departments in the organization. It would also avoid duplication of service.

"It is suggested that inasmuch as all of the director's time would not be occupied with the administration of the educational program that a part of the work now done by the Pub-

(Continued on page 511—adv. xix)

(Continued from page 510—adv. cont.)

lic Activities Committee be merged with the work of the educational program thereby securing adequate funds to permanently support this office, and any excess amount derived from the educational program would revert to the general fund.

"Your committee on Medical Education agrees and urges the acceptance of these recommendations

"1 Secure a director or executive secretary
"2 Assign him any tasks under the control of the Council, such as

"(a) Defense Committee work
"(b) Public Activities Committee work
"(c) Certain journalistic duties now done by recording secretary's clerk

"(d) Campaign and legislative work
"(e) Health education through various lay avenues, and

"(f) Later, postgraduate work when acceptable to doctors

"3 Budget this director's salary and expenses from part-time salaries and expense allowances already in our program

"We believe the present budget of the Association would provide or the necessary expense of the office and leave a fairly attractive salary for the director"

MALPRACTICE SUITS IN COLORADO

The March number of *Colorado Medicine* contains the following article on Malpractice Epidemics, in the Secretary's department

"Malpractice suits against doctors appear to constitute a contagious disease, likely to reach epidemic proportions in times of economic stress. Modern history shows this to have been the case in the past. Current experience indicates that we are in the midst of another such epidemic

"It seems to be an axiom of preventive medicine that epidemics of contagious diseases are preventable. It should be an axiom of medical organization that epidemics of malpractice suits are preventable

"Our Committee on Medical Defense has set up for the State Society a comprehensive plan of medical defense which possesses all necessary potentialities. The plan was published in the November and December, 1931, issues of *Colorado Medicine* and in the *Medicolegal Digest* was presented verbally before the State Society at the 1931 Annual Session and at other times before meetings of nearly every county and district society, and finally has been reprinted in a small pamphlet and is being mailed to each member with his 1932 member

(Continued on page 512—adv. cont.)

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(Continued from page 511—adv. xix)

ship card at the time he pays his annual dues. The Committee on Medical Defense has said that hereafter no member may logically argue that he does not understand the plan.

"Yet one more repetition of an extremely important point may be helpful. Do not wait until sued before you notify the Committee and your insurance company. Notify them immediately upon the slightest threat of a suit.

"Although it may at first seem to be a queer attitude to take, the Committee frowns upon our members taking part in the prosecution of malpractice claims against medical cultists. The reason is plain upon a little careful thought. Those who look upon a malpractice suit as the road to easy money consider that all 'doctors' are alike. If newspapers print stories of successful suits against osteopaths or chiropractors, there is an immediate increase in the number of suits and threats against regulars."

THE INDIGENT IN MISSISSIPPI

The Mississippi section of the March number of the *New Orleans Medical and Surgical Journal* contains the following comments on the care of the indigent, by Dr. G. S. Bryan, County Editor of Monroe County:

"Your card asking for news items has just reached me. . . . My communication will, perforce of scarcity of interesting news, be short this time. None of our doctors have been sick, none have married or been divorced, no youngsters have come to claim parental care at their hands. None of our group have gone to the Bermudas, Florida or California. Nor have they gone to Lake Placid for the winter sports. So you see life with us is rather drab and unexciting. The only thing we are concerned about is the recent move on Mr. Hoover's part to discover the cache in which our part of the one billion, three hundred million is so snugly resting. We had fondly hoped that it might not become necessary to loose this money that we have been hoarding, but, of course, we must 'do our duty though the heavens fall.'

"Replying to your inquiry as to my opinion as to whether legislation is necessary as touching doctors and their work, I will say that I hesitate to go on record further than to say conditions, as they now are, do not meet the requirements. Indigent sick in the part of the state with which I am familiar, get a poor break and the overburdened doctor bears the brunt of what help these poor unfortunates get. It is impossible to get them transported to

(Continued on page 513—adv. xxi)

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(Continued from page 512—adv. xx)

hospitals where needed care can be given them. Those whose condition will permit a long trip usually object to leaving their friends to go among entire strangers. And we can not deny or dodge the fact that entire strangers can not be expected to give them the care and attention they so much need. The home doctor is better able because of personal touch and faith to treat these unfortunate people, if he could only have hospital facilities at his command, than is the doctor in charge of the wards of the large charity hospital. And no doctor that I know will refuse the free service that these people must have (if they get any service at all). Politics, either state or local, should not enter into the solution of these weighty problems. The only question that I am willing to consider is that of money. What can we afford? And how can the best be done? I prefer to leave these questions to the men elected to work out all such matters. Just what laws to pass or what bills to propose I am willing to leave to the committee that represents our association.

"These are indeed gloomy and troublous times, but let us be patient and learn to 'labor and to wait.'"

COUNTY SOCIETY ACTIVITIES IN MICHIGAN

The March number of the *Journal of the Michigan State Medical Society* has an editorial enumerating the following activities which have been assigned to the County Societies by the House of Delegates of the State Society:

"1. The creation of a Public Relations Committee that shall solve and adjust local economic problems.

"2. The appointment of a local medico-legal advisor who shall cooperate with the medico-legal committee.

"3. Devising a county plan for the care of indigents.

"4. Securing as members every eligible physician in your county.

"5. Appointment of a legislative committee that will maintain intimate contact with your legislative representatives.

"6. Organization of a Woman's Auxiliary.

"7. Conducting Public Health Educational meetings.

"8. Apply the recommendation of our State committees on Civic and Industrial Relations, Cancer, and Survey of Medical Agencies.

"If every County Society undertakes to institute these activities, 1932 will be a year of commendable organizational achievements. Presidents and secretaries are urged to present these duties to their society and guide their institution."

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FREE CLINICS IN MISSOURI

The subject of free clinics is discussed in the March issue of the Journal of the Missouri Medical Association, as follows:

"For the last several months the economics survey committee of the St. Louis Medical Society has been investigating clinic abuse in St. Louis. The study included personal conferences with those in charge of the administration of clinics; with physicians doing work in dispensaries and social service departments; examination of systems employed in the clinics with special reference to determining the eligibility of those admitted for treatment, and a questionnaire survey of members.

"One hundred eighty-one, or 15 per cent, of the membership of the Society responded to inquiries either by questionnaire or by personal conference. It was found that one hundred of the 181 are engaged in dispensary work and that 88 of them reported a total of 560 hours per week devoted to hospital free service work. Seventy-eight estimated the value of the gratis dispensary work, based on fees in regular practice, as totalling \$342,202. On hundred twelve physicians estimated the value of charity work in their private practice for the year 1930 as totalling \$240,280, or an average of \$2,145 for each physician. On this basis the amount of charity work performed by the total membership of the Society would amount to \$2,456,325.

"The committee endeavored to determine whether this amount of charity was justified. Sixty-five per cent of the physicians estimated that 21 per cent of patients who receive free care are able to pay a private physician; thirty-five per cent varied in their replies from 'a great many' to 'a number could pay a small amount.'

"Replies to the questionnaire indicated that 85 per cent of the physicians did not participate in any investigation of the patient's ability to pay and that 73 per cent believed the methods used to determine the patient's financial condition were inadequate.

"The average of all replies by physicians doing dispensary work indicated that 40 per cent of those admitted to all clinics apply for treatment at more than one clinic. This duplication is fair neither to the public nor to those individuals who subscribe to the support of the dispensaries. It constitutes a waste of money and is most unfair to the members of the profession to require them to give their time and skill under such circumstances, especially as 25 per cent of physicians stated that they had a daily allotment of patients in clinics greater than they can handle."

The Society appointed a committee to secure data on the clinics, and to suggest remedies for the abuses.

NEW YORK STATE JOURNAL of MEDICINE

PUBLISHED BY THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

Vol 32, No 9

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May 1, 1932

MEDICAL SOCIETY OF THE STATE OF NEW YORK ANNUAL REPORTS, 1931-1932

The first installment of the annual reports was printed in the Journal (1 April 15, 1932—that of the Council, page 45)—and those of the Committee on Economics the Committee on Public Health and Medical Education and the Committee on Public Relations, beginning on page 474. The personnel of the Reference Committees appeared on page 501.

REPORT OF THE PRESIDENT

*To the House of Delegates
Gentlemen:*

The year just passed has been one notable for cooperation and understanding in our Medical Society. The solution of our own internal problems has left us free to formulate a constructive program for ourselves and to give aid in solving the general problems of health and welfare of a public nature. First, consideration will be given to our own program.

The work of the Society, of great volume and complexity, is done by standing and special committees, meeting at frequent intervals during the year. The industry and grasp of detail by the chairmen and members of these committees have been a constant source of wonder and admiration. Their reports can only hint at their scope. The business of the Society is safe in their hands. At least ninety-five per cent of the members of the Society are most interested in the work of actually caring for sick people, and though this portion may not be the most articulate it is the portion on which depends the present and future of medicine and the one to which the Medical Society owes most. Its members realize the need for continual re-education and appreciate the work of post graduate education in their behalf, and the high standard of articles in the Journal. They realize that if they are good enough doctors, the economic troubles and threats from the cults will automatically disappear. The addition to the item in the budget for our very efficient committee on scientific work was wise and should be increased. Doctors attend medical meetings in direct ratio to the value of the scientific program.

The external relations of our Society are more complex and for a variety of reasons. First, we are solicited by a wide variety of charitable and

quasi charitable organizations for our aid or recognition as allies in the furthering of their aims. Large sums are spent by some of these organizations for what has come to be known as propaganda and the penetration of the ranks of our members. If we are to have dealings with some of these organizations, the advice of Cassius may well be kept in mind.

"Well, Brutus, thou art noble, yet I see
Thy honorable metal may be wrought, from that
it is disposed,
Therefore 'tis meet that noble minds keep ever
with their likes,
For who so firm, that cannot be seduced?"

The intrinsic weakness of some of the programs of the professional charity workers must be apparent to themselves or they would not think it necessary to hitch on to so many other up and going organizations to tow them along. And one of the best evidences of the value of medicine, is the number trying with more or less success, to hook on.

The work of the Legislative Committee and Executive Officer has been especially efficient and merits only commendation. Good men are made better by time and training. How the world needs them for its work! The present day tendency toward the increase of governmental machinery has spread to medical societies and is shown in the increasing number of committees and the broadening field of their activities. Curtailment and concentration are worthy of thought.

We are the only profession that has surrendered the training in part of our successors to others, and therein lies a defect. Along with the acquirement of the beginnings of a medical education goes the acquisition of ideals and a reali-

zation of what it is all about. That is constant, while what we call medical knowledge, is forever changing and forever to change.

If we are to have physicians, medical students should be trained by physicians and not by investigators. The medical profession as a whole needs investigators. The people need physicians. Because of mistakes in choosing a life work, there is a certain percentage of men graduated from medical colleges who are not fitted to practice and who will seek positions in which their training will not have been in vain. For such, the rapidly increasing number of government positions will furnish a fertile field of endeavor and if the love of red tape and formalities are not master passions, one will not be led to say, like Earl of Surrey in Henry VIII: "If we live thus tamely, to be thus jaded by a piece of scarlet, farewell nobility!"

A few, taking a broader and more comprehensive view of beneficence will become promoters of charities and the administrators of funds left by wealthy people whose money never purchased health and happiness for themselves; but who vainly hope that it may for others. We need not worry for these administrators and promoters,—“verily, they have their reward.”

A more pernicious effect of the power of wealth on the ideals of medicine is to be noted in the subsidies to medical colleges for propaganda purposes. The antidote for this is the loss of face by institutions so subsidized. The public is very keen as to motives and the present depression seems likely to abate the evil somewhat and for a time.

If it has been shown that some of the ills of medicine follow from faulty adaptation and methods of training, the cure is plain. A return to a real preceptor system will discover who are and who are not fitted, and will eliminate some of the unfit, and prevent the disappointment and humiliation of men who are misfits, and divert them into channels leading to happy and useful lives.

The American Medical Association has by classification and rating reduced the number of medical colleges by more than half. The State Medical Society might wisely pass on the curricula of medical colleges as to their fitness to serve from a point of view other than that of laboratories, hours, museums, libraries, etc. Marble and brick, glass and brass, do not make a medical college.

The problems just touched upon belong properly to the Committee on Medical Education and Public Health. Public Health and Public Relations overlap and the joint meetings of these committees the past year have revealed many points of common interest.

If the practice of public health is to be limited to its proper sphere, the Medical Society of the State of New York should help to define that sphere which is growing rapidly at present.

It may be that Public Health consists in furnishing treatment for private diseases and the management of general hospitals and the determining of who shall practice in such hospitals supported by public funds. This idea is so new that the medical profession has not had time to pass judgment on it as yet. Some adjustment of authority between the Department of Education, which grants a doctor the right to practice medicine and surgery in this State, and another department which says that a surgeon must say good-bye to his patient at the door of a publicly owned and supported hospital, should be made. Why the surgeon, and not the obstetrician, internist, etc., is not plain. I know of no more important problem for the joint study of these committees.

These problems lead to the important one of State aid in general,—of the various ways of acquiring other people's property to do with as you wish. No definition of State aid has been given which consists in taking another's property with his knowledge and increasingly grudging consent and returning to him the part not used up in the machinery of collection and distribution.

The people as a whole have suddenly become tax-conscious and are going to watch their tax money through to its final use. The increasing tax confiscations and tax sales of homes point to a time when a citizen can say to his Government:

“You take my life when you do take the means whereby I live!”

The ability of men to govern themselves is being tested by us here and now. We will have freedom only if we are worthy, and it behooves us, the descendants of that first medical man who first had the leisure to think, to give the best that is in us “that this nation shall not perish from off the earth.”

WILLIAM D. JOHNSON, *President.*

April 15, 1932.

REPORT OF THE SECRETARY

To the House of Delegates:

Gentlemen:

Your Secretary has the honor of presenting his seventh annual report.

As the years have rolled on the executive work has steadily increased and the office bids fair to become, in the not-distant future, a "full-time job."

THE SOCIETY

Despite the business depression, the unnecessary worry over predictions of State medicine, the encroachment of hospitals and dispensaries and the actual loss of practice which prevails, the Medical Society of the State of New York has made a decided gain in membership and in income and has continued its earnest enthusiastic work for the welfare of organized medicine with unabated fervor.

The officers and committee men have willingly and loyally given their time and best endeavors to advance the interests of the Society and of the individual members. Their intelligent thoughtful study of the problems which constantly confront us and the constructive ideas with which they built their work have done much to engender a feeling of optimism throughout the Society and to dispel the pessimistic feeling of "whats the use" and "what can we do."

It is only when we come to consider that these men are in the main practitioners of medicine whose living depends upon their professional work that we can understand and appreciate this loyalty and devotion.

As has been pointed out in a previous report even in this good work there are pitfalls to be avoided. Over-enthusiasm and individualism are probably the most serious ones. It must always be borne in mind that a central governing power is an absolute necessity and that the individualist soon loses necessary contact with his fellows and thus becomes devoid of influence.

THE SOCIETY'S OFFICE

The general offices of the Society could be improved by the addition of a room where meetings could be held without interfering with the business of the Society. With the building of the addition to the Academy building, a room of this character could be obtained in the early fall and the Secretary earnestly recommends to the Trustees the obtaining of such quarters. At present when committee meetings or conferences are held in the Society's rooms the office force has to cease work and in some instances has to be relieved from duty part of the day. This is not conducive to the proper conduct of business nor to the peace of mind of the Secretary.

There have been no changes in the personnel of the office force during the year and the Secre-

tary takes pleasure in again stating that a more cheerful, willing and efficient staff does not exist.

To them and to Miss Baldwin the Secretary extends his sincere thanks.

FINANCIAL DEPARTMENT

In these days when the general topic of conversation is the fall in value of securities and the lack of dividends, it is indeed gratifying to read the reports of the Treasurer and the Board of Trustees and realize that they have been actuated by safe and sane policies.

The Society is to be congratulated upon having such men in charge of its finances.

LEGAL DEPARTMENT

During the past year, Mr. Lorenz J. Brosnan has continued his excellent work and has proven himself in every way as a friend, counsellor and lawyer worthy of the confidence which the Society has reposed in him.

Not only have letters of commendation been received from those whom he has defended but favorable comments on his work have been made by lawyers who have opposed him.

COMMITTEES

Mention has already been made of the excellent work done by the committees and your Secretary feels that he can voice the appreciative thanks of the Society. He does this advisedly and from personal experience as from time to time he has sat with many of the committees.

The Secretary, however, wishes to offer constructive criticism and a recommendation. Great care should be exercised by the House of Delegates in the creating of special committees. In several instances such committees have been created without considering the relative expenditure of time and money and the worth of work supposed to be accomplished. The records show that many of these committees have never met.

The Secretary recommends that the Special Committee on Periodic Health Examination and the Special Committee on Physical Therapy be abolished and their work made part of that of the Committee on Public Health and Medical Education. The Chairmen of both of these committees have been consulted and deem this a wise move. There may perhaps be other committees that could be combined under a single appropriation without affecting their efficiency.

It is recommended that the incoming Executive Committee make a study of such matters.

In his last report your Secretary recommended the appointment of a committee to revise the Constitution and By-laws which recommendation was adopted and the committee appointed. This committee has given individually and collectively conscientious study and careful attention to the

details of this revision and the Secretary of the Committee will present it to the House.

As your Secretary was a member of this committee, it would not be becoming for him to make any comment further than to praise the work done by the other members of the Committee and to recommend it to the favorable consideration of the House.

DISTRICT BRANCHES AND CONFERENCES

Continuing the long-established custom of attending the District Branch Meetings your Secretary visited six of the Districts but owing to the exigencies of practice regretfully found himself unable to attend the other two. He was gratified to find the same earnest interest manifested by the members and the scientific programs of the highest order.

The attendance on these Branch Meetings has steadily increased during the past few years due probably to the business-like method which has been adopted for their government. The former haphazard organization is a thing of the past. The selection of officers has been done with an eye to the welfare of the district and meetings of the Executive Committees have been held regularly.

One excellent feature of each meeting has been a short address by the Chairman of the Insurance Committee, Dr. John A. Card and it is recommended that Dr. Card be authorized to continue these talks.

The Conference of the County Secretaries was well attended and the discussion showed that the secretaries had a much better grasp and a keener understanding of the general affairs of the Society than before the custom prevailed.

On account of the benefit derived by the secretaries and incidentally by the county societies, it is recommended that these conferences be continued.

The Conference of the State Secretaries and Editors held under the auspices of the American Medical Association in Chicago was attended by the Editor-in-chief, the Executive Editor and the Secretary all of whom took active part in the various discussions.

The Secretary also attended the Tristate Conference held in New York City.

LEGISLATION

It may be claimed that this subject has no place in the Secretary's report but such claim cannot be made by those who recognize the extreme importance of a close relationship between the Secretary's office and the Legislative Bureau.

These have been parlous times filled with extremely critical moments and it has been only through the intelligent direction of the Chairman of the Legislative Committee and the able handling of complicated situations by the Executive Officer that the Society was able to pull through

the session unscathed by any pernicious or obnoxious acts of legislation.

To Dr. Lawrence is due the fact that every measure affecting the profession unfavorably or expressing views on matters of public health adverse to those held by the Society were defeated. As an example of his excellent work attention is called to the failure of the osteopathic bill which had such strong backing as that of the Board of Regents.

SPECIAL MEETING OF THE HOUSE OF DELEGATES

Pursuant to the decision of the Council, a special meeting of the House of Delegates was convened in the Hotel Ten Eyck, Albany at 2 P.M., Thursday, January 14th, for the purpose of considering the report of the Joint Committee on the report of the Governor's Special Health Commission.

After free and full discussion the report of the Joint Committee was adopted.

MEMBERSHIP STATISTICS

Membership, December 31, 1930	12,382	
New Members, 1931.....	744	
Reinstated Members, 1931...	266	
		<hr/>
		13,392
Deaths	212	
Resignations	78	
		<hr/>
		290
		<hr/>
		13,102
Dropped for non-payment of dues: December 31, 1931....		*516
		<hr/>
		12,586
Elected after October 1, 1931, and credited to 1932		382
		<hr/>
		12,968

* The delinquents are paying daily. 122 have already been reinstated, which makes the number of dropped members practically the same as last year with an increased membership of 450.

The list of honor counties is as follows: Albany, Cayuga, Chenango, Columbia, Greene, Lewis, Orleans, Rockland, Schoharie, Schuyler, Tompkins and Washington.

The Secretary extends his thanks to the Executive Officer for his ever-ready support and willing co-operation; to the Councillors for their courtesy and hospitality at the District Meetings and to the President, the members of the Executive Committee and other officers whose encouragement and friendship have lightened his burden and made his work a pleasure.

Respectfully submitted,

DANIEL S. DOUGHERTY,
April 15, 1932. Secretary.

REPORT OF COUNCIL

To The House of Delegates

Gentlemen

The Council has the honor of presenting the following annual report which includes those of its Executive Committee, Committee on Publication and Committee on Insurance.

In accordance with Chapter IV of the By laws the Council convened in the Syracuse Hotel, Syracuse, June 2, 1931, for the purpose of organizing for the ensuing year.

Pursuant to the provisions of the By law governing the constitution of the Executive Committee, the following members of the Council, nominated by the President, were elected to serve with the officers therein specified as said Executive Committee, John A. Card, Arthur J. Bedell, Louis A. Van Kleeck, Augustus B. Smyth and W. Ross Thomson.

The appointment of members of the standing committees was referred to the Executive Committee.

A regular meeting was held at the State Society's rooms, New York City, Thursday, December 10, 1931.

The most important business transacted at this meeting was as follows:

The confirmation of the appointment by the President of a committee of five to meet with a similar committee from the New York State Society of Industrial Medicine for the study of problems arising from Workmen's Compensation.

The adoption of the following resolution:

"RESOLVED, THAT the principles governing publicity adopted by the Press Publicity Committee and published in the NEW YORK STATE JOURNAL OF MEDICINE of December 1, 1931 shall be binding upon every member of the Medical Society of the State of New York, and be it also

"RESOLVED, THAT any member of the Medical Society of the State of New York who knowingly violates those principles or who is guilty of a violation of them after warning by competent authority shall be subject to investigation by the Censors of his county medical society and be subject to such discipline as the Comitia Minora of the county society may determine."

It was decided to refer the report of the Joint Committee to consider the report of the Governor's Special Health Commission when completed, to a special meeting of the House of Delegates and the President, Speaker and Secretary were appointed a committee to determine the place and date. This committee met immediately and reported the selection of Albany on January 11, 1932.

The Society having been notified that in the re-appointment of members of the House of Delegates of the American Medical Association, it was entitled to an increase of two delegates and the Legal Counsel having given the opinion that the Council had the power to elect such delegates, Drs. Frederic E. Sondern and Edward R. Cumiffe were placed in nomination and duly elected to serve during 1932.

In accordance with Section 1265 of the Education Law, Drs. Frederick H. Flaherty and Austin G. Morris were nominated to fill the vacancies on the Grievance Committee occurring on December 31, 1931. To fully comply with the law four other names were also submitted.

Executive Committee

The Executive Committee has held regular meetings on the second Thursday of each month, at the first of which it organized by electing William D. Johnson Chairman, and John A. Card, Vice Chairman. At this meeting, Orrin Sage Wightman was appointed Editor in chief, Frank Overton, Executive Editor, Lorenz J. Brosnan, Legal Counsel and Thomas H. Clearwater, Attorney, also as Publication Committee, Charles H. Goodrich, Daniel S. Dougherty and Charles Gordon Heyd, as Committee on Budget, the Speaker, the Secretary and the Treasurer and as Committee on Insurance John A. Card, Charles Gordon Heyd and Frederic E. Sondern.

Much of the business transacted during the year has been necessarily of a routine character, the Committee acting as Council ad interim being essentially the business and administrative body of the Society.

Although the work of the Executive Committee is routine, it is extremely important and the Committee has at all times given it serious consideration.

As a detailed report would be unnecessary waste of time and space only the more important decisions and actions can be mentioned.

Under date of June 18th the annual budget submitted by the Budget Committee was approved and ordered submitted to the Trustees.

The renewal of the contract with the Executive Officer was approved and referred to the Trustees.

The following nominations of committee men were made by the President and endorsed by the Committee:

Scientific Work—George W. Kosmak

Public Health and Medical Education—George W. Kosmak, Mahlon H. Atkinson, Leo F. Schiff, William A. Groat, Martin B. Tucker, Clayton W. Greene, Edward G. Whipple and Nellis B. Foster.

Legislation—John J. Buettner and Marshall Clinton.

Arrangements—L. Edward Villiaume, Nelson G. Russell, Robert P. Dobbie, Clarence H. Mackey, Milton G. Potter, William F. Jacobs, Frank N. Potts and James E. King.

Medical Economics—Frederic E. Elliott, Morris Rosenthal, Donald S. Childs and Joseph P. Garen.

Public Relations—Oliver W. H. Mitchell, Augustus J. Hambrook, George M. Fisher and William H. Ross.

Medical Research—Augustus B. Wadsworth, Burton T. Simpson, Simon Flexner, Winfield W. Scott, Edwin MacD. Stanton and Frederic E. Sondern.

Physical Therapy—Richard Kovacs, Chairman, Philip L. Forster, Guy H. Turrell, Frederic E. Elliott, Lee A. Hadley, George A. Leitner and Virginia Tannenbaum.

Periodic Health Examination—C. Ward Crampton, Chairman, Walter D. Ludlum, Walter A. Calihan, Guy H. Turrell, Harlow Brooks, Luther F. Warren, Nelson G. Russell, Joseph D. Olin, Marion C. Potter and W. Worthington Herrick.

Nurse Problem—Nathan B. Van Etten, Chairman, Andrew Sloan, J. Richard Kevin, George W. Kosmak, George R. Critchlow, Arthur S. Chittenden, George L. Brodhead and Robert P. Munson.

Prize Essays—Edwin MacD. Stanton, Chairman, Edgar A. Vander Veer and Albert C. Snell.

Insurance—John A. Card, Chairman, Charles Gordon Heyd and Frederic E. Sondern.

Press Publicity—Samuel J. Kopetzky, Chairman, Edward C. Podvin, Alec N. Thomson, Carl Boettiger, James N. Vander Veer, Arthur J. Bedell, Edwin Mac D. Stanton, Leo F. Schiff, Hyzer W. Jones, Lynn B. Chase, Charles D. Ver Nooy, Arthur S. Chittenden, Walter A. Calihan, John R. Williams, Louise Beamis and Peter J. Di Natale.

Under date of September 10th, the appointment of Drs. C. Hendee Smith, Walter D. Ludlum, John A. Card, Henry L. K. Shaw, Wardner D. Ayer, Stanhope Bayne-Jones and Clayton W. Greene to serve as members of a sub-committee to work with the State Department of Health during the poliomyelitis epidemic was confirmed.

Dr. Edward E. Haley was appointed to act as Secretary of the Committee on the Revision of the Constitution and By-Laws and Dr. Herbert A. Smith of Buffalo was appointed Chairman of the Committee on Arrangements.

It was decided that the next Annual Meeting be held in Buffalo, May 23, 24, and 25, 1932.

On October 8th, Drs. John A. Card, Charles Gordon Heyd and Frederic E. Sondern were ap-

pointed a committee to cooperate with the Saratoga Springs Commission.

Under date of January 14th, 1932, Dr. George W. Kosmak was appointed to represent the State Society at the hearings on bills pending in Congress to provide federal subsidies for rural maternal and infant hygiene.

Drs. Nathan B. Van Etten, George L. Brodhead and Andrew Sloan were nominated for membership on the Nurse Advisory Council.

The President announced the appointment, in accordance with a resolution of the Council, of Drs. Charles H. Goodrich, Thomas H. Cunningham, George Chandler, Ross G. Loop, Homer Knickerbocker and Sherman M. Burns to meet with a similar committee for the New York State Society of Industrial Medicine to discuss the problems arising from workmen's compensation.

Under date of February 11, 1932, Dr. Peter Irving was appointed a committee to confer with the Joint Committee of the Dental and Medical Professions regarding the advisability of holding a joint conference under the auspices of the Medical Society of the State of New York.

Drs. John A. Card and Arthur W. Booth were appointed a Committee on Transportation to the meeting of the American Medical Association in New Orleans.

At this meeting several resolutions regarding legislation were passed, the most important of which was to the effect that the Society is absolutely opposed to any osteopath bill containing a waiver whereby the safety of public health and welfare might be endangered by allowing the use of surgical instruments and the prescribing and administration of drugs by those untrained and unskilled.

Under date of March 10, 1932, the Insurance Committee were instructed to prepare an article for the State Journal on Mr. Lloyd Paul Stryker's book, "Courts and Doctors."

Pursuant to a resolution that the President be empowered to appoint a committee to study the publication of the Journal and Directory with power to ask such assistance as they may deem necessary and report back to the Executive Committee, the President appointed Drs. John A. Card, Daniel S. Dougherty and Frederic E. Sondern.

Owing to the ruling that all inquiries and requests for opinion sent to the Counsel by county societies or individual members should be presented to the Executive Committee before reply, considerable time was given at each meeting to the discussion of these problems.

During the year the committee remitted the dues of several members unable to practice on account of long continued illness.

Insurance Committee

Although this Committee held several meetings and conferences, no important issues have arisen and no new policy has been adopted.

All correspondence relating to insurance problems was referred to them and handled in a commendable manner.

Publication Committee

This Committee has met in conference with the Editors whenever occasion demanded and the publication work of the Society has proceeded harmoniously.

It is recorded with gratification that although it was necessary to publish a larger edition of the Directory owing to the steady increase in membership and in spite of the inclusion of the Constitution and By-Laws and the Principles of Professional Conduct, the total expense of the Directory for this year is only a small amount in excess of last year and would have shown a decrease if it had not been for a considerable loss in the revenue received from advertisements and sales.

The report of the Journal written for the Committee by the Executive Editor is here presented.

The Journal

The NEW YORK STATE JOURNAL OF MEDICINE has maintained its usual balance in the size of its several departments, as will be seen in the following table showing their number of pages during the past three years.

	1929	1930	1931
Scientific	639	537	573
Editorial	73	74	73
Medical Progress	96	96	96
Legal	68	62	70
News	207	220	272
Our Neighbors	127	137	153
Daily Press	48	48	48
Book Reviews	48	46	44
Advertising	653	615	633

The Journal has been conducted in accordance with the policy of the Executive Committee that the Journal shall fully reflect the activities of the Medical Society of the State of New York and its constituent county societies, and also shall report the activities of other State Societies as

revealed in their own Journals. Approximately one third of the Journal is devoted to these activities. The items are chosen for their importance and timely news, and every effort has been made to publish them promptly while they are "live" news.

The amount of space given to news items is considerably greater than that in any other year. The reason for the increase is the fact that the Societies are doing more work than ever before.

The county medical societies have shown a gratifying response to the request of the House of Delegates that each one shall appoint a representative to report the meetings to the State Journal. (Journal, July 1, 1931, page 825.)

The standard of the Journal in the choice of news items on public activities is that they shall have a permanent value, worthy of perpetuating in an index. Great efforts have been made to index all the items so that they may be available for easy reference. Four forms of index have been used.

1. An annual index of society activities. That of 1931 fills seven pages.

2. A quarterly index for current use and convenience.

3. Cross references to previous activities.

4. Special indexes of activities extending over months or years,—as for example, the index to the Governor's Health Commission, published in the Journal of October 1, 1931, page 1200.

Our Journal has been a pioneer in specializing in the publication of medical society activities, and its index of these activities is practically the only one in existence.

Special efforts have been put forth to make the articles in the scientific department useful to general practitioners who constitute the great majority of the members of the State Society. Authors and contributors are to be commended for their attitude of cooperation with the editors.

Advertisers continue a friendly attitude toward the Journal as is shown by the fact that the receipts from advertising in 1931, the year of financial depression, have been almost as great as those of 1929, the year of prosperity.

Respectfully submitted,

D S DOUGHERTY,
Secretary

April 15, 1932

BALANCE SHEET, MARCH 31, 1932

JOURNAL ACCOUNT FOR TWELVE MONTHS ENDED MARCH 31, 1932

DIRECTORY ACCOUNT FOR TWELVE MONTHS ENDED MARCH 31, 1932

Expenses		Income	
Publication-Printing	\$13,173.34	Advertising	\$ 4,035.00
Salaries	4,892.82	Sales	3,452.00
Commissions	675.25	Income from Dues	13,156.00
Discounts	23.25		
Delivery	1,521.28		
Stationery	473.10		
Postage	469.70		
Bad Debt Charged Off	60.00		
Sundry Expense	83.64		
	<u>\$21,372.38</u>	Net Cost of Directory	729.38
			<u>\$21,372.38</u>

REPORT OF THE TREASURER

STATEMENT OF INCOME AND EXPENSES FOR TWELVE MONTHS ENDED MARCH 31, 1932

EXPENSES

Committee on:	
Legislation	\$ 5,671.77
Public Health and Medical	
Education	9,285.89
Medical Economics	2,030.63
Physical Therapy	782.87
Periodic Health Examination	1,213.36
Scientific Work	295.40
Public Relations	1,767.31
Medical Research	235.90
County Secretaries' Conference	373.34
Tri-State Conference	94.65
Special Meeting, House of Delegates ..	83.00
District Branches	2,432.24
Special Appropriation—District	
Branches	200.00
Executive Officer's Salary	9,000.00
Executive Officer's Expenses	1,404.46
Secretary's Honorarium and Expenses ..	3,600.00
Salaries—General	14,178.75
Legal Expenses	14,338.49
Traveling Expenses:	
A. M. A.	208.59
General	3,328.63
Rent	2,900.06
Stationery and Printing	893.76
Telephone	180.96
Auditing	525.00
Postage	654.60
Annual Meeting—1931	585.24
Custodian Fees (Bonds)	116.00
Office and Sundry Expenses	832.71
Total	<u>\$77,213.61</u>
Net Cost of Journal Transferred from Journal Account	11,933.95
Net Cost of Directory Transferred from Directory Account	729.38
Total	<u>\$89,876.94</u>
Excess of Income Over Expenses Transferred to Surplus	19,834.74
	<u>\$109,711.68</u>

INCOME

Annual Dues-Arrears	\$704.00
Annual Dues—1930	1,370.00
Annual Dues—1931-1932	<u>129,270.00</u>
Total Dues	<u>\$131,344.00</u>
Less:	
Dues Transferred to Journal Account	13,156.00
Dues Transferred to Directory Account	<u>13,156.00</u>
Net Dues	<u>\$105,032.00</u>
Interest on General Fund	
Investments	3,655.92
Interest on Bank Balances	266.70
Clerical Work	250.55
Annual Meeting—1932	<u>506.51</u>

\$109,711.68

The above accounts have been audited and found correct by Wolf & Company, C.P.A., New York State.

Respectfully submitted,

FREDERIC E. SONDERN,
Treasurer.

THE REPORT OF THE BOARD OF TRUSTEES

To the House of Delegates,
Gentlemen:

It is unnecessary to recall to you the profound losses that have occurred in the value of securities in the world's markets in the past year. The average percentage loss of all domestic bonds listed on the New York Stock Exchange has been approximately fifty-two (52%) per cent as of March 31st, 1932.

It is indeed gratifying, then, to be able to report that the percentage loss on the bonds held as investments by this Society has been as of the same date only 26.8%. This fact is a tacit testimony to the care and capacity of the Investment Committee of this Board and their financial endeavors.

Your Board has invested an additional Ten (\$10,000) Thousand Dollars during the past year accrued from interest on investments, making a total investment at cost figures of \$126,394.01, all in bonds, a majority of which are legal for savings banks and trust funds according to the law of the State of New York. There has been no default in interest payment on our investments within the past year.

Our financial condition at the conclusion of this administrative year may then be said to be satisfactory taking into consideration all adverse factors as is shown by the tabulated investment summary appended to this Report.

The Society has been very fortunate for many years in having secured the services of Treasurers of great financial acumen, continuity of purpose and devotion to the affairs of the Society. It is not too much to say that the present incumbent has for the many previous years of zealous service to the profession and to the Society in other capacities shown his outstanding ability; in his present office his great financial knowledge,

foresight and judgment have been exceeded by none and equaled by few.

Your Board has endeavored to the best of its ability to carry out the directions of the House of Delegates and its subordinate bodies, the Council and the Executive Committee, with a due regard to the financial integrity and preservation of the funds of the Society for unproductive expenditures. In the performance of this duty inevitable differences of opinion arise between our Officers, Chairmen of Committees and this Board, which we have endeavored to adjust with due regard for the duties placed upon us by the Constitution and By-Laws.

It is earnestly recommended to the House and through it to the Council and the Executive Committee that in all of its proposals involving the expenditure of funds for the ensuing year most careful consideration be given to an appraisal of the value to be obtained by the proposed measure against the actual possible expenditure for carrying it into effect. It seems to the Board that the present time is one to consider the expenditure of funds for the most urgent purposes only and for the most careful conservation of invested moneys.

The Board wishes to express its commendation and heartfelt thanks to the Treasurer, Dr. Fred-
eric E. Sondern, and to the Secretary, Dr. Daniel
S. Dougherty. Without the Manager, Miss Bald-
win, the Society would be very like a ship with-
out a quartermaster.

Respectfully submitted,
JAMES F. ROONEY, *Chairman*,
ARTHUR W. BOOTH,
NATHAN B. VAN ETEN,
GRANT C. MADILL,
HARRY R. TRICK.

March 31, 1932.

Security	INVESTED FUNDS		Par Value	Cost	Market Value
Fourth U. S. Liberty Loan 4¼% 1933-38.....	\$	10,000.00	\$	9,841.26	\$10,022.00
American Tel. & Tel. Co. 35 yr. S/F G/D 5% 1960.....		8,000.00		8,251.25	7,910.00
Arkansas Power & Light 1st & Ref. Mtge. 5% 1956.....		3,000.00		2,876.25	2,400.00
Chicago Milwaukee & St. Paul Ry Co. Gen. Mtge. G/B Ser. "A" 4% 1989..		4,000.00		3,360.00	2,420.00
Cleveland, Cincinnati, Chicago & St. Louis Ry. Co. Ref. & Imp. Ser. "D" Mtge. Bd. 5% 1963.....		5,000.00		5,181.25	3,800.00
Consolidated Gas Co. G/D 5½% 1945.....		3,000.00		3,185.00	3,120.00
Erie Railroad Co. Conv. 50 yrs. Ser. "A" G/B 5% 1953.....		5,000.00		4,317.50	2,000.00
International Great Northern R.R. Ser. "B" 1st Mtge. 30 yr. 5% 1956.....		3,000.00		2,850.00	855.00
New Orleans Texas & Mexico Ry. 1st Mtge. G/B Ser. "B" 5% 1954.....		5,000.00		5,006.25	1,550.00
New York, New Haven & Hartford R.R. Co. 1st Ref. Mtge. G/B 4½% 1967		5,000.00		4,596.50	3,300.00
New York Power & Light Corp. 1st Mtge. 4½% 1967.....		5,000.00		4,575.00	4,368.75
New York Steam Corporation "A" 1st Mtge. 6% 1947.....		3,000.00		3,240.00	3,138.75
Norfolk & Western Ry. Co. 1st Cons. Mtge. 4% 1996.....		3,000.00		2,835.00	2,647.50
Northern Pacific Ry. Co. Prior Lien Ry. & Land Grant 4% 1997.....		3,000.00		2,763.75	2,291.25
Northern Pacific Ry. Co. Ref. & Imp. Ser. C & D 5% 2047.....		8,000.00		8,647.50	5,840.00
Pennsylvania Railroad Co. Cons. Mtge. 4¼% 1960.....		3,000.00		3,131.25	2,850.00
Puget Sound Power & Light Co. 1st & Ref. Mtge. Ser. "A" 5½% 1949.....		3,000.00		2,955.00	2,325.00
St. Louis, San Francisco Ry. Cons. Mtge. Ser. "A" 4½% 1978.....		5,000.00		4,293.75	850.00
Standard Oil of New Jersey Deb. 20 yr. Gold 5% 1946.....		6,000.00		6,176.25	6,097.50
So. California Edison Co. Ref. Mtge. 5% 1952.....		5,000.00		5,150.00	4,787.50
Utah Power & Light Co. 1st 5% 1944.....		3,000.00		3,022.50	2,430.00
Utilities Power & Light Co. G/B w/w 5% 1959.....		3,000.00		2,520.00	821.25
Wabash Ry. Co. Ref. & Gen. Mtge. Ser. "C" 4½% 1978.....		5,000.00		4,300.00	400.00
Western Union Tel. Co. 25 yr. Gold 5% 1951.....		5,000.00		5,050.00	2,931.25
New England Tel. & Tel. Co. 30 yr. 1st Mtge. G/B Ser. "A" 5% 1952.....		3,000.00		3,356.25	3,067.50
Atchison, Topeka & Santa Fe R.R. Co. Gen. Mtge. 4% 1995.....		2,000.00		2,010.00	1,725.00
Illinois Bell Tel. Co. 1st & Ref. Mtge. Ser. "A" 5% 1956.....		3,000.00		3,202.50	3,067.50

REPORTS COMMITTEES ON SCIENTIFIC WORK AND LEGISLATION

To the House of Delegates:

Gentlemen:

Your Committee on Scientific Work presents the results of its long and arduous deliberations in the form of an attractive, stimulating and educational program.

This year we have correlated the three great divisions of medical instruction.

1. *A Clinical Day* has been arranged by the local Buffalo Committee. By permission of the Council this innovation is inaugurated. Experience has proven that clinical sessions provide the most easily assimilated form of medical food. The supply of mental exhilaration and nourishment will be unlimited. All branches of medicine will be represented and we are convinced that every one who attends these clinics will be amply repaid. The work of our Buffalo confrères will be placed before us by means of operations and discussions. This Clinical Day is Monday, May 23rd. The details of the program will be posted so that every member can select the part which appeals to him.

2. *Scientific Exhibit.* This exhibit will be on display in the foyer of the Hotel Statler from Monday morning, May 23rd, until Wednesday night, May 25th. Competent demonstrators will explain a great variety of interesting things. The list of exhibitors appears in the program.

3. *Scientific Assembly.* The Sessions of the Society are divided into two groups, General and Special.

General Sessions will be held in the ballroom of the Hotel Statler at two o'clock, Tuesday and Wednesday.

The Tuesday meeting will be opened with an address by Dr. E. Starr Judd, President of the American Medical Association. The remaining part of the afternoon will be devoted to a Symposium on "The Therapeutic Use of Biological Products" presented by unusually well qualified leaders who will relate their personal experiences and summarize their beliefs.

Wednesday afternoon Session will be a "Therapeutic Symposium." This will be a unique experiment, clinicians of wide experience will tell how they treat certain diseases.

On Tuesday and Wednesday mornings the separate Sections will meet for the study of their special problems. The programs reflect the serious endeavor of the separate chairmen to secure trained speakers.

A new *Session on Radiology* is started this year under the very competent supervision of Dr. Joseph M. Steiner.

Your chairman takes great pleasure in expressing his indebtedness to all the members of the committee for their efficient cooperation, their suggestions and their unfailing courtesy and to all who have assisted in the preparation of exhibits and planned the clinics.

Respectfully submitted,

ARTHUR J. BEDELL, *Chairman.*

April 15, 1932.

REPORT OF THE COMMITTEE ON LEGISLATION

To the House of Delegates:

Gentlemen:

It gives us great pleasure to report to you that the year 1931-1932 has been one of the banner years in the history of the Committee on Legislation. Beginning with imminent and open threats from the osteopaths, physiotherapists and chiropractors, we were successful in defeating the osteopath and physiotherapy bills and creating an atmosphere which made chiropractors decide not to introduce their bill. This result was made possible by the unprecedented, wholehearted, co-operation of the members of County Medical Societies through their legislative chairmen. For this the Chairman of the Committee on Legislation extends his sincere thanks.

The osteopaths of the State of New York have promised to have their schools require two years premedical college work after 1935, in return for the support of the Department of Education of the State of New York, of the present osteopathic

bill in the Legislature. After considerable discussion the Department of Education agreed to this arrangement. An effort was made to have the Medical Society of the State of New York concur in this agreement. Since the osteopathic bill was absolutely sure of passage anyway, it was the best that the State Medical Society could do under the circumstances. The officers of our Society and the members of the Committee on Legislation, at an informal conference with the Department of Education, decided that the Medical Society of the State of New York was pledged to uphold the principle of a minimum standard of education for all medical practitioners, and one cannot compromise with a principle.

The fact that the osteopathic bill was defeated this year should convince the members of the medical profession that the State Legislature will always support them in upholding the high standard of medical education if only the doctors would let their wishes be known to their legislators clearly and emphatically.

The constant threat of the anti-vivisectionists must be taken seriously by every one who is interested in the advance of medical science. The movement is dangerous for two main reasons.

1. It is supported by a permanent endowment fund. As long as the fund lasts, there will be a group who will be interested in keeping the movement alive.

2. It is symbolized by a high ideal (prevention of cruelty). We know that the ideal is false and has no foundation in fact, but we must realize that many of the supporters are sincere and are motivated by a high sentiment. Individuals and nations have sacrificed "their all" for less plausible ideals (*war to end war*).

Most, if not all the advances that have been made in public health, sanitation and hygiene have been made possible through animal experimentation. The public should be aroused to the importance of this work for its own welfare. The interest of this work to the medical profession is purely scientific. Its interest to the public is vital. The medical profession must no longer carry on this fight single-handed. It is not fair to us, and we are likely to be worn down and defeated by this fanatic group.

Recommendation: Every County Medical Society, Academy of Medicine, and other scientific group should appoint an influential committee

whose purpose it shall be to interest and *organize* the leading citizens of their community for the protection of the public against these senseless fanatics, bigots and quacks who are forever threatening to undo all that has been accomplished in public health, sanitation and hygiene.

A résumé of the 1932 legislation by Dr. Lawrence has been published in the April first issue of the NEW YORK STATE JOURNAL OF MEDICINE, page 412, and I will not bore you by repetition.

The Committee on Legislation desires to emphasize the following conclusions:

1. The Legislature of the State of New York will always support the medical profession in upholding the high standard of medical education, if physicians will let their wishes be known, clearly and emphatically, to their individual legislators.

2. The medical profession must no longer carry on the fight of the public single-handed, but must arouse and organize the leading citizens in all communities for the support of medical ideals.

With grateful thanks to the members of the Committee on Legislation and the members of the County Committees, and all our friends throughout the State for their hearty cooperation, this report is respectfully submitted.

HARRY ARANOW, *Chairman*.

April 15, 1932.

REPORT OF THE COMMITTEE ON MEDICAL RESEARCH

To the House of Delegates:
Gentlemen:

In behalf of your Committee on Medical Research I have the honor to present the following report:

During the year, your committee was actively engaged in opposing the efforts of the anti-vivisectionists to secure the passage of a law by the New York State Legislature to prohibit the use of living dogs in properly conducted experiments and investigations in medical schools and universities of the State. While the Legislature was in session, the same bill was introduced three times, and the antivivisectionists maintained a persistent lobby in its favor until the last days of the session.

The first bill was introduced into the Assembly by Mr. Vaughan. In presenting opposition to this bill, your committee was ably supported by physicians and other influential citizens, by institutions engaged in medical research and teaching, by county medical societies, by the New York State Association of Public Health Laboratories, and by the Veterinary Medical Society of the State of New York. A hearing on the Vaughan Bill was held before the Committee on

Codes in the Assembly on February 9th. Members of the committee and a number of supporters of the opposition to the Vaughan Bill appeared at the hearing. Those who presented the arguments against the bill were; Dr. Simon Flexner, Director of the Rockefeller Institute for Medical Research; Dr. Peyton Rous, Member of the Rockefeller Institute for Medical Research and representative of the New York Academy of Medicine; Dr. Florence R. Sabin, Member of the Rockefeller Institute for Medical Research and Member of the National Academy of Science; Dr. Thomas Parran, Jr., Commissioner of Health of New York State; Dr. George H. Whipple, Professor of Pathology and Dean University of Rochester, School of Medicine and Dentistry; Dr. G. Canby Robinson, Director, New York Hospital-Cornell Medical College Association; Dr. John Wyckoff, Professor of Medicine, New York University and Bellevue Hospital Medical College; Dr. John J. Morton, Professor of Surgery, University of Rochester, School of Medicine and Dentistry; and Dr. Walter L. Mattick, New York State Institute for the Study of Malignant Diseases.

Shortly after the hearing on the Vaughan Bill,

an identical bill was introduced into the Assembly by Mr. Bernhardt. No hearing was held on this bill.

The Committee on Codes in the Assembly voted against both of these bills.

The third bill, with the same wording as the Vaughan and Bernhardt bills, was introduced into the Senate by Mr. Wicks. No action was taken on the Wicks Bill until near the close of the session. A vote was then asked for in the Committee on Codes in the Senate. We were informed that there were not enough votes to secure release of the bill from this committee.

Your chairman wishes to call attention to the services rendered the State Medical Society,

medical institutions, and the cause of medical progress and human and animal welfare by the Legislators who were convinced that the Vaughan, Bernhardt, and Wicks bills were detrimental to these interests. They maintained their stand against an unusually active general and political agitation carried on by the antivivisectionists.

The New York Academy of Medicine and the Committee on Legislation of the Society gave every possible aid to the work of your committee. Your chairman wishes to thank Dr. Joseph S. Lawrence, Executive Officer of the Society, for his constant and valuable assistance.

Respectfully submitted,
April 15, 1932. S. BAYNE-JONES, *Chairman*.

REPORT OF THE COMMITTEE ON PRESS PUBLICITY

To the House of Delegates:

Gentlemen:

The Press Publicity Committee created by the House of Delegates at the last annual meeting has made considerable progress in its program for the control of medical publicity.

Following the first meeting of the committee on November 10, 1931, sub-committees were formed in every District Branch, with representation from the constituent county societies of the respective districts. These sub-committees supervise radio talks by physicians and articles by medical men appearing in lay periodicals, each sub-committee directing the publicity of doctors in its own district. In some sections the sub-committees are sponsoring or cooperating in regular health education programs.

The committee has taken as the basis of its supervisory action the *Principles of Publicity* which it formulated at the outset of its work and which were published in the NEW YORK STATE JOURNAL OF MEDICINE, with editorial comment, on December, 1, 1931, page 1469. These *Principles* have been reprinted and distributed to newspapers, magazines and radio-broadcasting stations throughout the state for their information and guidance. Many of the larger broadcasting stations have consented to be guided by them in medical broadcasts; and station WNYC has announced to all of the municipal departments of Greater New York that all medical talks must conform to them.

At the suggestion of the committee, the Council passed a resolution making the *Principles of Publicity* binding upon all members of the State Society, so that deliberate violators of them will be subject to discipline by the Board of Censors of their respective county societies. This has been a very helpful provision; although in the majority of cases physicians who have violated the rules, willingly consent to be governed by

them when the regulations in force are brought to their attention.

The second meeting of the committee, on January 14, 1932, brought forth many interesting contributions to the question of the control of medical publicity. The experience of each member in his own district furnished valuable suggestions to the committee as a whole.

The committee has been compelled to restrict the scope of its activities considerably by the failure of the Trustees to adopt the budget which it submitted. It is the ultimate hope of the committee not merely to supervise publicity issued by physicians, but also to sponsor authentic projects for health education and to cooperate with various lay agencies interested in medical and medico-social activities so that the booklets and articles put forth by them may be in accord with the views of the organized medical profession.

Recommendations: It is recommended that the Press Publicity Committee be continued as a Special Committee.

It is recommended that all publicity emanating from officers, committees, and officials of the Medical Society of the State of New York, with the exception of the publicity work of the Committee on Legislation and of the Executive Officer, go through the hands of the Press Publicity Committee.

It is recommended that the Trustees be requested to make budgetary provision for the secretarial and other necessary expenses of the Press Publicity Committee.

The committee desires to thank the editor of the State Journal of Medicine for his willing cooperation; and the Chairman desires to thank the Secretary and other members of the committee for their unstinting work.

Respectfully submitted,
SAMUEL J. KOPETZKY, *Chairman*.
April 15, 1932.

REPORT OF THE COMMITTEE ON PHYSICAL THERAPY

To the House of Delegates:

Gentlemen:

The work of your committee showed gratifying progress during the year, which is the third in its existence.

County Societies. In accordance with the instruction of the House of Delegates, special efforts were made to stimulate more active interest among the county medical societies. The extended use of physical measures having begun only after the present medical generation received their medical training, post-graduate instruction by papers or lecture courses becomes imperative if physical therapy is to be part of the legitimate practice of medicine. The aim of the committee was to make it possible that there be in every county society at least a few men who are familiar with the possibilities and limitations of physical therapy and who will actively carry on the work or direct its institutional use. Your chairman addressed the secretaries meeting in Albany and ten meetings of county societies.

Questionnaires were sent out to all county societies and the active cooperation of the committee was offered along the line of lectures and organization. The result is shown in the accompanying table.

In 1930 there were committees in 18 counties and papers or lecture courses were given in five; while in 1931 there were committees in 30 counties, and papers or lecture courses given in 11. In 9 counties some interest was expressed, while 5 counties stated that there was not enough interest for active work; and 13 counties made no reply. This summary shows that the efforts of the committee met with satisfactory response in more than half of the 60 counties; and the continuance of the committee's work will insure further active interest and the likelihood of response from the rest of the counties.

The chairmen and members of the Physical Therapy Committees of the counties were regularly invited to the stated meetings of the State Committee which were held at Albany, New York, Syracuse, and Clifton Springs. Whenever possible these meetings were combined with a lecture, in order to stimulate more general interest.

In carrying on its educational work, your committee had the fullest cooperation from the chairman of the Committee on Public Health and Medical Education, and wishes to express its gratitude for his active interest and unfailing courtesy.

Hospitals. Following last year's survey of hospital facilities in physical therapy, your committee again offered its service to the hospitals which recorded their intention to install new departments. Due to the general economic situa-

PHYSICAL THERAPY ACTIVITIES IN
COUNTY SOCIETIES

1929-1930-1931

C—Committee Appointed

CA—Committee Appointed and Active

P—Paper or Special Meeting on Physical Therapy

LC—Lecture Course on Physical Therapy

	1929	1930	1931
Albany.....	C-P	C	C
Bronx.....	CA	CA	CA-LC
Broome.....	....	C	CA-P
Cayuga.....	....	C-P	C
Chenango.....	....	....	P
Clinton.....	....	....	P
Columbia.....	LC	....	....
Cortland.....	....	....	CA
Dutchess-Putnam..	P	....	....
Erie.....	C	CA-P	C
Essex.....	....	P	C
Genesee.....	C	C	C
Kings.....	CA-P	CA	CA-P
Montgomery.....	C	....	C
Nassau.....	C-P	CA-P	CA
New York.....	CA	CA	CA-LC
Niagara.....	....	....	C-P
Oneida.....	....	C	C
Onondaga.....	C	CA	CA-LC
Ontario.....	....	....	P
Oswego.....	....	....	C
Otsego.....	P	....	CA
Queens.....	CA-P	CA-P	CA
Richmond.....	....	....	CA
Rockland.....	C	....	C-P
St. Lawrence.....	C	....	C
Saratoga.....	....	....	C-P
Schenectady.....	....	....	C
Schoharie.....	....	C	C-P
Steuben.....	....	....	CA
Suffolk.....	C	C	C
Sullivan.....	....	....	CA
Ulster.....	....	CA	CA
Washington.....	LC	....	C

tion, no progress in this direction can be recorded. Your committee urged the chairmen of the Medical Boards of Hospitals possessing physical therapy departments to encourage the presentation of physical therapy cases at staff meetings, in order to stimulate better interest and a more intelligent discussion of the value and limitations of physical measures.

Medical Colleges. The Deans of Medical colleges were again asked for information concerning instruction in physical therapy to graduates and undergraduates. The accompanying table shows very definite progress compared to the table in the annual report of two years ago.

Objectionable Commercial Courses.—Additional efforts were made to discourage commercial lectures run by manufacturers and lecturers from outside of the State. In the single instance where such a self-appointed lecturer attempted to run a set of sales talks of his own, the Bureau

SURVEY OF PHYSICAL THERAPY INSTRUCTION IN MEDICAL COLLEGES OF NEW YORK STATE

1931

	UNDERGRADUATE TEACHING	GRADUATE TEACHING	SPECIAL
Columbia University College of Physicians and Surgeons	3rd year students—8 lectures and demonstrations 4th year students—optional clinical work	Under advisement	3 months' resident service at Presbyterian Hospital
Cornell University Medical College	Casual clinical instruction; therapeutic courses in medicine and surgery.	None	
New York University University and Bellevue Hospital Medical College	None	None	1 year course for (non-medical) physical therapists at Hospital Ruptured and Crippled in New York
New York Homeopathic Medical College	3rd year students—11 lectures 4th year practical course two mornings a week	None	
Long Island College of Medicine	None	None	
New York Post-Graduate Medical School of Columbia		Casual instruction in courses of orthopedic and traumatic surgery	
New York Polyclinic Medical School		2 months' course in theory and practice	2 months' service of internes in physical therapy department
Syracuse University College of Medicine	Senior class in second semester, weekly lecture and demonstrations	Physicians admitted to observe clinical work	
Union University Albany Medical College	Casual instruction in general therapeutic courses and in conjunction with general medicine		
University of Buffalo School of Medicine	All undergraduates receive lectures and demonstrations	Subject included in program of Annual Post-Graduate Course	
University of Rochester School of Medicine	Senior Class—3 hours a week for 4 weeks (Demonstrations)	Physicians admitted to observe clinical work.	

of Investigation of the American Medical Association furnished helpful information as to the true status of this physician.

Session at the Annual Meeting. As in the previous two years, your committee was entrusted by the Committee on Scientific Work to arrange a program for a half day session on physical therapy at the annual meeting of the State Society. These sessions were well attended and proved valuable in spreading further information about the status of physical therapy among general practitioners. The committee wishes to thank Dr. A. J. Bedell, chairman of the Committee on Scientific Work, for his interest.

Compensation Work. In order to develop suitable standards for physical therapy in com-

pensation work, your committee conferred with the Committee on Industrial Clinics of the State Department of Labor, the Industrial Commissioner also being present at this meeting. The possibilities of correcting abuses by some low grade industrial clinics were discussed; a minimum standard for physical therapy equipment was proposed and subsequently endorsed by the Executive Committee.

A special course on physical therapy in traumatic conditions was arranged for the Committee on Medical Education in the Counties of New York and Bronx and the cooperation of the insurance carriers enlisted.

Legislation. Another attempt was made this year to introduce legislation to free registered

physiotherapists from any medical supervision. The intention of the physiotherapy clause in the Medical Practice Act was to recognize trained technicians to carry out physical therapy under physicians' orders; the licensing of these technicians for independent practice would mean repudiation of the basic principles of the Medical Practice Act. Due to the emphatic protests of the profession, the bill died in committee. It was also contemplated to introduce a bill to license masseurs, colonic irrigators, physiotherapy, x-ray and laboratory technicians, "medical technicians," but with no right to independent practice. Vigorous opposition to this plan was voiced by the competent committees in New York County and as a result the bill was not presented.

With the medical profession now definitely awakened to its responsibilities and rights as to physical therapy, as part of the practice of medi-

cine, and with continued educational work and vigilance by your committees, it is hoped further attempts to destroy the safeguards of the Medical Practice Act to public health will similarly fail.

The chairman is happy to express his appreciation to the members of your committee, Drs. F. E. Elliott of Brooklyn, P. L. Forster of Albany, L. A. Hadley of Syracuse, G. A. Leitner of Piermont, Virginia Tannenbaum of Buffalo, and G. H. Turrell of Smithtown Branch, for their unfailing interest. He also wishes to voice his gratitude to the staff of the State Society office and to the Legislative Bureau for their painstaking help in many of the technical details of the committee's activities.

Respectfully submitted,

RICHARD KOVACS, *Chairman*.

April 15, 1932.

REPORT OF THE COMMITTEE ON ARRANGEMENTS

To the House of Delegates:

Gentlemen:

The Committee on Arrangements for the one hundred and twenty-sixth Annual Meeting of the Medical Society of the State of New York reports as follows:

Detailed arrangements have been made with the Hotel Statler in Buffalo for this meeting, May 23rd to and including May 25th, 1932. All activities of the Society, including registration, scientific and technical exhibits, general sessions, scientific sessions, banquet, meetings and dinner of the House of Delegates, will be held in the Hotel Statler, making attendance to any meeting most convenient.

Exhibits will be in place for the opening session, Monday morning, when registration will begin.

Special attention is called to the Clinical Day, Monday, May 23rd. Beginning at nine o'clock, Monday morning, the Committee has arranged for a variety of demonstrations and clinics in various hospitals, including an excellent opportunity to visit the New York State Institute for the Study of Malignant Disease. On this date a very large amount of clinical material will be available for those interested in diagnosis and treatment of malignant disease; also demonstrations of radium packs, radium implantation, high voltage x-ray, bone tumor exhibition, research work, etc.

The Banquet will be held Tuesday evening, May 24th, at 7:30 P.M. sharp. Tickets will be \$3.50 each. The Chairman of this Committee has arranged for an excellent entertainment and is endeavoring to make this an outstanding feature. There will be an address of welcome by the Mayor of Buffalo and addresses by the President and President-elect. Dancing will follow this program.

The Committee on Ladies' Entertainment have completed arrangements for a reception and luncheon to be held at the exclusive Garret Club of Buffalo on Tuesday, May 24th. On Wednesday there will be a trip to points of interest around Buffalo, including Niagara Falls and Old Fort Niagara which has recently been restored to its original state and is one of the landmarks in the history of the Niagara Frontier. Luncheon will be had en route. Transportation for these trips will be provided. A headquarters will be established on the Mezzanine Floor of the Hotel Statler, and the visiting ladies are invited to register on arrival to facilitate the arrangements.

All those desiring to play golf are requested to communicate with the Chairman of Committee on Arrangements or with Dr. Leon H. Smith, 606 Genesee St., Buffalo, N. Y.

Respectfully submitted,

HERBERT A. SMITH, *Chairman*.

April 15, 1932.

REPORT OF THE COMMITTEE TO REVISE THE CONSTITUTION AND BY-LAWS

To the House of Delegates:

Gentlemen:

The Committee appointed by the President to revise the Constitution and By-Laws in accordance with the resolution of the House of Delegates, June 1st, 1931, begs leave to submit the following:

CONSTITUTION

Article I.

Name and Purposes

Add in the 9th line following the word "medical" "and public health" and also at the end of the paragraph following the word "medicine." In the last line strike out the word "great." The paragraph will then read:

"The name and title of the Society shall be The Medical Society of the State of New York. The purposes of the Society shall be to federate and bring into one compact organization the medical profession of the State of New York; to extend medical knowledge and advance medical science; to elevate the standard of medical education; to secure the enactment and enforcement of just medical and public health laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members, and to protect them against imposition; and to enlighten and direct public opinion in regard to the problems of medicine and public health."

Articles II, III and IV remain the same.

Article V.

Officers

In the 7th line following the word "thereof" place a period, striking out the word "and." Also strike out lines 8, 9, 10, 11 and half of 12. The 12th line to be changed to read as follows:

"The Officers shall take office at the termination of the annual meeting at which they were elected with the exception of the Councilors elected by the District Branches who shall take office at the termination of the next annual meeting of the State Society."

Article VI.

Trustees

Strike out of the 2nd line the words "elected as such Trustees." Strike out the second paragraph. The Article will then read:

"The Board of Trustees shall consist of five members. The President, the Secretary and the Treasurer shall sit with the Board of Trustees with voice but without vote."

Article VII.

Censors

Strike out the first 2 paragraphs and insert the following:

"The Board of Censors shall consist of the President, the Secretary and the eight District Councilors.

"Five Censors shall constitute a quorum.

"The President and the Secretary of the Society shall sit as Chairman and Secretary respectively of the Board of Censors but without vote except that in case of a tie the President, sitting as Chairman of the Board of Censors, shall cast the deciding vote."

The 3rd paragraph now becomes the 4th paragraph and remains the same.

Article VIII.

Meetings

In the 1st line strike out the words "and the Intermediate Stated." In the 2nd line strike out the letter "s" of the word "Meetings" and change the word "or" to the word "and." The paragraph will then read as follows:

"The Annual Meeting of the Society and of the House of Delegates shall be held at the time and the place designated by the House of Delegates."

In the 4th line, strike out the last word "The," also strike out the 5th, 6th and 7th lines and insert after the words "House of Delegates." the following:

"When the House of Delegates is not in session the Council shall exercise all the rights and duties of the House of Delegates that are not inconsistent with the Constitution and By-Laws of the Society."

Article IX.

Funds

In the 7th line make a new paragraph beginning with the words "No funds of the" In the 11th line strike out the letter "s" of the word "Committees," and the letter "s" of the word "members" in the 12th line; in the 12th line following the first word "of" insert the word "any"; in the following word "Committees" strike out the letter "s"; in the 14th line following the word "been" insert the words "recommended by the Executive Committee and." The second paragraph of Article IX will then read as follows:

"No funds of the Society shall be expended for any purpose, except by the authority of a resolution of the Board of Trustees, nor shall any indebtedness be incurred by any officer, Committee or member of any Committee of the Society as a charge against the Society until the

same shall have been recommended by the Executive Committee and approved by the Board of Trustees."

Article X.

Referendum

In the 1st line strike out the words "annual or stated"; in the second line strike out the words "Society or of the"; in the 7th line strike out the words "or the Council"; in the 10th line following the word "after" add the word "the" and in the same line following the word "mailing" add the word "of"; in the 12th line following the words "majority of" strike out the rest of the line and also 13th, 14th and 15th lines. Article X will then read as follows with new additional wording at the end:

"At any meeting of the House of Delegates a majority of the members present may order a referendum on any question consistent with the Constitution and By-Laws and in accordance with such regulations respecting the submission of the question as the House of Delegates may prescribe. The members shall vote thereon by mail. The poll shall be closed at the expiration of fifteen days after the mailing of the question; and if the members voting shall comprise a majority of all the active members of the Society, a majority of such vote shall determine the question and be binding on the Society and the House of Delegates. The Council may, in a similar manner, order a referendum to the House of Delegates."

Article XI.

District Branches

Sec. 1. 7th line combine:
"Dutchess Putnam."

Article XII.

County Societies

In the 1st line change the word "and" to "or"; the balance of the first two paragraphs remaining the same. Add as a third paragraph the following:

"If there should be an insufficient number of physicians and surgeons in any of the counties of this State to form themselves into a component county medical society, such physicians may become members of the component county medical society of an adjoining county when eligible by the Constitution and By-Laws of such county society."

Article XIII.

Amendments

Second paragraph, 4th line following the word "published" insert the words "at least," in the same line following the word "once" add the words "and at least one month," the paragraph will then read as follows:

"Notice of the proposed amendment shall be given at a previous annual meeting of the House of Delegates, and before the same can be acted upon, it shall be published at least once and at least one month before the annual meeting in the official publication of the Society."

Third paragraph, 1st line following the word "the" insert the words "members of the House of" and change the first letter of the following word "delegates" to a capital "D". The paragraph will then read as follows:

"A two-thirds vote of the members of the House of Delegates present and voting shall be necessary for adoption."

BY-LAWS

Chapter I.

Membership

Sec. 1 remains the same.

Strike out Sec. 2 and insert the following:

"Sec. 2. Any member expelled from his component County Society or suspended from its rights and privileges shall likewise be expelled or suspended for the same period from this Society. The right of appeal to this Society shall not be impaired nor shall such appeal prevent the carrying out of the judgment of the county society pending such appeal. Members not in good standing or ceasing to be members of their county societies shall ipso facto have the same status in this Society."

Strike out the first sentence including four lines of Sec. 3 and insert the following:

"A member in good standing in his component county medical society reaching seventy years of age may ipso facto have the privilege of applying for retired membership in the State Society."

The balance of Sec. 3 remains the same beginning with "All such applications etc."

In Sec. 4, 10th line insert the words "House of" before the word "delegates" also changing the letter "d" to a capital "D."

Sec. 5 remains the same.

Chapter II.

House of Delegates

Sec. 1 5th line strike out "; (d) Trustees" and following the word "and" in this same line change "(e)" to "(d)."

Sec. 2 New Section will read as follows:

"Sec. 2. A delegate to this Society shall not be considered in good standing or entitled to vote in the House of Delegates if the component county medical society by which he was elected is in default of the payment of any dues or assessments imposed by the House of Delegates, or if such component county medical society shall at the time be under sentence of suspension imposed by the House of Delegates, or if such

delegate is not in good standing in this Society, or in the component county medical society to which he belongs. The term of a delegate elected by a County Medical Society shall begin at the first annual meeting of the House of Delegates subsequent to his election."

The present Sec. 2 now becomes Sec. 3.

In renumbered Sections 5, 6 and 7 strike out the word "It" at the beginning of each Section and in each Section insert the words "The House of Delegates."

In renumbered Sections 5, 6 and 7 strike out the word "It" at the beginning of each Section and in each Section insert the words "The House of Delegates."

In Sec. 8 (formerly Sec. 7) No. 8 insert the words "the Board of" following the word "of" making it read as follows:

"8. Report of the Board of Trustees."

Chapter III.

Election of Officers

Sec. 1. 1st line strike out the comma following the word "officers" and strike out the word "Trustees" in the same line. In the 11th line of Sec. 1 strike out the word "Trustees."

Sec. 2. Insert New Section as follows:

"The Officers, except the Councilors and Trustees, shall be elected for one year or until their successors have been duly chosen.

"One Trustee shall be elected annually for a period of five years and in the event of a vacancy a Trustee shall be elected for the unexpired term."

Old sections 2, 3, 4 and 5 remain the same with the exception of renumbering.

Strike out Sec. 6 entirely.

Chapter IV.

Council

Sec. 1. strike out lines 3, 4 and 5. In the 2nd line following the word "Delegates" place a period and add the new sentence as follows:

"The members of the Council shall hold office until their successors are duly elected and qualified."

Sec. 2 remains the same.

Strike out old Sec. 3 and insert new Sec. 3 as follows:

"Sec. 3. A quorum shall consist of eleven members."

Sec. 4 and Sec. 5 remain the same.

Sec. 6 strike out entirely.

Sec. 7 now becomes Sec. 6 and reading matter remains the same.

Chapter V.

Executive Committee

Sec. 1 in the 4th line following the word "President," insert the words "the President-elect."

Sec. 1. in the 15th line following the word "immediately" strike out the words "and elect a Chairman and a Vice-Chairman" and insert the words "under the Chairmanship of the President of the Society and proceed to elect a Vice-Chairman." Sec. 1 will then read as follows:

"Sec. 1. At its first regular meeting the Council shall choose by a majority vote five members of the Council, three of whom shall be councilors, who together with the President, the President-elect, the Secretary, the Treasurer and the immediate Past President shall constitute the Executive Committee. Candidates for election to the Executive Committee shall be nominated by the President, but other candidates may be nominated by any member of the Council. The Executive Committee shall hold office until the following annual meeting of the Council or until their successors shall be duly chosen. The Executive Committee shall, when elected, organize immediately under the Chairmanship of the President of the Society and proceed to elect a Vice-Chairman. The Executive Committee shall hold regular meetings at times and places that shall be fixed by the Chairman and any two members of the Executive Committee may require the Chairman thereof to call a meeting for such time and place as shall be designated by them in writing, of which the members shall have at least two days' notice. Five members shall constitute a quorum. It shall prepare a budget to be acted upon by the Board of Trustees."

Sec. 2. remains the same.

Sec. 3. in the 3rd line following the word "appoint" insert the words "a Publication Committee,". In the 4th line the word "editor" the letter "e" to be changed to a capital letter "E."

Sec. 3. in the 7th line following the word "society," insert the following sentences:

"The Standing and Special Committees of the Society shall report to the Executive Committee and shall be subject to the jurisdiction of the Council or the Executive Committee when the House of Delegates is not in session. No Standing or Special Committee shall inaugurate or initiate any policy or commit the Society to any policy unless the same has been expressly approved by the House of Delegates, and, or the Council and, or the Executive Committee."

The balance of Sec. 3 remains the same.

Sec. 4. in the 3rd line strike out the word "President" and insert the word "Chairman."

Sec. 5. in the 4th and 5th lines strike out the words "not repugnant to" and insert the words "in conformity with."

Chapter VI.

Trustees

Sec. 1. in the 5th line following the word "meetings," insert the sentence "The Board of Trustees shall meet at least bi-monthly."

Sec. 2. in the 3rd line strike out the word "manage" and insert the word "supervise."

Secs. 3, 4 and 5 remain the same.

Chapter VII

DUTIES OF OFFICERS

President

Sec. 1. in the 3rd line following the word "Censors." insert the sentence "He shall be Chairman of the Executive Committee."

At the end of Sec. 1 following the words "the Council shall require." add the sentence:

"He shall not accept any civic or public duties without the advice and consent of the Council."

Sec. 2 remains the same.

President-Elect

Sec. 3. in the 3rd line following the word "Council" strike out the words "but shall attend the meetings of the" and insert the words "and the." In the 4th line strike out the words "without voice or vote."

At the end of Sec. 3 insert the sentence:

"He shall not accept any civic or public duties without the advice and consent of the Council."

Sec. 4 and Sec. 5 remain the same.

Secretary

Sec. 6. 6th line from the bottom strike out the words "The amount of his salary shall be fixed by the Board of Trustees."

Sec. 7 remains the same.

Treasurer

Sec. 8. strike out the last two lines following the word "Trustees": "His salary shall be fixed by the Board of Trustees."

Assistant Treasurer

Sec. 9. 6th line, following the words "shall be elected" insert the words "who, at the expense of the Society, shall give a bond for the faithful performance of his duties, which shall be approved by the Board of Trustees as to the amount, form and surety." The balance of the section remains the same.

Sec. 10. remains the same.

Chapter VIII.

Traveling Expenses

Sec. 1. First paragraph remains the same. Second paragraph, in the 2nd line following the word "railroad" insert the words "and Pullman." In the 4th line following the word "President-Elect" insert the words, "and all other Officers of the Society." In the 5th line strike out the words "attending committee meetings." and insert the words "engaged upon official business." In the 25th line strike out "of \$250.00" and in-

sert the words "not to exceed \$200.00." The second paragraph of Chapter VIII will then read as follows:

"The President and the Secretary shall be allowed intrastate railroad and Pullman fares and a per diem for maintenance not to exceed fifteen dollars. The President-Elect, and all other Officers of the Society, shall be allowed traveling expenses when engaged upon official business. The members of the Board of Trustees, of the Council, and of the Executive Committee shall be allowed railroad fares to and from the places of meeting of these respective bodies. In all cases where no appropriation has been allowed a Standing or Special Committee, traveling expenses shall be allowed the individual members of the committee. Proper vouchers must be filed with the Secretary and approved by the Board of Trustees before any such allowance may be made. The Delegates to the American Medical Association who have attended each session of the House of Delegates of that Association and who shall have filed with the Secretary evidence of such attendance shall be allowed the actual cost of railroad transportation and Pullman accommodations to the place of meeting and return. The vouchers of such expense shall be approved by the Board of Trustees before payment. Each District Branch shall be entitled to receive a sum not to exceed \$200.00, exclusive of the work done by the Secretary regarding notices, programs, etc., to defray the expenses of holding the annual meeting of such District Branch, provided a proper statement of such expense shall have been presented to the Secretary and approved by the Trustees. All bills, claims or vouchers herein provided for shall be filed within thirty days after the date of the incurring of such expense. This time may be extended for any cause by the Board of Trustees and such extension shall not exceed ninety days."

Chapter IX.

Censors

Sec. 1 and Sec. 2 remain the same. Sec. 3 remains the same with the addition of the following paragraph which is new matter:

"If the appellant desires to be present in person or by counsel at the hearing of said appeal, the notice of appeal must so state. In that event, the appellant must file with the notice of appeal a bond in the sum of \$500.00 to cover the costs of said appeal. If the appellant fails to appear in person or by counsel upon the hearing of said appeal, he shall forfeit to the Medical Society of the State of New York such share of said bond as represents necessary expenditures incident to convening the Board of Censors for the hearing of said appeal."

Sec. 4, Sec. 5 and Sec. 6 remain the same.

Sec. 7 remains the same with the addition of the following paragraph which is new matter:

"The appellant must also state if he desires to be present in person or by counsel."

Sec. 8 and Sec. 9 remain the same.

Chapter X.

Committees

Sec. 1. 4th line following the words "the Council and" insert the words, "or the Executive Committee and, or". The paragraph will then read as follows:

"Sec. 1. The Committees shall be classified as Standing, Reference and Special Committees, Standing and Special Committees shall report to the Council and, or the Executive Committee and, or the House of Delegates."

Sec. 1. strike out the 12th line "Committee on Medical Research."

Sec. 2 remains the same.

Sec. 3. 2nd line strike out the word "three" and insert the word "five."

Sec. 3 will then read as follows:

"Sec. 3. The Committee on Legislation shall consist of five members including the Chairman."

Sec. 4. strike out entirely and insert the following:

"Sec. 4. The Committee on Public Health and Medical Education shall consist of nine members including the Chairman. It shall be the function of this Committee to investigate, study and report to the House of Delegates on matters of public health, preventive medicine, and medical education. It shall gather facts regarding the activities of health organizations, both official and non-official, and report to the House of Delegates regarding the same when it so deems necessary. It shall be the duty of this Committee to advise the House of Delegates as to plans for post-graduate education for the general profession and shall be in charge of carrying out such plans as are approved by the House of Delegates. It shall cooperate with similar committees of component county societies in carrying out recommendations of the House of Delegates dealing with public health and medical education."

Sec. 5 strike out entirely and insert the following paragraph:

"Sec. 5. The Committee on Medical Economics shall consist of nine members, including the Chairman. The function of this Committee shall be to conduct investigations, to gather facts, to make studies or surveys on the general subject of the relationship of the physician individually and collectively with the public. It shall receive matters of general public information and study them both in regard to their effect upon the practice of medicine in private or institutional work. It shall concern itself with the financial aspects of the practice of medicine, throughout the State of New York, especially insofar as it affects the efficiency of medical service to the public. It

shall concern itself with all economic phases regarding the practice of medicine in hospitals, private or public clinics, commercial organizations and other institutions established for diagnosis and treatment."

Sec. 6 and Sec. 7 remain the same.

Sec. 8 strike out entirely.

Sec. 9, 1st line, the word "Chairman" shall be changed to "Chairmen."

Sec. 9 now becomes Sec. 8.

Reference Committees

Sec. 10 strike out entirely and insert the following paragraph which is now known as Sec. 9:

"Sec. 9. At least one month before the meeting of the House of Delegates the Speaker shall appoint such Reference Committees as he shall deem expedient for the purposes of the meeting. Immediately after the organization of the House of Delegates he shall formally announce the appointments to the Committees. Only members of the House of Delegates are eligible for appointment on the Reference Committees. Such Committees shall consist of five members, three members constituting a quorum, and shall serve during the meeting at which they are appointed."

Sec. 11 strike out entirely and insert the following paragraph which is now known as Sec. 10.

"Sec. 10. Reports of Officers and Standing Committees shall be printed at least one month before the meeting of the House of Delegates and sent to the members of the Reference Committee appointed according to Section 9, for their preliminary consideration. All recommendations, resolutions, measures and propositions presented to the House of Delegates and which have been duly seconded shall be referred by the Speaker to the appropriate Reference Committee."

Sec. 12, 13, 14 and 15 remain the same with the exception of renumbering.

Chapter XI

Meetings

Sec. 1. 1st line strike out the word "regular." In the 8th line in the word "Affidavit" change the capital "A" to a small "a".

Sec. 2. 2nd line strike out the word "meeting" and insert the word "or" following the word "annual." In the 2nd line following the word "special" strike out the words "or intermediate stated." In the 2nd and 3rd lines change the word "meetings" to the word "meeting." Sec. 2 will then read as follows:

"Sec. 2. Each member in attendance at the annual or special meeting of the Society, shall enter his name and the name of the component county medical society to which he belongs in a register to be kept by the Secretary of the Society for that purpose. No member shall take

part in any of the proceedings of such meeting until he shall have complied therewith."

Secs. 3, 4 and 5 remain the same.

Sec. 6, 3rd line, following the word "delegates," insert the words "or at request of the Council." Sec. 6 will then read as follows:

"Sec. 6. Special meetings of the House of Delegates shall be called by the Speaker upon the request, in writing, of fifty delegates, or at request of the Council, and in case of the failure, inability or refusal of the Speaker to act, such meetings may be called by a notice thereof subscribed by fifty delegates."

Chapters XII and XIII
remain the same.

Chapter XIV.

Component County Societies

Sec. 1. remains the same with the addition of the two following paragraphs which are new matter:

"When a member in good standing ceases to practice in the State of New York he shall ipso facto cease to be a member of the Society and of his component medical society. His status shall be deemed that of a resigned member and all rights and title to any share in the privileges and property of the Society, the District Branch, or County Society, shall be deemed to have been forfeited by such action.

"The dues of any member of the Medical Society of the State of New York may be remitted for the current year on account of illness when the request is made by the member's component county medical society."

Sec. 2. strike out entirely.

Sec. 3 now becomes Sec. 2 and remains the same.

Sec. 4 and Sec. 5 are combined into one section and are now known as Sec. 3. In the 13th line of what is now known as Sec. 3 following the words "said society" insert the word "and".

Sec. 3 now reads as follows:

"Sec. 3. The Secretary of each component county medical society shall keep a roster of its

members and of all other registered physicians of such county in which shall appear the full name of each of said physicians, the date of his admission to such society, his residence and the date when his license to practice medicine in this State was granted. He shall note any changes in said roster by reason of removal, death, revocation of license or other disqualification.

"He shall forward said roster and information, together with the names and places of residence of each of the officers of said society and the names and residences of each delegate of the House of Delegates of said society to the Secretary of this Society thirty days before the date of its annual meeting."

Sec. 6 and Sec. 7 remain the same with the exception of renumbering.

Chapter XV.

Miscellaneous

Secs. 1, 2, 3 and 4 remain the same.

Sec. 5. 1st line following the word "Officers" insert the word "and", and remove the comma in the first line following the word "Officers" and in the second line following the word "Society."

Sec. 6 remains the same.

Chapter XVI
remains the same.

Chapter XVII.

Amendments

Secs. 1 and 2 remain the same.

Sec. 3. 2nd line following the word "the" insert the words "House of" and change the letter "d" of the following word "delegates" to a capital "D".

Sec. 3 will now read as follows:

"Sec. 3. The affirmative vote of two-thirds of the House of Delegates present and voting shall be necessary for adoption."

Sec. 4 remains the same.

Respectfully submitted,

CHARLES G. HEYD,
Chairman.

April 15, 1932.

REPORT OF THE COMMITTEE ON PERIODIC HEALTH EXAMINATION

To the House of Delegates:

Sirs:

The Committee on Health Examination begs to present its Third Annual Report as follows:

(1) A brief general review of the three years' work; (2) an analytical statement of the radio broadcasting of this year, and (3) certain recommendations with reference to the future. All other work of this committee has been covered in monthly reports to the council which are concerned with the progress and development of

projects as reported in our last annual report and authorized by the House of Delegates.

1. *General Summary.* A health examination for every man, woman, and child in the State of New York was and still is the objective of the committee. It envisioned a continuing program of development rather than a series of brief, high potential campaigns. This program has been printed, approved, and followed. It contemplated two efforts. (1) The education of the public. (2) Aid to physicians and the medical profession

in the furtherance of the health examination and pre-clinical medicine. The committee stated at the outset, that it believed a ten-year campaign should be waged. Its three years' experience has inclined it to the opinion that this subject should be incorporated as one of the standard and continuing labors of the medical profession. It believes that pre-clinical medicine will be an increasing duty, an increasing service, and an increasing privilege of the medical profession. The committee has declared the faith that lies in them, in the *Journal of the Society* and in its several reports, and has set forth the results of its various labors. It remains only to give a report of the last year's work. For the sake of brevity this report will be confined to one feature—broadcasting—a part of the division of our work related to the education of the public.

Principles of Radio Broadcasting. From the first this committee has followed the plan of concentrating upon one purpose, using one method and driving home with full concentration all of its energy. We therefore concentrated upon Health Examinations for Women, as announced in our original plan in 1929. Similarly, we concentrated upon the education of the public and again restricted ourselves to the use of the radio. In our last annual report we called attention to the fact that there were powerful forces which could be utilized to bring to the attention of the public the need of the Health Examination: We believe that we could stimulate executive action of a continuing nature and instead of doing the work ourselves to get our willing friends to do it for us, thus serving them, the public, and our purpose. It is better to act as train despatcher than to push a wheel-barrow. A program of this kind depends entirely upon the importance of the message, mutual confidence, and alignment of effort. Cooperation always results when the welfare of humanity is truly and greatly to be served.

Preliminary Steps. In June, 1930, we held an open conference at Rochester and invited the representatives of the State-wide women's organizations to be present. They came, they offered cooperation and in the Fall of the same year the New York State Federation of Women's Clubs and the National Congress of Parents and Teachers passed stirring resolutions favoring health examinations, re-enlivening their own health programs and backing up ours. The health examination program of the Business and Professional Women's Clubs of the State was stimulated to further activity. Dr. Marion C. Potter of Monroe County, a member of this committee, took a large part on following through this phase of cooperation and development. In the Spring of 1930, with the backing of these organizations, we procured a radio opportunity we had been working to get. This was reported in June, 1931, to the House of Delegates. The project was approved.

Opening. Accordingly the broadcast was opened on September 17, 1931, with the Columbia Broadcasting System. It will continue until the close of the fiscal year in May. The time given to us was part of the most highly valued woman's hour—between eleven and noon. It was put into the period of the National Radio Homemakers' Club, for which 500,000 women listeners in every morning are expected, and in the opinion of radio experts this number is exceeded by one-half million more. This broadcast on the National network of the Columbia Chain with the number of stations ranging upward to seventy-two, included in a circle bounded by Toronto, New York, Florida, Oklahoma, and Colorado included among the stations most consistently taking the program the following:

Station	City
WABC	New York City
W2XE	New York City
WOKO	Albany, New York
WPG	Atlantic City, New Jersey
WNAC	Boston, Massachusetts
WKBW	Buffalo, New York
WBT	Charlotte, North Carolina
WDOD	Chattanooga, Tennessee
KVOR	Colorado Springs, Colorado
KRLD	Dallas, Texas
WXYZ	Detroit, Michigan
WTAQ	Eau Claire, Wisconsin
WHP	Harrisburg, Pennsylvania
WDRG	Hartford, Connecticut
WLAP	Louisville, Kentucky
WQAM	Miami, Florida
WISN	Milwaukee, Wisconsin
WLAC	Nashville, Tennessee
WDSU	New Orleans, Louisiana
KFJF	Oklahoma City, Oklahoma
WDBO	Orlando, Florida
WJAS	Pittsburgh, Pennsylvania
WEAN	Providence, Rhode Island
KOH	Reno, Nevada
KDYL	Salt Lake City, Utah
KTSA	San Antonio, Texas
WTOC	Savannah, Georgia
KSCJ	Sioux City, Iowa
WSPD	Toledo, Ohio
WIBW	Topeka, Kansas
CFRB	Toronto, Ontario, Canada
WACO	Waco, Texas
WMAL	Washington, D. C.
WMT	Waterloo, Iowa
WORC	Worcester, Massachusetts

Acknowledgment. This was the truly munificent gift of the Columbia Broadcasting System and its officers, William S. Paley, President, Edward Klauber, First Vice-President, and Julius Seebach, Director of Program Operations. The committee therefore recommends that a resolution expressing the appreciation of the

House of Delegates for the great public service that has been rendered be spread upon the minutes and copies transmitted to the Columbia Broadcasting Company and to its several officers as mentioned, and also to the Secretary of the Department of Commerce, Ray Lyman Wilbur, with whose cooperation this powerful educational service was carried forward. The committee recommends further that a resolution be passed by the House of Delegates in appreciation of the courtesy and aid given by Mrs. Ida Bailey Allen, President of the National Radio Homemakers' Club, whose studio and facilities were given to the committee and who contributed so largely to the success of the whole series.

The whole broadcast was furnished by the radio authorities without cost to the Association. Confronted with this somewhat overwhelming opportunity the committee realized that the Medical Society of the State of New York was being put before the great public and its honor, reputation and good report were in our hands. We therefore invited as many of the leading State officers as possible to take part. The following were invited and gave addresses:

The President, Dr. William D. Johnson.

The Speaker of the House of Delegates, Dr. John A. Card.

A Member of the Board of Trustees, Dr. Nathan B. Van Etten.

The Chairman of the Legislation Committee, Dr. Harry Aranow.

The Chairman of the Committee on Public Health and Medical Education, Dr. Thomas P. Farmer.

The Chairman of the Committee on Public Relations, Dr. James E. Sadlier.

Ex-President, Dr. James N. Vanderveer, whose Presidential address had given the committee definite factors of guidance in its publicity work.

This insured the presentation to the public of a message of the State Society in accordance with its established plans and the spirit which has carried it forward. The committee herewith wishes to record its appreciation of the courtesy of these officers and the high value of their services.

The committee has been fortunate in securing medical speakers from among the men who have not only won prominence in the profession but have contributed to its dignity and progress. The following is a list taken chronologically:

Walter T. Dannreuther, M.D.

Foster Kennedy, M.D.

Roger H. Dennett, M.D.

Walter L. Niles, M.D.

Herman O. Mosenthal, M.D.

Harlow Brooks, M.D.

W. W. Herrick, M.D.

Carolyn C. Williams, M.D.

T. Stuart Hart, M.D.

Marion Craig Potter, M.D.

Mary M. Crawford, M.D.

Walter A. Calihan, M.D.

Phoebe M. Van Voast, M.D.

Lenna F. Meanes, M.D.

A. J. Rongy, M.D.

Hugh Chaplin, M.D.

Charles G. Kerley, M.D.

Walter Timme, M.D.

In many cases these physicians not only gave serviceable addresses to the public, but refreshed their own interest in health examinations and in addition transmitted to various societies with which they were associated, a new stimulation in the premises. Hugh S. Cumming, M.D., the Surgeon General of the United States Public Health Service, took over our whole broadcast for the entire month of January. We introduced his speakers from the New York studio; the broadcasting was done from Washington (WMAL). The closing announcement was made from the New York studio (WABC). This gave a welcome and impressive endorsement of our efforts an added definite professional contributions. New York State gave its contribution in the address of Dr. Thomas Parran, Jr., the Commissioner of Health, who delivered the first broadcast after the committee's preliminary announcement. Mrs. Franklin D. Roosevelt was kind enough to introduce our own President, Dr. W. D. Johnson.

Cooperation. This committee had deliberately planned this broadcast to develop the acquaintance and cooperation of the social forces aforementioned, in addition to its direct service to the women of the State. Accordingly it procured distinguished women speakers representing these organizations, usually a responsible officer and often the national president. In this way, they severally added to the direct value of this message, their endorsement of the work of the Medical Society of the State of New York and to the health examination. They refreshed their own faith and practice of their own health programs and opened the way for more general cooperation. In this, our committee added its effort to the service of the Committee on Public Relations. These organizations included the most representative and influential women's associations of the United States as follows:

1. The General Federation of Women's Clubs, the combined representative body of the women of the Nation, by Mrs. John F. Sipple, President.

2. The National Council of Catholic Women, by Mrs. Michael Gavin, its President for many years.

3. The National Y. W. C. A., by Mrs. Robert E. Speer, President.

4. Girl Scouts of America, by Mrs. Nicholas F. Brady, President.

5. The Camp Fire Girls of America, by Miss Florence Hughes, Vice-President.

6. The American Women's Association, by Miss Anne Morgan.

7. The Henry Street Nurses' Settlement, by Miss Lillian Wald.

8. The Child Health Association, by Mrs. Aida de Acosta Breckinridge.

9. The New York State Federation of Women's Clubs, by Mrs. William D. Sporborg, President; Miss Harriett Mayer, Chairman.

10. Child Study Association of America, by Mrs. Sidonie M. Gruenberg, Executive. And many others.

Insofar as the Medical Society of the State of New York and these organizations are in acquaintance and cooperation, it is fortunate and the public profits. Insofar as they are not, there is something highly desirable yet to be realized.

But this group is only a part of organized womanhood. The field may be cultivated further. Already, however, the results are becoming concrete. Three of these national groups have asked us to formulate plans, methods and programs, in health examinations for their membership, which totals over 1,000,000 in the United States. The work is launched. The greater profits will come year by year in the future, as the project is developed. The rewards of continuing effort may well be very great. This closes the discussion of the radio broadcast.

For Men. It must be remembered that the broadcast was part of our program of health examinations for women. We propose to take the next logical step and open a similar campaign for health examinations for boys and men at an invitation conference to be held at Buffalo on May 23, 1932. Dr. Russell of Buffalo is in charge. Representatives of the men's and boys' national and State organizations are invited. We hope we may turn over to the next administration a project well advanced and a project ready for launching.

Summary and Recommendations. With reference to the whole matter of health examinations the committee feels the necessity of making further recommendations based upon its three years of work.

1. We confirm our original program as to the need of a health examination by the people, as stated in our two previous annual reports. We believe it to be the manifest duty of the medical profession to teach the public with reference thereto and to instruct themselves how they may increasingly improve and extend their service in the health examination and personal preventive medicine. A ten-year

program was outlined. Three years have passed. What work has been done and what accomplished, is for others to say and the future to prove. What work has yet to be done is for others to do. We did not originate anything materially new. We carried it forward. We now pass it on. But now is no time for the Society to falter. It is the time for tenacity.

2. We recognize the fact that the health examination is only a method in the large field of pre-clinical medicine or personal preventive medicine, which promises to be one of the most important, popular and scientific phases of medicine in the future; and we, as a profession, should be alert and unflaggingly persistent if we wish to take and keep our leadership therein. It is the duty of our committee to terminate its service in such a manner as will best serve our successors. We therefore present the following additional recommendations:

No. 3. Inasmuch as the work of this Special Committee falls largely under three divisions of endeavor, each of which is covered by a Standing Committee, it is suggested to the Council and House of Delegates that the Committee on Health Examinations be discontinued, and that activities be assigned to three existing committees as follows:

(a) *That the radio broadcast*, which is for the education of the public and which has been well put on its feet, be turned over to the Council for the Committee on Press Publicity, with the recommendation that this opportunity is so great that it should not be confined to one single purpose of the Society but extended to its general functions, with due regard to the continuation of the health examination programs.

(b) *That the work of cooperation with the several large National Societies be turned over to the Council for the Committee on Public Relations*, with the definite understanding that the cooperation already elicited for our health examination work be carried forward. It may be pointed out that these several societies, when well informed of our purpose and accustomed to cooperate with us, would wield great, if not decisive, power in medical matters of public concern.

(c) *That the education of the physician with reference to health examinations, belongs similarly within the scope of the Committee of Public Health and Medical Education.*

The Committee in considering the above recommendation could not express itself unanimously in approval, therefore it formulated the following two alternative recommendations:

Recommendation 4. Continue a Special Committee on Health Examination for one year (or

more), during which time the three standing committees above mentioned will gradually but definitely absorb its activities into their own committee procedure. Postpone further action until the year shall have been completed.

Recommendation 5. This recommendation is the same in every particular, as recommendation No. 4, with the exception that the name of the Special Committee should be changed, from the Committee on Health Examinations to (No. 5a) "Committee on Preventive Medicine" or (No. 5b) "The Committee on Personal Preventive Medicine." It is advanced in favor of this recommendation, that the health examination is a form of practical procedure which, although it forms a most important element in preventive medicine, is nevertheless only a beginning of a health service. This health service is a personal service rendered by the Physician to his client, continuing from year to year, and designed to prevent illness as well as to bring to the client's life all the benefits and betterments that the science of medicine can provide.

This is a much larger matter than the health examination. It extends forward into the future and development of a larger sphere of usefulness on the part of the physician and it rightly belongs in his field.

Recommendation 6. That proper notice is hereby formally given that a "Standing Committee on Personal Preventive Medicine" be formed, and the necessary constitutional amendments be prepared by an officer assigned.

Post Graduate Institute. The committee is formulating a plan of carrying on a week or a fortnight, of post graduate instruction in health examinations in preventive medicine, the date for which is tentatively set for a time before, during, or after the Graduate Fortnight of the Academy of Medicine, to be held next Fall. The work of this committee in this regard is essential to the orderly development of its duties even though it is recognized that next Fall is a time beyond its own tenure. The committee has accordingly conferred with several continuing bodies of competent jurisdiction in this field. A sub-committee of the Greater New York Society has been authorized to confer with us and the matter is in a definitely formative stage.

Censorship. In preparing to conduct its broadcast the committee perforce gave earnest study to this subject. It formulated a set of

suggestions to guide its speakers. These were followed by the publication of the New York County-Academy of Medicine regulations: these again by the formation of the State Press Publicity Committee. To this committee we turned for this service, and it was rendered by the chairman with understanding, decision, and despatch, for which we are grateful. We have been conscious of the fact that we were sending our message into other States. We were giving guidance to the clientele of our neighboring State Medical Societies without their official knowledge or consent. We were not entirely at ease, nor yet did we feel authorized to take up the matter with three-quarters of the States in the Union. The matter is not simple. It involves the County, the State, and the National organizations. We recommend that it be studied.

The Medical Examiner. This is a pamphlet published periodically by the Greater New York Committee on Health Examinations. It came into being as a result of the New York City campaign and its publication has been continued. It has been used also in the Monroe County campaign. It has the real and important value of a continuing effort without which no campaign avails; a notable example of tenacity in a good cause. This committee wishes to call to the attention of the members of the House of Delegates the fact that issues of the Health Examiner may be made available for circulation by any County Society. Arrangements may be made direct with the Greater New York Committee on Health Examinations through the officers of the State Association, 2 East 103rd Street, New York City.

Acknowledgment. In closing this report the committee and the chairman in particular, wish to thank the officials of the State Society, the chairmen of its several committees, the editor of the Journal, and the administrative and executive staff, for their unflinching courtesy, understanding and helpfulness. The committee wishes to thank the House of Delegates and the retiring President for the privilege of serving the Society, and to say again, in closing, that this is the beginning and only the beginning, of a great work which must be carried forward.

Respectfully submitted,
C. Ward Crampton, Chairman.

April 15, 1932.

REPORT OF COMMITTEE TO STUDY THE NURSE PROBLEM

To the House of Delegates:

Your committee appointed to continue the study of the problems of nursing and nurse education reports greatly increasing interest by the medical profession in the quality of nursing service.

Many a physician recalls with regret the memory of a "natural born nurse" who intuitively supplemented his efforts to restore his patients to normal health and strength—without any scholastic or institutional training or any other endowment beyond an optimistic personality, native intelligence and an inflexible conscience which never hesitated over a disagreeable task.

This paragon seldom appears because she has been replaced by a multitude of individuals who wear a title and a uniform which cover equally the incompetent and the competent and lift them both to financial standards which are beyond the paying ability of a sick employer.

The physician also realizes that he too has changed his demand upon the nurse from homely comfort for his patient to skilled recording of trained observations—to the assumption of much responsibility—to the strict execution of orders—to skilled assistance to the execution during his absence of therapeutic technique and surgical procedures and often to playing the role of expert technician—her efficiency often dulling many of his five senses, especially in fully equipped hospitals where he may find her not only his right hand but both of his hands.

The physician may find a highly competent nurse indispensable but he is a lame worker with the incompetents often sent him by irresponsible registries.

The hospital care of his patients is generally satisfactory but the domiciliary care is another story because his patient cannot afford any but a house working nurse who cannot be expected to possess technical skill and who many times takes advantage of emergency distress to insist upon fees which amount to extortions.

There is in the opinion of your committee a real demand for the trained attendant as provided in our State law—for the highly educated trained nurse of exemplary character and for the public health nurse. Three types of nurses—all greatly needed, whose qualities should be definitely certified by local and State registration.

Your committee is dissatisfied with the present system of nurse education, believing that while the quality of the product of the best school and the poorest school claims to be the same, there is great unevenness in the real educational equipment and that over-production results not only in unemployment but in inferior personnel.

It is likely that any overcrowded profession will attract the best possible recruits. There are

now, according to the United States Bureau of the Census, 294,268 trained nurses, or one to every 416 people, and if we add to this 153,443 untrained nurses, we find that we have a nurse for every 273 people in the United States.

Our population has increased 16 per cent in ten years, while in the same period the number of trained nurses has increased 97 per cent, and untrained nurses 1 per cent.

New York State with a population of 12,588,066 has 42,000 trained nurses and 22,869 untrained nurses—totaling 64,869, or one trained nurse for every 293 people and a nurse of both kinds for every 193 people.

With the general field of medicine also overcrowded with one physician for every 650 people in the State of New York and the average physician employing a little more than one nurse a day, there are now about four times as many nurses as are needed in this State.

Last year there were again graduated in the United States 25,000 more nurses—a figure which will be duplicated in 1932. Over 100,000 nurses have been added in the last six years. We also find that the average professional life of the nurse is now longer than seventeen years and that many of them continue to work after they are married—all of which creates a situation impossible of solution.

Cutting down the number of schools will only partially solve the problem and raising standards is not entirely promising.

Cutting down the number of medical schools temporarily checked the numerical growth of the medical profession—but is now promising little relief to the army of physicians now in the United States, more than ample to serve all of the people, 145,000 physicians, of whom 2,500 die annually and are replaced by 5,000 new registrants. Foolish overproduction impoverishes everybody.

Nine hundred thousand hospital beds with 64 per cent occupancy in the non-governmental hospitals spells financial incompetence. Sharp curtailment must be made and strict censorship in the program of hospital building and also in the admission of more physicians and more nurses to the medical field.

The medical profession must share responsibility for the quality of allied professions—overproduction means unemployment, lowered morale and destruction of ambition.

Many hospital schools are training nurses because the service of student nurses is profitable. Sixteen per cent of the hospitals could close their schools without loss, but 84 per cent would lose money by so doing, the varying loss running up to \$23,000 annually, and so they will go on swelling the nursing pool until all restrictions are overflowed and the profession wrecked.

Your committee believes that an entire change

in nurse education should take place as soon as a method can be developed, that all basic education of the nurse should be carried by educational institutions, schools or colleges and after passing satisfactory examinations, students in sufficient numbers should be admitted to such general hospitals as may be approved by the American Medical Association and the American College of Surgeons for a two or three-year rotating service, as a final requirement for the R.N. degree.

Your committee believes that there should be additional provision for the graduate education of registered nurses in the specialties and for public health service.

Your committee believes that mental hygiene and psychiatry furnish fields scantily supplied by intelligent nurses.

Your committee believes that nurse midwives should be developed in the interest of a lower general mortality in obstetrics. Fifteen per cent of all of the obstetric deliveries in the United States are now being attended by midwives, most of whom are incompetent, ignorant and dirty.

The Medical Society of the County of New York, through a special committee on nursing has tried to define educational, character and ability qualifications of nurses and has secured the cooperation of the department of licenses through a very intelligent commissioner. We here insert a portion of a report presented at a meeting on February 26, 1932, at which Dr. Goldmark read the following letter from Commissioner Geraghty:

"February 17, 1932.

"My dear Doctor:

The enclosed notice has been sent to every Licensed Nurses' Registry in the four boroughs today. I hope your campaign among the doctors and patients will also start at once, stressing the need of dealing with Licensed Agents, so that any failure to comply with rulings may be brought to the attention of the Department."

Dr. Goldmark further read the notice sent to the Licensed Nurses' Registries:

"To Licensees of Employment Agencies

"The following classifications of nurses have been recommended and adopted by the Special Committee on Nursing of the New York Medical Society for the better protection of the sick public, and to meet the growing demand of the public unable to pay the highly specialized registered nurse and for a better cooperation between the public, physicians and registries.

"These classifications have been made effective by the Department of Licenses and all agents conducting Nurses' Registries are hereby instructed that these classifications and require-

ments will be strictly enforced by the Inspectors of this Department.

"In effect February 15, 1932.

"Classification and Requirements of Agents:

"1st Class. Registered Nurses (as under present law). Agents must see Diploma and R.N. card for current year.

"2nd Class. Non-registered Nurses (this group will include nurses from non-registered schools who have had two years' hospital training, and who are in possession of a Diploma; and also R.N.'s of other States).

"3rd Class. Trained State Hospital Nurses (as under present law). Agents must see Diploma.

"4th Class. Undergraduates, Trained Attendants: At least nine months' hospital training for Undergraduates; Trained Attendants, card from State.

"Agents must verify training credentials of this group by writing to hospital-schools, and have references on file at agency before sending nurse on a case and must see cards issued by State to Trained Attendants.

"5th Class. Practical Nurses (all miscellaneous nurses). Agent must have two written references from physicians on file at agency before sending nurse on case.

"These requirements must be complied with before an agent gives an Identification Card to a nurse and before sending her on a case, regardless of her classification.

"Agents must send out the triplicate forms Sec. 181-A within twenty-four hours on every case as law requires. The patient's copy to be sent directly to him in a plain envelope without agency name.

"All references and triplicate copies must be available at agency for inspection at all times. Registers to be posted daily. Inspectors will be assigned to see that these instructions are being fulfilled in every detail.

"Failure of agents to strictly comply with these rules and requirements will warrant the revocation of license.

"Agents will keep this notice for future reference.

JAMES F. GERAGHTY, *Commissioner.*

On motion, it was decided to communicate this information to the Coordinating Committee through the Director of Activities.

On motion, it was decided to give this matter due publicity through the *New York Medical Week*, the newspapers and possibly the radio."

We have commended the visiting nurse in all of our reports and we feel that too much praise cannot be given to this form of delivering nursing service.

We believe that the extension of appointment

and hourly nursing is one of the best of the present workable schemes to furnish nursing at prices within the financial ability of the patient and that the work carried on by these visiting nurses' organizations among the poor is the finest benevolent operation that we know of—and that the way it is done by the visiting nurse organizations in the various parts of the State of New York represents a more economical and valuable use of the donor's dollar than is shown by any other group engaged in social work.

Your committee recommends the extension of the visiting nursing service and the extension of hourly and appointment nursing.

We recommend group nursing in hospitals—so planned as to divide the costs of nursing between several patients.

We recommend the development of trained attendants as provided by our State laws.

We recommend the development of nurse mid-

wives to replace many of the dangerously incompetent midwives now practising.

We recommend that this House of Delegates request a complete review of nurse education by the Board of Regents of the State of New York.

We recommend the transfer of all basic nurse education to High Schools or Junior Colleges, or other educational institutions.

We recommend the establishment of nurse internships in hospitals approved by the American Medical Association.

NATHAN B. VAN ETEN, *Chairman*,
ANDREW SLOAN,
J. RICHARD KEVIN,
GEORGE W. KOSMAK,
GEORGE R. CRITCHLOW,
ARTHUR S. CHITTENDEN,
GEORGE L. BRODHEAD,
ROBERT P. MUNSON.

April 15, 1932.

REPORT OF THE FIRST DISTRICT BRANCH

The First District Branch of the Medical Society of the State of New York is composed of three county societies of Greater New York, and four of the lower Hudson Valley. All the county societies composing the District are active, and some conduct their affairs on a scale approaching that of the State Society. The scope of the District Branch is restricted, compared with that of the Branches in rural counties.

The major activity of the First District Branch during the past year was its annual meeting which was held in the Hotel Palatine, Newburgh, on Wednesday, October 7, 1931. The members began to assemble, seventy-five in number, at noon. Luncheon was served at one o'clock, after which addresses were made by Dr. W. D. Johnson, President of the State Society; Dr. Charles

Gordon Heyd, President-elect, and Dr. John A. Card, Speaker of the House of Delegates. The following scientific program was then carried out:

1. Medical Nomenclature—H. P. Logie, M.D., N. Y. Academy of Medicine.
2. Compensation and the Doctor—V. A. Zimmer, Director of Compensation Division of the State Labor Department.
3. Some Phases of Circulatory Failures and Their Treatment—Marcus A. Rothschild, M.D., New York.
4. Lung Abscess, Newer Phases of Treatment—Harry Wessler, M.D., New York City.

CHARLES D. KLINE, *President*.

April 15, 1932.

REPORT OF THE SECOND DISTRICT BRANCH

To the House of Delegates:

Gentlemen:

The policy of the Second District Branch during the past year has been to start building a superstructure on the foundation laid by previous administrations. Scientific medicine has not been neglected, but has been fostered by the component county societies, leaving to the Branch the problem of focussing the attention of the individual

physician to the problems of the practice of medicine.

The Twenty-fifth Annual Meeting was held in the Hotel St. George, Brooklyn, November 19, 1931. The afternoon was devoted to the recent polio epidemic, pneumonia, and health examination, and was participated in by fifteen members of the Branch, who presented brief, complete, summations of various special branches of medi-

cine. The members were privileged to hear the record of Doctor Martin B. Tinker's experience "The medical, special, and surgical treatment of goiter." The annual dinner in the evening was attended by about three hundred, who had the opportunity of meeting the officers of the State Medical Society and listening to a discussion of governmental medicine from the varied points of view of the medical profession, public health planning, health promotion, cost of medical care, and the obtaining of adequate medical services. These subjects were presented by: Dr. William D. Johnson, President of the State Society; Dr. Allan J. McLaughlin, Medical Director, United States Public Health Service; Mr. Michael M. Davis, Ph.D., Director of Medical Services of the Julius Rosenwald Fund, and Dr. Livingston Farland, President of Cornell University, and Chairman of Governor Roosevelt's Special Health Commission.

The attendance and enthusiasm of the annual meeting were an evidence of the interest of the membership in the State Society as represented by the Branch.

The activities of the component county societies have grown in multiplicity and detail. Each county society continues to publish a bulletin which is replete with the various interests and activities of the society. These publications have afforded a better and more complete contact and understanding between the four county societies composing the Branch. Limited space does not

permit even the tabulation of the many phases of medical work undertaken. Scientific programs have been of high character. Health activities have occupied a prominent place. The subject of medical economics has received serious consideration. Cooperation with the official and unofficial agencies has continued to be developed. Graduate education has continued to grow as a local feature. Membership shows a net gain.

Kings County continues to increase its library which is housed in its own building.

Queens County is developing its building into the medical center of the county.

Nassau County's suite of offices are being utilized as the seat of county wide medical activities.

Suffolk County has continued its interest in its county health unit, and has worked out an excellent cooperative program under the Welfare Law.

The Executive Committee, composed of the officers of the Branch and the presidents of the component county societies, has held one meeting to plan for the next annual meeting. It was decided to hold a spring meeting which would be social in character. Queens County Society will act as host for this special meeting. The Annual Meeting will again be held in November in Brooklyn, and Kings County will be the host.

Respectfully submitted,

LOUIS A. VAN KLEECK, *President.*

April 15, 1932.

REPORT OF THE THIRD DISTRICT BRANCH

To the House of Delegates:

Gentlemen:

Feeling that it would be of interest to the members of the State Society to know some of the history of the Counties of the State as well as the history of the Societies, I take pleasure in submitting the following as my Report as District Branch President:

Albany County, one of the original counties of the State of New York, was formed November 1, 1683, and at one time embraced nearly all that part of the State north and west of the present limits of the county and even included the whole of Vermont. The county lies on the west bank of the Hudson River and has an area of 544 square miles. In 1855 the population was 103,681 and included 174 physicians, 45 of whom were members of the Medical Society of the County of Albany, which Society was organized July 29, 1806, with nine members, William McClelland, President and Charles D. Townsend, Secretary. Its present membership numbers two

hundred fifty-seven, and the non-affiliates in the county, seventy-three. The meetings are held regularly on the third Tuesday of each month in Albany with an average attendance of ninety.

Columbia County was formed from Albany County, April 4, 1786, with an area of 688 square miles. The north line of "Kinderhook District" marks its northern boundary—the south line of "Kings District" its southern—the Taghkanick Mountains are along its east border and the Hudson River bounds it on the west. Iron, lead and manganese have been mined in the county and there are also several mineral springs. The Medical Society of the County of Columbia was organized in June, 1806, under the law of that year, it being the first county medical society to be so formed in New York. Its membership was eleven and its first President, William Wilson, and William Bay was its first Secretary. Columbia County numbered at that time about thirty-three thousand. The present membership of the Society is thirty-four and those physicians who

are not affiliated number nine. The date of the annual meeting is the first Wednesday in October at Hudson and that of the semi-annual the first Wednesday in May, with an average attendance of twenty-two. Post-graduate meetings were held 1927-1929 with a fairly good attendance.

Greene County was formed from Albany and Ulster Counties, March 25, 1800, and named in honor of General Nathaniel Greene of the Revolution. On May 26, 1812, parts were annexed to Ulster. The Catskill Mountains cover nearly the entire County—the main ridge extending along its southern border to Delaware County and a branch from this main ridge extending in a north-west direction from near Palenville through the County divides it into two nearly equal parts. The Medical Society of the County of Greene was organized the first Tuesday of July, 1806, with Dr. John Ely, President. The population of the County then was about 16,500, and in 1855, 31,137, and at this last date the physicians in the County numbered 47. The annual meeting of the Society will be held at Cairo on the second Tuesday of October. The other regular meetings are held on the second Tuesday of January, May and July. The present membership is twenty-one, and non-affiliates six. A Post-graduate course was given four years ago with a fifty per cent average attendance.

Rensselaer County was formed from Albany County February 7, 1791, and was named from the Rensselaer family, whose holdings at the beginning of the eighteenth century, by patents and purchase embraced nearly all of the present area (690 square miles) of the county of Rensselaer as well as that of Albany. The Medical Society of the County of Rensselaer was organized July 18, 1806, with an initial membership of twenty, Dr. Benjamin Woodward as President, and Dr. Ira M. Wells as Secretary. The population of the County at that time was about thirty thousand. The present membership of the Society is one hundred and thirty, non-affiliates, twenty-five. The annual meeting is in Troy on the second Tuesday of January and regular meetings on the second Tuesday of each of the other months with an average attendance of forty-five.

Schoharie County was taken from Albany and Otsego Counties, April 6, 1795, and in 1836 a small part was annexed from Greene County. The name signifies "drift wood" and was taken from the original Indian name To-wos-scho-her. The northerly branch of the Catskill Mountains lies along the southern border and spurs extend northward covering nearly the entire county. The area of the county is 675 square miles. The first settlement made by the whites was by the German Palatinates in 1711. A colony of about 700 coming here from East and West Camps on the

Hudson, where they had previously settled. The Medical Society of the County of Schoharie was reorganized September 21, 1857, with Dr. S. B. Wells of Middleburg as President, and Dr. C. C. Van Dyck, Secretary. Ten physicians became members at this time. The population of the County in 1855 was 33,519, about double its present population. The number of physicians in the county then was sixty-eight. The annual meeting of the Society is on the second Tuesday of October in Cobleskill, and the semi-annual meeting on the second Tuesday of May. Several Post-graduate courses have been held with good attendance. Average attendance at meetings—fifteen.

Sullivan County was partitioned from Ulster County, March 27, 1809, and named in honor of General John Sullivan of the Revolution. It has an area of 1,082 square miles. The County is largely drained by the Delaware River and its branches the waters of which with the many small lakes afford excellent fishing. The Medical Society of the County of Sullivan was organized October 3, 1809, with Thomas Royce, its first President, and Dr. Samuel Dimmick, its Secretary; the number of members, six. The population of the County at that time was six thousand. At present there are thirty-seven members and twelve non-affiliates in the County. The annual meeting is held at Liberty, on the second Wednesday in October and the semi-annual meeting on the second Wednesday of May. All other meetings are specially arranged as those of the Post-graduate courses. The average attendance at meetings, regular and special is thirty members.

Ulster County was formed November 1, 1683 (nearly 250 years ago), being thus one of the original counties, and it is said in its charter to "contain the towns of Hurley, Kingston and Marbletown, Foxhall and the New Paltz, and all villages, neighborhoods and Christian habitations on the west side of the Hudson River, from the Murderers Creek, near the Highlands, to the Sawyers Creek" extending west to the Delaware River. Its name is derived from the Irish title of the Duke of York. Its area is 1204 square miles. The Medical Society of the County of Ulster was organized in 1806. Its charter members and first officers are not known. The Society at present numbers sixty-seven and the non-affiliates in the county, twenty-six. The annual meeting is held in Kingston on the first Tuesday in December and the other regular meetings on the first Tuesday of February, April and October. In June an outing meeting is held. The average attendance at all meetings is fifty per cent.

Respectfully submitted,

HERBERT L. ODELL, M.D.

April 15, 1932.

President.

REPORT OF THE FOURTH DISTRICT BRANCH

To the House of Delegates:

Gentlemen:

It is with deep regret that owing to prolonged illness it has been impossible for me to visit the County Societies or perform the other duties required of the District Branch President, which if conditions had been different it would have given me much pleasure to have been able to do.

The Annual Meeting was held in Glens Falls on Wednesday and Thursday, October 21st and 22nd, 1931. At this meeting interesting papers were presented by Dr. Wilder Penfield of Montreal on "Neurology in General Practice—The Early Diagnosis of Remediable Lesions"; Dr. Edward MacD. Stanton of Schenectady on "Gall Stones"; Dr. Edward C. La Porte of Amsterdam on "Anthrax"; Dr. Samuel T. Orton of New

York City on "Certain Obstacles to the Development of the Language Function in Children"; Dr. Walter J. Craig of Albany on "The State Orthopedic Program"; Dr. Raymond G. Perkins of Malone on "Presentation of the Welfare Problem to the Board of Supervisors"; Mr. John R. Parker of Schenectady on "The Lawyer and the Physician in Welfare Work" and Dr. Grant C. Madill of Ogdensburg on "Medical Education."

Following a dinner at the Hotel Queensbury at which the Warren County Medical Society acted as host a very interesting address was given by Mr. J. Thacher Sears of Glens Falls on "The Great War Path."

Respectfully submitted,

FRANK VANDER BOGERT,
President.

April 15, 1932.

REPORT OF THE FIFTH DISTRICT BRANCH

To the House of Delegates:

Gentlemen:

As President of the Fifth District Branch of the Medical Society of the State of New York, I respectfully report as follows:

The Executive Committee of the Fifth District Branch, the Presidents of the component county societies, and Dr. Joseph S. Lawrence, executive officer of the State Society, attended a luncheon at the Hotel Utica, Utica, on Monday, June 15, 1931, for the purpose of discussing the condition and problems of the District and formulating plans for the annual meeting. There was a full attendance.

An invitation received from Dr. Richard A. Hutchings, President of the Oneida County Medical Society to hold the annual meeting of the Fifth District Branch in Oneida County was accepted. Later an invitation was received from Dr. W. W. Wright, Superintendent of Marcy State Hospital to hold our meeting at that institution.

The annual meeting was held at the Marcy State Hospital, Tuesday, September 29, 1931. We were fortunate to be able to hold our meeting in such a convenient place. I believe an institution like this, or a large hospital is the ideal place for a meeting. Dr. Wright and his able assistants made us all at home, not only during the Scientific Session but also at the luncheon at which about two hundred were the guests of the Marcy State Hospital.

The District was honored by having as guests, Drs. William D. Johnson, President; Daniel S. Dougherty, Secretary; John A. Card, Speaker, and Joseph S. Lawrence, Executive Officer of the Medical Society of the State of New York.

The Scientific Session which followed was opened by an address of welcome by Dr. William W. Wright of Marcy State Hospital.

"Pernicious Anemia, Differential Diagnosis and Treatment," Kenneth R. McAlpin, M.D., New York City.

"Cancer," Joseph Colt Bloodgood, M.D., Baltimore, Md.

"Modern Methods of Treating Syphilis of the Nervous System," Charles W. Hutchings, M.D., Marcy State Hospital.

"Some of the Compensation Problems Encountered in Surgical Practice," Percival K. Menzies, M.D., Syracuse.

"Compensation Law and the Physician," Mark A. Daley, General Secretary, Associated Industries of Buffalo.

We were also fortunate to be able to get such men as Dr. Bloodgood and Dr. McAlpin to address us. I believe such men out of the District help to make the meetings a success. It means a great deal of work on the part of the committee, but I think it is worth the trouble.

Respectfully submitted,

AUGUSTUS B. SANTRY, *President.*

April 15, 1932.

REPORT OF SIXTH DISTRICT BRANCH

In accordance with plans made early in the summer by the Executive Committee the regular meeting of the Sixth District Branch was held at the Iron Kettle Inn, near Waverly, on the 22nd of September.

Dr. George M. Cady, President, called the meeting to order and Dr. John A. Conway of Hornell, District State Health Officer, took up the consideration of "Typhoid Carriers, Surgical and Medical Management." In this he outlined the methods of eradication of foci of infection remaining after an attack of typhoid and his conclusions were that in most cases it would be necessary to attack them from a surgical standpoint.

The "County Health Unit" was the topic of a paper presented by Dr. Oliver W. H. Mitchell of Syracuse, a guest speaker. He presented the advantages and disadvantages of this set-up and drew the conclusion that it was better than the municipal and town arrangement that now obtains in most of the State. This drew out a good deal of discussion from various members and guests.

Drs. Hiram L. Knapp of Newark Valley, Henry E. Merriam of Ithaca and George R. Murphy of Elmira were appointed by the chair to act as a nominating committee of the officers to be elected for the ensuing term.

At this point the following guests of the Branch were introduced by President Cady:

Dr. W. D. Johnson, President of the State Society, Dr. D. S. Dougherty, Secretary of the

State Society, and Dr. John A. Card, Speaker of the House of Delegates. Each made an address outlining the policies of the Medical Society of the State of New York.

After the luncheon which followed Dr. Merriam, Chairman, presented the report of the Nominating Committee as follows:

For President, Dr. S. B. Blakely, Binghamton.

For First Vice-president, Dr. John E. Wattenberg, Cortland.

For Second Vice-president, Dr. Leo P. Larkin, Elmira.

For Secretary, Dr. H. B. Marvin, Binghamton.

For Treasurer, Dr. W. A. Moulton, Candor.

The report of the Nominating Committee was accepted in its entirety and the candidates declared elected.

Following the election of officers the scientific program was resumed and Dr. Arthur Morgan of Philadelphia, guest speaker, discussed the "Treatment of Cardiac Tragedies," in which he gave a very complete monograph of these conditions, discussing especially the management of Angina Pectoris and Coronary Occlusion.

The history, the architecture and the operation of the "Tioga County Hospital" were given by Dr. G. S. Carpenter of Waverly, who finished by issuing an invitation to all and sundry to make a call of inspection at the close of the meeting. This was taken advantage of by a large number.

GEORGE M. CADY, *President*.

April 15, 1932.

REPORT OF THE SEVENTH DISTRICT BRANCH

To the House of Delegates:
Gentlemen:

There has been very little special activity in the counties of the Seventh District Branch during the past year. However, Monroe County has continued its broadcasting program which I believe has done a great deal of good. Ontario County has been surveyed for a county health unit, but as far as I am able to ascertain nothing definite has been done along this line. Activities in the other counties have been about normal.

The annual meeting of the Branch was held at the Iola Sanitarium in Rochester on September

24, 1931. It was well attended. We were fortunate, through the efforts of Dr. T. P. Farmer of Syracuse, and the cooperation of the Monroe County Medical Society, in having with us Dr. Walter C. Albarez of the Mayo Clinic, Rochester, Minnesota. The attendance was very large at this meeting, the registry showing, I believe, the largest number attending any Seventh District Branch Meeting.

Respectfully submitted,

E. CARLTON FOSTER, *President*.

April 15, 1932.

REPORT OF THE EIGHTH DISTRICT BRANCH

To the House of Delegates:

Gentlemen:

As President of the Eighth District Branch, permit me to submit the following report of our activities during the last year.

In June we had a meeting in Buffalo of the Executive Committee and the presidents of the component county societies, for the principal purpose of outlining a program for the annual meeting. The representation was splendid, and in addition to outlining a program, we discussed a number of important medical affairs reported from the different counties.

On Thursday, October 1st, the District Branch held its Twenty-Sixth Annual Meeting at the Country Club in Olean. The attendance was most encouraging, being the largest that the district has recorded in a number of years. Every county was represented, giving a total enrollment of one

hundred and ten members, and twenty guests. At the close of the meeting the following officers for the next two years were elected:

President—Raymond B. Morris, Olean.

First Vice-President—Frederick J. Schnell, No. Tonawanda.

Second Vice-President—Henry W. Ingham, Jamestown.

Secretary—Robert P. Munson, Medina.

Treasurer—Fitch H. Van Orsdale, Belmont.

Owing to disability, I was not able to visit as many of the county societies as I should like to have done, but I have been in communication with the officers of all societies, and take pleasure in reporting that, without exception, they are actively engaged in solving their individual problems.

Respectfully submitted,

W. ROSS THOMSON, President.

April 15, 1932.

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For list of officers of County Medical Societies, see this issue, advertising page xxx

Annual meeting, Hotel Statler, Buffalo, N. Y., May 23-25, 1932

PREPARATIONS FOR THE ANNUAL MEETING

This May first issue of the Journal contains the final announcements of the Annual Meeting of the Medical Society of the State of New York, to be held in Buffalo on May 23-25, 1932. The issue of April 15 contained the programs and the first installment of the annual reports of the officers and committees. This present issue completes the annual reports, and adds details of arrangements which could not be settled at an earlier date.

A surprisingly large number of members have cooperated to complete the preparations for the Annual Meeting. There are the officers and chairmen who have prepared the reports, twenty-six in number; the Committees on Scientific Work and on Arrangements have a total of twenty members whose work has extended over the greater part of last year; there are 180 participants listed on the scientific program; and 70 members of the Refer-

ence Committees who will consider the Annual Reports and the recommendations of the officers. Altogether 275 members are listed to prepare for the meeting, or about one physician in every forty members of the State Society.

This is the sixth year in which the Annual Reports have been published before the Annual Meeting and the second year in which the personnel of the Reference Committees have been announced in advance. The wisdom of this plan is demonstrated by the facility of action in the Annual Meeting. The House of Delegates, for example, has tripled its scope of

work in the past five years; and yet it requires no increase in the amount of time necessary to transact its business. The Reference Committees have nearly a month for considering the reports and recommendations of the officers; and the other members of the House of Delegates have abundant time for studying the subjects to be discussed. The business of the House of Delegates is, therefore, transacted with the maximum facility and wisdom.

The Annual Meeting this year promises to be the most extensive and satisfactory in the history of the Medical Society of the State of New York.

RADIUM POISONING

The Metropolitan papers of April first carried front page news of the death of a prominent business man of Pittsburgh from chronic poisoning by radium contained in a "water" that was widely advertised as a "rejuvenator." The newspapers of 1928 and 1929 had given equal publicity to a series of fatal cases of radium poisoning in factory workers in Newark, N. J., caused by the practice of using the lips to wet the brushes with which radio-active paint was applied to luminous dials. (See this Journal of February 1, 1929, page 177; and that of August 1, 1929, page 962.)

When the Pittsburgh case was featured in the newspapers, the editors of this Journal invited Dr. Frederick B. Flinn, head of the Department of Industrial Hygiene of the College of Physicians and Surgeons, New York City, to describe the effects of radium on the human body. The article, which was a model of brevity, clearness and completeness, was published in this Journal of April 15, 1932, page 446.

The story of the exploitation of water containing radium was printed in the Journal of the American Medical Association of April 16, 1932, page 1397. Five columns of that Journal were required to give the concise record of attempts to place alleged radiation on the market by a promotor who was sentenced to prison in 1915 for automobile frauds. The promotor then took up radiation and advertised at least seven devices for applying it to the human body. Most of these devices were probably fakes, but one, a water called radithor actually contained radium in appreciable quantities. This water was advertised to be good for a list of one hundred and sixty conditions of the human body. It was this preparation which caused the death of the Pittsburgh victim. It seems strange that the promotor should really have put radium into the water, but he also made preparations containing radium emanations and others which were inert and were frauds of the most evident type.

LOOKING BACKWARD

This Journal Twenty-Five Years Ago

Women's Medical Society: The coming meeting of the Women's Medical Society of New York State at the time of the annual meeting of the Medical Society of the State of New York recalls its founding a quarter of a century ago, as is described in this Journal of May, 1907:

"On March 11, 1907, in honor of the seventy-eighth birthday of Dr. Sarah R. Adamson Dolley, the women physicians of the State met at Rochester and organized the Women's Medical Society of New York State.

"It seems fitting that this should occur in Western New York, where the opportunities for

medical education and a medical degree were first given to women.

"Dr. Elizabeth Blackwell graduated at the Geneva Medical College, Geneva, N. Y. in 1849, and Dr. Dolley graduated at the Central Medical College of Syracuse and Rochester, in 1851.

"This Society is organized with the distinct understanding that it is not to divert interest from the Medical Society of the State of New York, but rather to encourage greater activity in organized work, and to cultivate social relations and mutual helpfulness among women physicians."



MEDICAL PROGRESS



Erythredema or Pink Disease.—A study of the records of 42 cases diagnosed as erythredema in Sydney, Australia, leads George Willcocks to believe that the diagnosis may not always be correct. It is the combination of symptoms that is important—pink feet, pink papular rash, irritability, photophobia, and other signs in the absence of any other adequate explanation. An infectious focus of some kind is almost invariably present, and gastro-intestinal disturbances are common. The disease quite often follows bronchitis, gastroenteritis, improper diet associated with ulceration about the mouth or nose, dentition, urinary infection or septic sores about the face or limbs. In 23 of the 42 cases reviewed the characteristic symptoms and signs occurred, without obvious cause for their existence, while in 19 cases there were certain possible causes for the symptoms. In some cases skiagraphy revealed the bony changes typical of rickets, but often these were absent. There is no doubt that the symptoms occur without any obvious dietetic or infectious cause, but in the present state of our knowledge these should be investigated. The prognosis of the disease is serious. The main method of treatment has been to give an adequate diet, including egg yolk, orange juice, and one-half a drachm of cod-liver oil. All infective foci should be treated, and the child should be left at rest in the fresh air as much as possible. Chloral, bromide, and Dover's powder are often given for the insomnia, which is one of the most difficult symptoms to combat. In addition 20 grains of potassium citrate may be given four times a day. The impression is that children with this disease do better at home than in a hospital. Findlay and Stern have produced a syndrome resembling pink disease in rats. They found that the condition was rapidly cured by feeding raw liver. In view of this there could be no harm in adding a small quantity of liver extract to the child's daily diet in pink disease.—*Practitioner*, January, 1932, cxxviii, 1.

Preliminary Pneumothorax in Intrathoracic Surgery.—M. J. Arcé points out that as long ago as 1924 he called attention to the possibility of opening the thorax to perform intrathoracic operations without any more difficulty than is involved in carrying out an abdominal operation. This is made practicable by the simple device of performing a preliminary pneumothorax 8, 10 or 12 days before operation, sufficient to produce total or nearly total atelectasis of the corresponding lung. One point of great importance is the making of roentgenograms before and after the

pneumothorax, in order to follow the evolution of the therapeutic process in its entirety. Nitrogen is the gas of choice; air is undesirable because it is resorbed too rapidly. From 300 to 500 c.c. are injected on the first occasion, according to the tolerance of the patient, with care to pause after 200 c.c. have been injected in case the patient has a tendency to cough or has difficulty in respiration. In the course of three insufflations a total of 1500 to 2000 c.c. generally suffices. When atelectasis has been attained, the second roentgenogram is taken. When the case is one of tumors of the lung, particularly hydatid cysts, it is easily understood that the atelectasis will never be quite complete, and that small portions of the lung will still be full of air around the tumor. When the affection is not one of the lung, but of the mediastinum or diaphragm, the complete atelectasis of the lung and the greater transparency of the insufflated hemithorax will make it possible to clear up the diagnosis in a manner often astonishing. If under these conditions the surgeon does a thoracotomy he finds the patient in a state of absolute tolerance at the moment when he incises the pleura, and no matter how sudden the opening no modification is observed of either pulse or respiration. To produce any sign of disturbance one must irritate the pleura, make traction on the lung, or, if it is a hydatid cyst, irritate the bronchioles by intracystic maneuvers after the cyst is opened; the response is then usually a cough, a slight sense of oppression, or more or less dyspnea; when a pneumotomy is done, bloody expectoration may be produced. To assure success of the operation, the collapse must be maintained; when exploration is completed, this is accomplished by covering the lung with gauze compresses wrung out in warm artificial serum, upon which an assistant makes pressure to keep them in situ. There is always a slight effusion afterwards, which however gives no trouble. The patient should be fluoroscoped at least once in 4 days afterward. Arcé has had remarkably good results in all the 50 and more operations that he has carried out.—*Bulletin de l'Académie de Médecine*, February 9, 1932.

Relation of Cancer of the Skin and Skin Appendages to Focal Lesions in Other Ectodermal Structures.—Montrose T. Burrows, writing in the *Southern Medical Journal*, February, 1932, xxv, 2, discusses the possibility that cancer may be a reaction secondary to other forms of deterioration. In the production of coal tar cancer it has been noted that cancerous degeneration does not take place at once, but always after the

systemic changes have become noticeable. This suggests that systemic changes may be as important as local irritation. To throw light on this hypothesis, the author made a study, published in 1929, which showed that in every cancer case there were other degenerative states any one of which, regardless of the cancer, might have caused cachexia or general deteriorations from which the subjects were suffering. It was found that patients with cancers of the skin, breasts, and lips had also abscessed teeth, chronic tonsillitis, chronic nerve lesions, or diabetes. The treatment of these secondary lesions along with the cancers gave not only excellent results in many cases, but cancers of the skin disappeared spontaneously and in several instances breast metastases were no longer noticed after careful removal of all the diseased teeth. Abscessed teeth were not found associated with cancer of other tissues and organs. In a more recent study, including 172 cases of skin cancer and 68 breast cancers, lesions of the teeth or other degenerations in the skin or nerves were found in every case except one of breast cancer. The study further showed a degeneration in the ectoderm in each case of cancer of the skin and its appendages. The same ectodermal lesions were not found in cases of cancer of other organs and tissues. A series of 43 patients with cancer of the skin or its appendages, who had toothless mouths, were submitted to careful x-ray examination. In all but three instances the toothless mouths showed root fragments, and a visible pus pocket surrounded most of them. No evidence has been found that tonsils act directly to cause malignant degeneration of the skin or its appendages. It is possible, however, that they play a rôle in localizing the cancer. In many cases of cancer about the nose chronically diseased tonsils have been present, and the cancers have developed on that side of the nose corresponding to the most diseased of the two tonsils. It has been noticed in cases of cancer of the skin and its appendages that malignancy has in no instance developed until after the appearance of cachexia associated with abscessed teeth or similar conditions. On the other hand, cancers have developed after cachexia on sites which have suffered previous irritation. It seems that cancer may depend not only on a specific form of local irritation, but also on the immediate metabolic state of the individual.

Arterial Atony and Arteriosclerosis.—J. Plesch holds that arteriosclerosis is only one phenomenon in a constitutional systemic disease affecting more particularly unstriated muscle. It is by no means restricted to local areas; it attacks the whole vascular system simultaneously. It is a disease that sets in at every age, that can be arrested, that can be cured in the early stages and beneficially influenced in the later stages. Two forms of the disease can be distinguished:

(1) The arteriosclerosis of old age, due to wear and tear, with its local atheromatous calcified areas as secondary mechanical hysteresis, and (2) arteriosclerosis as a constitutional, systemic, allergic primary affection of the smooth muscles, the sympathetic nerves and the connective tissues. The essential characteristic is not deposition of lime. The primary cause is the weakening of the elastic elements of the blood-vessel walls. The author's investigations have shown that the attenuation of the blood-vessel walls corresponds to their atonic state. Every influence that is capable of weakening the organism to such an extent as to produce a general atony can also be held responsible for arterial atony and for calcification. The clinical symptoms of arteriosclerosis can be explained on the basis of arterial atony. Plesch points out that in the early stages of arteriosclerosis both high and low blood pressures can be found. The important factor is not so much the absolute blood pressure as its extraordinary instability. The changes in the vascular system affect the heart's capacity for work, resulting in the so-called oppressive feeling or in angina pectoris. The prophylaxis and treatment of atony in its early stages consist chiefly in removing as far as possible the injurious etiological elements. The over-taxed circulation must be relieved by absolute rest in the horizontal position. The physician who is determined to reduce the blood pressure by force, without first combating its causes, commits malpractice. He should not work against compensation, but rather direct it. Still less rational are remedies to "loosen the lime in the arteries." It is important that the volume of blood be reduced. It is possible to do this far more effectively by dieting and fresh air than by blood-letting. It is practicable to repeat the nitrogen-free and salt free diet every year for three or four weeks, and to introduce a "dietetic day" once a week to relieve the vascular system. The idea of digitalis at all costs is objectionable. The prolonged administration of iodide of potassium is injurious rather than useful. Where arteriocapillary fibrosis has already developed, this drug may be given in doses up to 8 grams daily for ten days, and repeated at intervals of ten days. For meteorism tincture of asa-fetida, about 15 drops before meals, is effective. —*The Lancet*, February 20, 1932, cccxii, 5660.

Arteriosclerosis.—Wesley Scott quotes statistics which show a mounting incidence of arteriosclerosis, particularly in middle life. But we are reminded of the fact that individuals are living longer than ever before and deterioration of the arteries seems to be nature's method of eliminating us after our biological responsibilities have been fulfilled. Complicating the problem are our present day efforts to thwart the law of natural selection. The pathogenesis of the disease is an unsolved problem. The clinical and pathological

problems involved are most perplexing. The changes in the arterial tree that we call arteriosclerosis are most capricious in their distribution, appearing in the greater circulation from the sinus of Valsalva to the smallest arterioles. The process may be generalized in some instances and sharply localized in others. The functional significance of arteriosclerosis varies greatly. Extensive changes in the large arteries may offer no barrier to longevity, and on the other hand, the process may be confined to a few millimeters of the coronary artery and cause sudden death in the prime of life. Serious damage to the intimate vasculature of the kidney is found in young people dying of uremia. Scott cites a case of extensive and severe diffuse vascular disease with hypertension and death from cerebral hemorrhage in a boy of 12 years. As a basis for discussion in correlating the clinical and pathological findings he offers a classification under two headings: (1) Arteriosclerosis (large arteries) without hypertension, and (2) arteriosclerosis (arterioles) with hypertension. He then points out defects in this scheme, since a number of conditions, such as myocardial insufficiency, coronary disease, angina pectoris, apoplexy, and paralysis appear under both headings. Arteriosclerosis and hypertension are associated because most individuals with so-called hypertension show at post mortem more or less marked lesions of the arterioles. The occurrence of large vessel sclerosis without hypertension is also open to criticism because of the frequent involvement of the arteries as well as the arterioles in individuals with hypertension. The cause of death in individuals with hypertension is, in the order of frequency, heart failure, a cerebral accident, and renal insufficiency. In a series of 100 cases of hypertension coming to autopsy Scott found as the cause of death myocardial failure in 68 per cent, cerebral accident in 22 per cent, and renal insufficiency in 10 per cent. From 85 to 90 per cent of patients with hypertension and arteriosclerosis die of heart failure or a cerebral accident before the vascular lesion in the kidney progresses to the point of renal insufficiency. These facts are not as widely appreciated as their significance merits. When we know more of the causes of hypertension we shall be further on the road to the solution of the problem of arteriosclerosis.—*American Heart Journal*, February, 1932, vii, 3.

Spontaneous Pneumothorax Under the Form of Perforated Ulcus Ventriculi.—According to M. Siebner, certain affections of the lungs, which are attended with laceration or breaking down of cortical lung parenchyma, may produce a spontaneous pneumothorax. Among those that have this tendency in peculiar degree are those acute cases of phthisis which go hand in hand with rapid destruction of tissue, in which tuberculous caverns lie near the surface of the

lung and break through into the pleural cavity, whereas the fibrous forms with chronic course relatively seldom show this behavior. Siebner had a case in which without any preceding pulmonary disease or any external cause a spontaneous pneumothorax appeared, to the extreme astonishment of physician and patient alike. A healthy man of 32 while traveling to his work was suddenly seized with pains in the region of the stomach and left shoulder, accompanied by nausea. He was taken to the hospital in a state of shock, and his symptoms on admission were such as to suggest perforation of an ulcer ventriculi. Laparotomy, however, showed no pathological findings in the stomach or any other abdominal organ. On the following day the first signs of a left-sided pneumothorax were established by percussion and auscultation. There was no air hunger, and no rigidity of the abdomen; the temperature was normal. During the next 8 days a complete pneumothorax of the left side was diagnosed roentgenologically. Recovery ran a perfectly normal course, and at the end of 3 weeks there remained only a very slight collection of air with a small amount of exudate over the diaphragm, but neither fever nor cough. Sputum examination was negative. The patient is still under observation for tuberculosis, but no active lung process has been demonstrated. One may suppose that a small cavity near the wall or an emphysematous vesicle in the wall ruptured into the left pleural cavity and then established a communication with the external air by way of a bronchial branch. In the moment of rupture there was an excitation of the intercostal nerves, and pain and rigidity of the abdominal wall appeared at a time when the lung was still expanded; also only a little air could find its way in between the bronchial tube and the pleural cavity, so that at first the pneumothorax could not be recognized even roentgenologically. The irradiation of the pain to the intercostal nerves caused pain in the upper part of the abdomen, presenting the picture of *ulcus ventriculi*.—*Deutsche medizinische Wochenschrift*, February 12, 1932.

Hypertension and the Kidney.—A report is made by Max Rosenberg in the *Deutsche medizinische Wochenschrift* of February 5, 1932, with reference to the conditions of blood pressure in 22 patients with renal affections, 14 of whom were suffering with hydronephrotic or pyelogenic contracted kidney, 5 with cystic kidneys, and 3 with renal tuberculosis, and in all of them the condition led to a fatal termination, due to azotemic uremia. One of the patients with contracted kidney was found at autopsy to have been affected also with chronic glomerulonephritis, and another with arteriosclerosis; both of these exhibited cardiac hypertrophy and a hypertonia respectively of 195/120 (age 23) and of 165/95

(age 62), so that it is not clear whether the hypertonia and cardiac hypertrophy must be attributed to the contracted kidney through ascending infection or to the hypertonic effect of the vascular disease. The 3 tuberculous cases had a blood pressure between 110 and 135 mm. Hg (ages 21-46), and at autopsy there was either a dilated or a small brown-atrophic heart, in no case an hypertrophy. Of the 5 patients with cystic kidney, 2 women of ages 49 and 44 had no hypertrophy, blood pressure 130 and 145 mm. Hg respectively; a man aged 53 had maximal blood pressure 170 mm. Hg and considerable hypertrophy; a woman of 45, blood pressure 160 mm. Hg and no hypertrophy; and a man of 55, moribund when admitted, had sclerosis of the coronary arteries and a huge dilatation and hypertrophy of the left ventricle. The author concludes that high grade contractions or destructions of the kidney with fatal termination through uremia, and due to ascending infection (pyelonephritis), chronic urinary stasis (hydro- or pyonephrosis), tuberculosis, or cystic degeneration of both kidneys, much less frequently cause high blood pressure and cardiac hypertrophy than contracted kidneys resulting from chronic nephritis or primary disease of the vessels (malignant nephrosclerosis). This is of diagnostic significance in view of the fact that renal insufficiency without hypertonia or cardiac hypertrophy must always suggest the diagnosis of such diseases (including amyloid). The theoretical significance of these observations lies in the fact that they make it seem unlikely that the increased blood pressure has a mechanical origin, in an insufficient irrigation of the kidney with blood, and presuppose rather a chemical origin, namely, that both groups of kidney insufficiency are caused by quantitative and probably also qualitative differences in the formation of chemical substances having a pressor effect.

Oleothorax in Chronic Non-Infectious Pleural Effusions.—Walter Baumgarten and Howard A. Rusk report two cases of non-infectious pleural effusion in which, after the injection of gomenol, fluid ceased to accumulate, and there had been no further effusion. Both of the patients were elderly women with heart disease. In the one the pleural effusion followed an attack of bronchopneumonia and in the other it was due to malignant metastases in the pleura following a radical breast operation. Heretofore, oleothorax has been used chiefly as a means of compression in cases of tuberculous and infectious pleurisy to prevent adhesions and permit collapse. The technique employed in the two types of cases is quite different, and upon this difference depends the difference in results. In tuberculous pleurisy a portion of the effusion is withdrawn, then oil is injected and reinjected in large amounts, replacing the infected fluid with an oil emulsion of

gradually increasing strength. In the authors' cases as much of the fluid as was possible was withdrawn at each aspiration and the oil was re-injected so that each time the chest was tapped there was a marked increase in the strength of the emulsion and a diminution of the amount. For example, in the first case, one-half of the fluid on the right side was withdrawn and 10 c.c. of 3 per cent gomenol in olive oil were slowly injected. Two days later the same amount of fluid was withdrawn and 30 c.c. of oil were injected. The amount was rapidly increased at two-day intervals until at the fifth injection as much of the fluid as possible was withdrawn and replaced by 250 c.c. of oil. On the basis of their animal experiments, the authors believe that in a simple serous effusion the medicated oil sets up an irritative pleurisy, which is followed by adhesions, with an obliteration of the pleural cavity. This is in direct contrast to the results in the treatment of tuberculous and infectious pleurisy, where the oil is used to prevent adhesions and permit collapse.—*Southern Medical Journal*, March, 1932, xxv, 3.

Winter Sun Cure at Home.—Many physicians, says E. Schott, fail to utilize means close at hand in the case of patients for whom a stay at a winter cure in a high mountain climate is an absolute impossibility. It is not a question of a substitute, but of doing nothing, of letting matters slide, or of taking advantage of such sunshine as lower climates afford, which is not to be despised. There is no need of a long journey, strange surroundings and manners, a strange bed, and a parting from home. All that is needed is a chaise longue, or, failing that, any comfortable chair, such as even a man out of work possesses, together with warm covers for his legs and a pillow at his back. Anyone can find a corner protected from the wind. The winter sun is only waiting to have its beams sought for. It is a mistake for anyone to suppose that there is no winter sunshine in his own climate. There is sunshine everywhere, and in all months of the year. But one must give attention to it, seek it, and take time for it. Everyone has time enough for the thing he really needs, and most of all the sick man! Hours spent in the winter sunshine of one's own home town, with the body in a comfortable reclining position, and well protected from the wind, will accomplish almost the same results as that of the high resorts, the latter in 5 hours, the former in ten, or perhaps a little more. One or two weeks after the high mountain cure is ended, and the patient back at work, its effect is over. To be able to renew the stimulation over and over again in smaller doses is much better. Warm sunshine in the middle of the day in winter is common. Even schoolchildren know the tonic effect of tanning of the face and shoulders. In addition, the psychic effect of a healthy, brown face is not to be despised.—*Münchener medizinische Wochenschrift*, February 26, 1932.



LEGAL



LEGAL LIABILITY OF EMPLOYER FOR THE ACTS OF A PHYSICIAN EMPLOYEE

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

A variety of cases have arisen in the courts involving the question of legal liability on the part of individuals or corporations who employ physicians to administer medical care and treatment to third parties. It is, of course, the rule that a doctor is personally responsible to the patients treated by him and is answerable in money damages to such patients if malpractice is established. There, however, have been a number of cases where the patient has sued the employer of the physician and not the physician himself. In these cases no doubt, the plaintiff felt that the individual or corporate defendant was financially able to respond to a judgment, whereas the physician might not be. It may be of interest to the medical profession to discuss some of the cases involving these propositions.

Some years ago the point arose in a very interesting case which was taken on appeal to the highest court of this State. In that case a passenger on a ship at sea, fell on the deck and fractured her knee-cap. The ship-surgeon, who was under salary from the steamship company, treated her, but after she landed it became necessary to amputate the leg. The passenger sued the company for damages arising out of alleged negligence. It was held by the Court of Appeals that in the absence of evidence of carelessness on the part of the company in the selection of its doctor it could not be held liable for his negligence. In its opinion the court stated in part:

"If, by law or by choice, the defendant was bound to provide a surgeon for its ships, its duty to the passengers was to select a reasonably competent man for that office, and it is liable only for a neglect of that duty. . . . It is responsible solely for its own negligence and not for that of the surgeon employed. In performing such duty it is bound only to the exercise of reasonable care and diligence and is not compelled to select and employ the highest skill and longest experience. There was no evidence in this case that the defendant was careless or negligent in its choice. The surgeon had been upon the Rotterdam Line for three years, and so far as appears, was reasonably competent for his duty. If in plaintiff's case he erred in his treatment, it does not prove that he was incompetent, or that it was negligence to appoint him."

Under a statute requiring a passenger ship to carry a duly qualified medical practitioner, and

to carry a supply of medicines to be used at his direction and under his charge, it has been held that the ship company assumed no liability for the malpractice of its doctor so employed. In ruling upon such a case the Court of Appeals said:

"When the shipowner has employed a competent physician duly qualified as required by the law, and has placed in his charge a supply of medicines sufficient in quantity and quality for the purposes required, which meet the approval of the government officials, and has furnished to the physician a proper place in which to keep them, we think it has performed its duty to its passengers. That from that time the responsible person is the physician, and errors and mistakes occurring in the use of the medicines are not chargeable to the shipowner, and that no different rule is applicable to such mistakes as are the result of improper arrangement in the care of the medicines than to those which are the result of errors in judgment."

A similar case came up before a Federal Judge where the plaintiff had been riding on a railway train, and was injured in a collision. His collar bone was broken, and was set by a surgeon in the employ of the railroad. He was under the doctor's care in a hospital for 19 days and at the end of that time he was discharged as cured, and told that the injured shoulder was as good as the other one. A few days later his family physician found that there was no bony union. The plaintiff's recovery was a slow one and he sued the railroad charging it with negligence. The court stated the rule as follows:

"It must be remembered that the company is not obliged to engage the very highest and best talent that can be engaged, but it must engage a man who is reasonably competent in his profession, so that he would be an ordinarily competent man, having ordinary knowledge and skill to perform the duties placed upon him. These are the duties that are assumed by the company. A competent man being in the employ of the company, his services are offered by the company to attend to the injured party. The person that it injured is not compelled to accept his services; he may prefer to go elsewhere. There is a difference between a person whose services are offered that may or may not be accepted, and a con-

ductor or brakeman that are put on the train and whose services we must accept. When a man goes upon a train he has no choice about the conductor, brakeman or anything else. The company assumes that they are responsible for the performance of their duty in such respects. But with regard to a surgeon of that character, the plaintiff could have refused to take him as his surgeon, and could have taken any other surgeon, as he deemed it best to do. So that, as I have instructed you, the duty of the company is performed, and it has performed all that the law requires, when it furnishes a competent man, and he is ordinarily competent for that duty."

Similarly it has been held that where a great business corporation maintains a hospital for the free treatment of its employees, supported partly by the company, and in small part by monthly contributions from all of the employees, the company cannot be held to liability for acts of negligence on the part of the physicians and attendants at said hospital, provided it used care in selecting such doctors and attendants. In an opinion so holding, the court well stated the rule as follows:

"Was the Company liable for the malpractice of the physicians or the carelessness of the attendants, at the hospital, if that hospital was maintained as a charitable enterprise and not for the purpose of deriving profit from it? If one contracts to treat a patient in a hospital, or out of it, for that matter, for any disease or injury, he undoubtedly becomes liable for any injury suffered by the patient through the carelessness of the physicians or attendants he employs to carry out his contract. If one undertakes to treat such a patient for the purpose of making profit thereby, the law implies the contract to treat him carefully and skillfully and holds him liable for the carelessness of the physicians and attendants he furnishes. But, this doctrine of *respondeat superior* has no just application where one voluntarily aids in establishing or maintaining a hospital without expectation of pecuniary profit. If one, out of charity, with no purpose of making profit, sends a physician to a sick neighbor, or to an injured servant, or furnishes him with hospital accommodations and medical attendance, he is not liable for the carelessness of the physicians or of the attendants. The doctrine of *respondeat superior* no longer applies because by fair implication, he simply undertakes to exercise ordinary care in the selection of physicians and attendants who are reasonably competent and skillful, and does not agree to become personally responsible for their negligence or mistakes.

"The same rule applies to corporations and to individuals, whether they are engaged in dispensing their own charities or in dispensing the charitable gifts of others entrusted to them to administer. . . . Moreover, the corporations or individuals that administer such trusts must, after all,

leave the treatment of the patients to the superior knowledge and skill of the physicians. They cannot direct the latter, as the master may ordinarily direct the servant, what to do, and how to do it. If they did so, the physicians would be bound to exercise their own superior skill and general judgment and to disobey their employers if, in their opinion, the welfare of the patients required it and finally, the patient is not required to accept the proffered accommodations and attendance. They are but freely offered to him. He may refuse to accept them, and seek other physicians and other accommodations.

"It would be a hard rule indeed, a rule calculated to repress the charitable instincts of men, that would compel those who have freely furnished such accommodations and services to pay for the negligence or mistakes of physicians or attendants that they had selected with reasonable care. No such rule has ever prevailed in this country. The rule is that those who furnish hospital accommodations and medical attendance, not for the purpose of making profit thereby, but out of charity, or in the course of the administration of a charitable enterprise are not liable for the malpractice of the physicians or the negligence of the attendants they employ, but are responsible only for their own want of ordinary care in selecting them."

A fairly recent case in this State brought against a railroad, however, is illustrative of the sort of situation in which the law will hold the employer liable. The railroad had established an emergency hospital, to which it required all injured employees should be taken. The plaintiff received a severe injury to his leg while at work, and was taken to the emergency hospital for treatment. The doctor whose duty it was to be there had not arrived, and an assistant station master delayed sending him to another hospital, so that he was allowed to remain at the emergency hospital for over an hour without treatment or relief. When finally taken to a hospital his leg was amputated, and on the trial of his damage suit there was testimony that the delay deprived him of a chance to save the leg. The Appellate Court affirmed a judgment for the injured employee, stating that the liability did not rest upon negligence in caring for the plaintiff, but upon negligence of the company in failing to provide any care at all to the plaintiff for an unreasonable length of time, the company having undertaken to provide medical and surgical care to its employees.

These adjudications are not only good law, but good common sense as well. Obviously, the law should not cast upon the employer any greater duty than reasonable care in the selection of the physician employed. To rule otherwise would be to place an onerous and unjust burden upon the employer.



NEWS NOTES



THE ANNUAL MEETING

The one hundred and twenty-sixth Annual Meeting of the Medical Society of the State of New York will be held on Monday, Tuesday, and Wednesday, May 23-25, 1932, in the Hotel Statler, Buffalo, N. Y. The major features of the meeting will be as follows:

The House of Delegates will meet on the afternoon of Monday, May twenty-third, at two o'clock, daylight saving time. Following the excellent custom of the last few years the members will dine together soon after six o'clock, and the House will remain in session throughout the evening. A session will also be held on Tuesday morning.

General scientific sessions will be held on the afternoons of both Tuesday and Wednesday, and the subjects to be discussed will be of practical value to every physician, be he a family doctor or a specialist.

The eight *scientific sections* will hold their meetings on the mornings of Tuesday and Wednesday.

The *Annual or Anniversary meeting* required by the Charter of the Medical Society of the State of New York, will be held on the evening of

Tuesday, in connection with the *Annual Banquet*. The President's address will be given by Dr. W. D. Johnson, and the inaugural address of the incoming President will be delivered by Dr. Charles Gordon Heyd.

A scientific exhibit will be open during the entire time of the annual meeting. Demonstrators will be in attendance to explain the exhibits.

Clinics will be held in several hospitals of Buffalo throughout the day on Monday, May twenty-third. Please note that these clinics are to be held in Buffalo, and not in Albany, as was announced on page 462 of the *Journal* of April 15, through an oversight.

Technical exhibits will be conducted by dealers in medical wares throughout the three days of the annual meeting. Every physician is interested in the wares which he uses in the practice of medicine, and will find them in great variety at the exhibit booths which will be located on the mezzanine floor. Nearly all the exhibitors are also advertisers in the *Journal* and are all-the-year supporters of the Medical Society of the State of New York; and their demonstrations will be of scientific value.

THE COMMITTEE ON ARRANGEMENTS

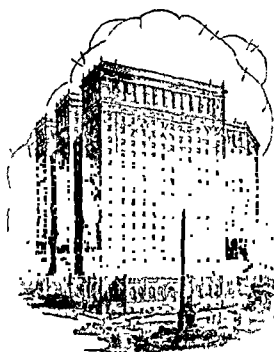
The smoothness of the meetings and exhibits, and the comfort of the members and guests at the Annual Meeting are dependent largely on the efficiency of the Committee on Arrangements,

which supervises all the local facilities. This Committee consists of:

Dr. Herbert A. Smith,	Dr. C. H. Mackey
Chairman	Dr. Milton G. Potter
Dr. L. E. Villiaume	Dr. William F. Jacobs
Dr. Nelson G. Russell	Dr. Frank N. Potts
Dr. Robert P. Dobbie	Dr. James E. King

This Committee has made provision that practically every feature of the Annual Meeting shall be held in the Hotel Statler, at Delaware Avenue and Niagara Square. This hotel has 1100 rooms, every one equipped with a private bath, circulating ice-water, a bed-head reading lamp, and a radio set. The room rates per day are from \$3.50 upwards.

The local committee is especially desirous that the golfing doctor enjoy many of the excellent courses in Buffalo and vicinity during the State Meeting, May 23rd to 25th. Courtesy guest cards will be issued at the Hotel Statler. At this time an effort will be made to promote a one-day handicap tournament. Those interested, ad-



HOTEL STATLER, BUFFALO, N. Y.

dress communications to the Chairman of the Sub-committee on Golf of the Local Committee on Arrangements, Dr. Leon H. Smith, 606 Genesee Street, Buffalo, N. Y.

The Committee on Ladies' Entertainment has completed arrangements for a reception and luncheon to be held at the exclusive Garret Club of Buffalo, on Tuesday, May 24th. On Wednesday there will be a trip to points of interest

around Buffalo, including Niagara Falls and Old Fort Niagara which has recently been restored to its original state and is one of the landmarks in the history of the Niagara Frontier. Luncheon will be had en route. Transportation for these trips will be provided. A headquarters will be established on the Mezzanine floor of the Hotel Statler, and the visiting ladies are invited to register on arrival to facilitate the arrangements.

PROPOSED RESOLUTION

In accordance with the action of the House of Delegates on June 1, 1931, Dr. Julius Ferber of New York County, gives notice that he will propose the following resolution in the House of Delegates on May 23, 1932:

"Resolved, that the Medical Society of the

State of New York through its proper officials, appoint a committee to make a thorough study of the medical aspects of the 'Workmen's Compensation Act,' and bring in concrete suggestions for the purpose and to the end of improving the present unsatisfactory situation."

WOMEN'S MEDICAL SOCIETY OF NEW YORK STATE

The winter meeting of the Councillors of the Women's Medical Society of New York State was held in Syracuse on March fifth with thirteen members present. It was decided to hold the annual meeting in Buffalo, on May 23, at the time of the meeting of the Medical Society of the State of New York. A feature of the meeting will be a medical pageant.

The tentative program of the Annual Meeting is as follows:

Greetings from the Medical Society of the

State of New York, William D. Johnson, M.D., President.

Women in Medicine, Louise Beamis-Hood, M.D., Buffalo.

Cardiological Research, Jane Sands Robb, M.D., Syracuse.

Cancer of the Spine, M. Louise Hurrell, M.D., Rochester.

Paper: Beatrice R. Rossell, M.D., Buffalo.

Paper: Margaret Warwick, M.D., Buffalo.

SOPHY PAGE CARLUCCI, *Secretary*.

AN EXPLANATION AND AN APOLOGY

April 16, 1932.

Dr. Orrin S. Wightman, Editor-in-Chief,
NEW YORK STATE JOURNAL OF MEDICINE,
7 East 88th Street,
New York, N. Y.

My dear Dr. Wightman:

The Executive Committee at a meeting held on Thursday, April 14th, 1932, passed the following resolution:

Resolved, that the Executive Committee acting as a Publication Committee hereby instructs the Editor-in-Chief to publish the following report in the May 1st, 1932, issue of the NEW YORK STATE JOURNAL OF MEDICINE.

Your Committee appointed to consider the matter of the publication of an article entitled, "A Brief Review of the Physiology of the Gall

Bladder" by Lester Levyn, M.D., which appeared in the NEW YORK STATE JOURNAL OF MEDICINE, Vol. 32, No. 2, January 15, 1932, has compared said article with "Problems in Normal and in Abnormal Physiology of the Gall Bladder" by Lester R. Whitaker, M. D., reprinted from the Archives of Surgery, April 1929, Vol. 18, pp. 1783-1802 and have reached the following conclusion:

That the article of Dr. Levyn as published in the NEW YORK STATE JOURNAL OF MEDICINE demonstrates without any doubt in the minds of the Committee the following:

1. An absolute lifting of paragraphs and sentences in exact words and construction from Dr. Whitaker's paper.

2. The utilization of references occurring in

Dr Whitaker's paper without citing Dr Whitaker's authorship

3 In general presentation and form Dr Levyn's article would seem to be almost a literal abstract of Dr Whitaker's previous publication

Your Committee therefore recommends that public apology should be made to Dr Whitaker and the Editor of the Archives of Surgery, and also that the members of the Medical Society of the State of New York and other readers of the Journal may be informed of this evident

plagiarism by the publication of this report in the NEW YORK STATE JOURNAL OF MEDICINE

ARTHUR J BFDLL, *Chairman*,
CHARLES GORDON HEYD,
FREDERIC E SONDRIN

Yours very truly,

D S DOUGHERTY, *Secretary*

The article to which reference is made was a paper read before the Section on Medicine on June 2 1931 at the Annual Meeting of the Medical Society of the State of New York It came to the editors through the regular channels of the section officers and was published in accordance with section 89 of the By laws of the State Society—*Editor's Note*

PUBLIC HEALTH LABORATORIES ASSOCIATION

The New York State Association of Public Health Laboratories is to hold its sixteenth annual meeting in Alumni Hall, School of Medicine, University of Buffalo, on Monday morning, May 23, at 9 30 o'clock The program consists of the following papers

Studies on the autounnary test in the diagnosis of tuberculosis (A preliminary report) Ernest B Hanan, Sophia Zurett and (by invitation) Clifford Orr and Helen Walker, Buffalo City Hospital Laboratories Buffalo

Cotton guard rope in swimming pools as a source of the colon aerogenes group Harold W Leahy, Health Bureau Laboratories, Rochester

A summary and analysis of the replies to the

Association's questionnaire George M MacKenzie, Otsego County Laboratory, Coopers-town

The practical value of antipneumococcus, antimeningococcus and antistreptococcus sera in the treatment of pneumonia, meningitis, scarlet fever and other streptococcus infections Augustus B Wadsworth, State Laboratory, Albany.

Pathological diagnoses at the State Institute for the Study of Malignant Disease Alphonse A Thibaudeau (by invitation), State Institute for the Study of Malignant Disease, Buffalo

Laboratory diagnosis of psittacosis in birds and human beings Thomas M Rivers (by invitation), The Hospital of the Rockefeller Institute for Medical Research, New York City

SPECIAL CARS TO A M A MEETING

President Johnson has appointed Drs John A Card, of Poughkeepsie, and Arthur W Booth, of Elmira a Transportation Committee for the benefit of those attending the American Medical Association meeting in New Orleans, beginning May 9, 1932

The Committee has arranged for the New York delegation to leave New York on the Pennsylv

vania Railroad, Saturday, May 7, 1932, at 8 10 A M, Eastern Standard Time, arriving in New Orleans Sunday evening

Several Pullman cars have been placed at the disposal of the Committee and tentative reservations for drawing rooms, compartments, or berths may be made by applying to Dr John A Card, Poughkeepsie N Y

SULLIVAN COUNTY

A special meeting of the Medical Society of the County of Sullivan was held on Thursday, March 24, at the Loomis Sanatorium to commemorate the 50th anniversary of the discovery of the Tubercle Bacillus by Dr Robert Koch The importance of this great discovery was very ably brought out by Dr J Burns Amberson, Jr, in an excellent talk on "The Significance of the Work of Dr Robert Koch" Dr Amberson, a former president of the Sullivan County Medical Society is at present professor of Clinical Medicine at Columbia University, and a visiting Physician to the Tuberculosis Service at the Bellevue

Hospital, New York City A microscopic demonstration of the Tubercle Bacilli following the original technique of Dr Koch compared with the more modern technique was exhibited by Dr J S Woolley of the Loomis staff

As a souvenir of the occasion everyone present at the meeting received a beautifully bound copy of a translation of Koch's original article

There were forty in attendance, and all were guests of the Loomis Sanatorium at an excellent collation which was served after the meeting

HARRY GORMAN, M D
Chairman Publicity Committee



BOOK REVIEWS



SURGICAL PATHOLOGY OF THE DISEASES OF BONES. By ARTHUR E. HERTZLER, M.D. Octavo of 272 pages, illustrated. Philadelphia, J. B. Lippincott Company, [c.1931]. Cloth, \$5.00 (Hertzler's Monographs on Surgical Pathology.)

SURGICAL PATHOLOGY OF THE SKIN, FASCIA, MUSCLES, TENDONS, BLOOD AND LYMPH VESSELS. By ARTHUR E. HERTZLER, M.D. Octavo of 301 pages, illustrated. Philadelphia, J. B. Lippincott Company, [c.1931]. Cloth, \$5.00. (Hertzler's Monographs on Surgical Pathology.)

These two small volumes represent the beginning of a series of monographs on Surgical Pathology. The objective arrived at by the author, is the presentation of the surgical pathology of various systems, organs and tissues, in a concise, systematic and orderly manner from the surgical point of view, founded on an experience of some thirty years. Review of the volumes reveals an astonishing wealth of information regarding many conditions which are considered of minor importance and therefore neglected in other works. They cover their subjects comprehensively and with an unusual lucidity of expression. The style is entertaining and a certain amount of dogmatism emphasizes the author's points of view. The books are abundantly and excellently illustrated so that more attention perhaps is paid to visual transmission of the appearance of the lesion than to verbal description; a condition which enhances the importance of the works. Both volumes can be heartily recommended to every surgeon and surgical pathologist. To both, as well as to the teacher of surgical pathology, they will prove of inestimable value.

MAX LEDERER.

CRITERIA FOR THE INTERPRETATION OF ELECTROCARDIOGRAMS. Prepared with the aid of the Committee on Research of the Heart Committee by ARTHUR C. DE GRAFF, M.D. 12mo of 13 pages, illustrated. New York, New York Tuberculosis and Health Association, Inc., 1931. Paper, 35c.

This little book is an attempt to classify the alterations of cardiac rhythm met with in a study of electrocardiographic tracings. It serves a useful purpose in that it provides a standard nomenclature. It is not a key to the interpretation of the electrocardiogram as it does not stress the fundamental principles that govern the interpretation of the electric curves.

SIMON FRUCHT.

ESSENTIALS OF PSYCHIATRY. By GEORGE W. HENRY, A.B., M.D. Second edition. Octavo of 304 pages. Baltimore, The Williams & Wilkins Company, 1931. Cloth, \$4.00.

This, the second edition, is a moderate-sized and conveniently arranged volume of 304 pages.

The first two chapters deal respectively with personality development and personality disorder in a way that gives one insight into why and how the human being may develop susceptibility to mental aberrations. Then, after a discussion of the various types of mental reaction with the appropriate mental and nursing care, the very important matter of prevention is dealt with and the reader gets an idea of the fundamental importance of a knowledge of psycho-pathology and mental hygiene and must soon realize, whether or not he has acquired any previous knowledge, the importance of early and proper child guidance. The wisdom of studying a patient from all

angles is well shown by the author's experience with general hospital cases. There is an interesting chapter on the history of psychiatry.

The book is written in a way to hold the interest of the reader and to stimulate further reading, and if he will take up the collateral reading suggested in the bibliography, he will, without doubt, acquire very ample information on psychiatry and allied subjects. It is highly recommended as an aid to physicians and nurses, whether or not they specialize in the care of mental cases, and to all others who are interested in social work and mental hygiene.

A. E. SOPER.

HOW'S YOUR BLOOD PRESSURE? By CLARENCE L. ANDREWS, M.D. Octavo of 225 pages. New York, The Macmillan Company, 1931. Cloth, \$2.50.

This is a book for the patient with abnormal blood pressure, written in a style that the layman can understand. There is an explanation of the circulation of the blood, a discussion of what is normal blood pressure and high and low pressure with the probable causes. The effects of exercise, work, worry, food, sex problems and matrimony are discussed. The author attempts to show how many disturbances in blood pressure that begin in early life may be avoided and to give to the patient a clearer and better understanding of blood pressure in its relation to health.

Books of this type, though not very interesting reading for the physician, may be used to serve a useful purpose in dealing with the intelligent and curious patient who wants to go into details. The author writes well and expresses standard ideas.

W. E. MCCOLLOM.

PREPARATION OF SCIENTIFIC AND TECHNICAL PAPERS. By SAM F. TRELEASE and EMMA SAREPTA YULE. Second edition. 12mo of 117 pages. Baltimore, The Williams & Wilkins Company, 1930. Cloth, \$1.50.

Designed primarily as a reference book for university and normal school students who desire information regarding matters of style, this manual presents many helpful suggestions for those writing articles on scientific or technical subjects.

The book contains valuable tables, abbreviations, styles of type, and many rules that are based upon recognized authorities, all of which should enable the student to present his material more effectively.

FREDERIC DAMRAU.

THE GREAT PHYSICIAN. A Short Life of Sir William Osler. By EDITH GITTINGS REID. Octavo of 299 pages, illustrated. New York, Oxford University Press, 1931. Cloth, \$3.50.

This book is a splendid attempt of presenting a brief résumé of the important periods in Dr. Osler's vivid, colorful and useful life with especial emphasis on the more intimate glimpses as revealed by personal letters and quotations from Sir William's own addresses and essays.

Edith Gittings Reid quotes freely from Dr. Cushing's Life of Dr. Osler and acknowledges that her aim is simply to present Dr. Osler as the humane and beautiful character, that he was, so that from her book the reader will turn to Dr. Cushing's Life and "live from day to day with this master and lover of men," and thanks to her beautiful style of writing and her masterly presentation, she has undoubtedly accomplished her purpose.

WILLIAM RACHLIN.

GUIDE TO RADIOLOGIC DIAGNOSIS IN HEART DISEASE. Prepared with the aid of the Committee on Research of the Heart Committee by GLEA NEMET, M.D. 12mo of 25 pages, illustrated. New York, New York Tuberculosis and Health Association, Inc., 1931. Paper, 35c.

This book is a masterpiece and should prove helpful in the study of cardiac X rays. Special attention is paid to the shadows cast by the right ventricle. Rotation and displacement of the heart, enlargement of the individual chambers, changes in the aorta and the results of hypertension are clearly defined. This booklet should be in the hands of every roentgenologist and in the library of every cardiologist. The medical profession should be very grateful to Dr. Nemet for his guide to the radiologic diagnosis in heart disease. SIMON FRUCHT

A THOUSAND MARRIAGES. A Medical Study of Sex Adjustment. By ROBERT LATOU DICKINSON and LURA BEAM. Octavo of 482 pages, illustrated. Baltimore, The Williams & Wilkins Company, 1931. Cloth, \$5.00 (Medical Aspects of Human Fertility Series issued by the National Committee on Maternal Health, Inc.)

The problems of marriage are indeed many and complicated when viewed singly and when these dissimilar complexities are multiplied by a minute consideration of hundreds of cases we have a truly overwhelming presentation of marital unhappiness.

Doctor Dickinson has shown in this work what a vast and painstaking field the specialty of gynecology could offer. He has sought and found evidences of emotional experiences, such as frigidity, passion, dyspareunia, also, fertility, and separation and divorce in diseases of pelvic organs. Pelvic disease meant more to him than strict gynecological study. It also included a thorough study in relation to sexual aberrations and psychic disturbances.

One thing the reviewer failed to find, namely, whether such emotional disturbances as frigidity or passion or maladjustment could be corrected or prevented by proper attention to pelvic organs, then again the vast problem of marital incompatibility in relation to social, economic, religious, and age differences was dealt with but sparingly.

Nevertheless, Dr. Dickinson has offered a comparatively new angle to the complicated marriage problem. Whether such further consideration will help to simplify this vast problem or not remains to be seen. At any rate he has struck bottom in his zeal to find some of the sources of marital unhappiness, and future investigators will no doubt depend on his work before making further contributions to that subject. EMANUEL KRIMSKY

INTRODUCTION TO THE HISTORY OF SCIENCE. By GEORGE SARTON. Two volumes in two parts from Rabbi Ben Ezra to Roger Bacon. Quarto of 1251 pages. Baltimore, The Williams & Wilkins Company, 1931. Cloth \$12.00 (Carnegie Institution of Washington Publication No. 376).

The second volume of this valuable reference work on THE HISTORY OF SCIENCE is warmly welcome. It is a marvellous undertaking and fortunately has not fallen into the errors common to this type of writing. Needless to say every library of any pretensions will have to possess it the scholar and historian who can own his volumes are to be envied.

Volume two is divided into two parts. On the jacket we read it covers the Twelfth and Thirteenth Centuries. The pagination is continuous. One index serves both parts. The publishers are wise in that the parts are not sold separately.

This volume covers the period from Rabbi Ben Ezra to Roger Bacon. There is an Introductory Chapter. Part One treats of the time of William of Conches.

Abraham Ibn Ezra, and Ibn Zuhr (the First Half of the Twelfth Century). We read of the Survey of Science and Intellectual Progress in the First Half of the Twelfth Century, the Religious Background the Translators the Philosophic Background Mathematics and Astronomy, Physics, Technology and Music Chemistry, Geography Natural History Medicine, Historiography, Law and Sociology, and Philology and Education. In Book Two—the time of Crmona, Ibn Rushd and Maimonides (Second Half of the Twelfth Century) the subjects covered are Survey of Science and Intellectual Progress in the Second Half of the Twelfth Century, and the Chapters treated are the same as in Book One.

Part Two (Book Three) covers the Thirteenth Century—the time of Robert Grosseteste, Ibn al Baitar and Jacob Anatoli (the First Half of the Thirteenth Century) while Book Four deals with the time of Roger Bacon, Jacob ben Mahir ibn Tibbon and Quth al din al Shirazi (the Second Half of the Thirteenth Century). The chapter headings follow a general outline and are divided as in Book One.

George Sarton Associate in the History of Science Carnegie Institution of Washington has done an epoch making work. We have no criticisms. It is an outstanding and valuable landmark in the literature of THE HISTORY OF SCIENCE. T S W

SURGICAL CLINICS OF NORTH AMERICA. Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues) Cloth \$16.00 net paper \$12.00 net.

Vol. 11 No. 1 February 1931 (Chicago Number). This issue represents a crosscut of Chicago's best surgery. Most of the articles are of great practical value. The editors have fortunately avoided the bizarre in surgery and have thus made the material of more absorbing interest to the general surgeon.

Vol. 11 No. 2 April, 1931 (Lahey Clinic Number). The Lahey Clinic issue. The name is a recommendation itself. The individual articles need not be itemized. Each one is timely, intensely practical and reflects the best in surgery that America has to offer.

Vol. 11, No. 3 June 1931 (New York Number). This issue is particularly important because of the symposium on fractures by members of the New York and Brooklyn Committee of the American College of Surgeons. The rest of the issue which emanates from the various New York clinics is most instructive and gives the reader an excellent picture of the outstanding surgical work being done in these hospitals.

Vol. 11, No. 4 August 1931 (Mayo Clinic Number). The Mayo Clinic issue of the Surgical Clinics never needs a detailed review. Each and every article has the backing of thorough and vast experience behind it. The names of the authors are familiar and authoritative to every American surgeon.

Vol. 11 No. 5 October 1931 (Pacific Coast Surgical Association Number). This issue of the Surgical Clinics has between its covers contributions from 30 Pacific Coast Clinics many of which are of national renown. A total of 49 different topics are discussed among them such popular ones as head injuries spinal anesthesia Carcinoma of the breast, lip and prostate cholecystitis and many rarer ones. The high standard of scientific presentation is maintained throughout the volume.

Vol. 11 No. 6 December 1931 (Philadelphia Number). The Philadelphia number of the Clinics has among its contributors the names of Deaver Jackson Babcock and many other noted surgeons. Several of the articles are resumes and statistical critiques of follow up clinics. These are valuable because of the deductions that can be drawn from them. The case reports are all well selected and presented. The illustrations are as usual excellent. GEO. WEISS



OUR NEIGHBORS



STATE DEPARTMENT OF HEALTH OF ALABAMA

The State Department of Health is headed with the Board of Censors of the Medical Association of the State of Alabama acting as Board of Health, or "Committee on Public Health." These censors are elected by the State Medical Association; and they appoint the State Health Officer, and conduct the administration work of the Department.

The Journal of the Medical Association of the State of Alabama for March contains two articles outlining the origin of the dominance of the State Medical Association in public health. The first article is by Dr. Toulmin Gaines of Mobile, describing Dr. Jerome Cochran who was the outstanding leader of the State Medical Association from the time of the Civil War until his death in 1896.

"Our organization leaped full-fledged from the Jovian brow of Jerome Cochran, short of stature and not bulky of frame as some have described him, but slight and slender with a large head, rather sunken between the broad and stooped shoulders of the student; a voice light, high, and rather effeminate in social conversation, which, however, could become rasping and incisive in debate. His general appearance belied his power, but the steely glint of his gray eyes and the firmness of his thin-lipped mouth soon demonstrated that he was 'the little corporal'; he was a veritable Napoleon. Coming to my home town immediately after the Civil War he mingled with a group of physicians who have been characterized as men who, cultured and prominent, enjoyed the love and confidence of the people of Mobile and of the entire State. Devoting their entire time to the cure of the sick, the exigencies of their enormous practices had resulted in the neglect of the county Society activities. Dr. Cochran, a born organizer, with his heart ever set on the prevention of disease rather than on the practice of medicine, infused new life into an almost moribund association. Though a comparative stranger he made bold to criticize these grave and reverend seigniors and to reprove the prominent, influential, and to the manor born physicians for their laxity as an organized scientific body, and in so doing, as Dr. Sanders says, 'he, Martin Luther like, set in motion a reformation destined not only to bear fruits for the Mobile Medical Society, but to extend itself to every county in the State and to result in a harmony and completeness of organization among medical men, such as does not exist anywhere else on the face of the earth.'

"Since it is universally conceded that the most satisfactory government is that of a benevolent despot and since his wisdom and efficiency as a sanitarian were beyond criticism, Dr. Jerome Cochran, as State Health Officer, remained as virtual and actual head of the organization from 1873 until his death in 1896, his reputation as a beneficent leader untarnished, as a sanitarian the ideal of his profession, as a man the idol of many. To paraphrase an expression of the late Dr. Mack Rogers: 'To all he was an inspiration, to many he was inspired.'"

The second article in the Alabama Journal is by Dr. J. N. Baker, State Health Officer:

"It so happened that, in the realm of public health, the medical profession in Alabama, at the very dawn of public health activities, produced a man—Jerome Cochran—who had not only foresight and vision but courage and executive ability as well. He envisioned then what today is an axiomatic and conceded fact, viz., that the field of public health is a specialized field, requiring for its successful prosecution, skillful and trained leadership and control. After much persuasion he was able to convince his profession of the soundness of such views. Once this was accomplished, he had little or no difficulty in showing the people of his State the wisdom of such a plan. The General Assembly of Alabama in 1875 took over bodily the medical machinery set up by Cochran in each county of the State and for the State at large, as its legal and duly constituted health agency and made it one of the important arms of the State government. In a word, this constitutes the uniqueness of Alabama's plan, viz., the definite placement of a highly technical field of governmental activity upon the shoulders of a specialized group within the State. Such a scheme has not its counterpart in any other State in the Union nor, to the writer's knowledge, anywhere else in the civilized world. The continued success of such a plan—for its success up to now stands unchallenged—will unquestionably hinge upon the vision and perspicacity of the leaders within this group to which so important a trust has been committed. At present, Alabama's public health system enjoys not only the full confidence and support of its own people, but the admiration of its sister States. Its machinery is smooth, flexible and democratic, with a minimum of extraneous political influence, which so often may prove baneful to sustained and carefully planned health programs.

(Continued on page 564—adv. ser.)

ARTHRITIS

In Acute Gonorrheal Arthritis A Valuable Adjuvant

In the issue of the Illinois Medical Journal for June, 1931, Drs. D. F. Rudnick and H. J. Burstein of Cook County Hospital, Chicago, report the results obtained by the use of different therapeutic measures in 31 cases of acute gonorrheal arthritis

In their summary of results they refer to Mono-Iodo-Cinchophen Compound as a valuable adjunct in these cases. "In some instances its

usage alone afforded good relief"

They also state that "brilliant results have been noted from Mono-Iodo-Cinchophen in cases of epididymitis. Prompt relief of pain and an early resolution were outstanding factors."

Mono - Iodo - Cinchophen Compound is available under the name FARASTAN

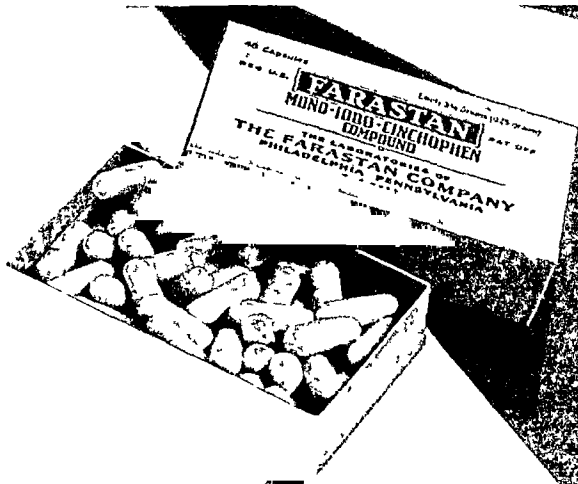
Write for literature and full size package for clinical trial

The Laboratories of

THE FARASTAN COMPANY

131 So. 11th St.

Philadelphia, Pa.



(Continued from page 562)

"The most important single responsibility now confronting the doctors of this State—i.e., the organized medical profession—is to see that no corroding forces spring up from within this group to eat away and destroy the usefulness of this rare type of health machine to which they have fallen heir. Its capacity for ready adjustment to modern ways of prosecuting health work has been amply proven by test and is conceded by the leading national health agencies.

"The rank and file of the profession throughout the State must display sufficient interest to insure that suitable and proper representation is given them in the House of Delegates and in the College of Counsellors—the voting strength of the Association. This voting body, upon which rests the responsibility of selecting all Association officers—including the ratification of the election by the Board of Censors of the State Health Officer—should be dominated solely by a spirit of the fitness of the individual for the office sought, in so far as the good of the organization is concerned. The personally ambitious or politically minded member should quickly be made to realize that the high aims and purposes of this organization are not to be relegated to the background for the sake of personal preferment. Disharmony and factional discord, whenever they rear their ugly heads, must be promptly and

definitely dealt with by showing that the basic principles upon which the success of this organization rests can never be submerged in the sea of personalities and petty prejudices."

LEGAL STATUS OF CHIROPRACTORS IN WISCONSIN

The March issue of the *Wisconsin Medical Journal* contains the following record of the decision that chiropractors are not physicians:

"Declaring that a chiropractor is not a physician even though he treats the sick and that the services of a chiropractor are not the services of a physician under any conditions, the Wisconsin Supreme Court in February rendered a sweeping decision against chiropractors in a case that arose under the workmen's compensation act. The decision reverses the Circuit Court which had held against the Industrial Commission.

"The case arose in Green Bay when a city fireman obtained treatments of a chiropractor for an injury received in his line of duty. The Commission refused to allow the claim of the chiropractor and the Circuit Court upheld the chiropractor. This decision was reversed by the Supreme Court, Justice Fowler writing the Court's opinion."

An abstract of the decision is as follows:

"The only point involved is whether the charge
(Continued on page 566—adv. xviii)

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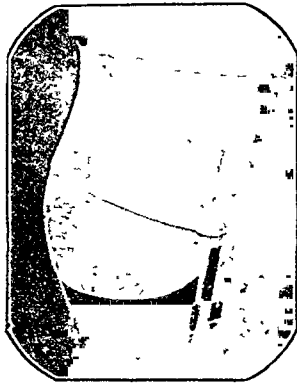
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COMMITTEE ON PUBLICATION.

(Continued from page 564—adv. xvi)

of a registered chiropractor for treatment of an employee entitled to compensation under the workmen's compensation act is allowable as an item of his compensation. The Commission held that it is not and disallowed the item. The circuit court reversed the Commission's order and directed its allowance.

"Under the governing statute, Sec. 102.09, Stats. 1927, the expense of treatment recoverable is limited to 'medical, surgical and hospital treatment . . . or at the option of the employee . . . (under certain circumstances) Christian Science treatment in lieu of medical treatment.'

"The learned circuit judge based his reversal upon the idea that chiropractors giving medical treatment as that term is defined in ch. 147 of the statutes which is headed 'Treatment of the Sick' and governs the practice of medicine and surgery. While it is true that according to that chapter chiropractors do treat the sick and that their treatment is 'medical treatment,' it does not necessarily follow from this that it is such medical treatment as the workmen's compensation act contemplates. The legislature might give such meaning under the act to the term 'medical treatment' as it saw fit, whether it corresponded with the definition of ch. 147 or not. Doubtless we should hold that under the act the term has the same meaning as in ch. 147 unless the act indicates clearly that it uses the term with a different meaning. But we are of opinion that under the act the only medical treatment contemplated is medical treatment administered by a physician; and we are also of opinion that a chiropractor is not a physician as that term is used in the act and in ch. 147.

"Manifestly the statute does not consider Christian Science treatment as medical treatment although it constitutes treatment of the sick and treatment of disease. Such treatment is 'in lieu of medical treatment'; therefore it is not medical treatment. The same is true, under the act, of chiropractic treatment. From the act it appears very clearly that the act contemplates that only physicians may give the medical or surgical treatment for which compensation is allowable.

"Under ch. 147 a chiropractor is not a physician, even though he does treat the sick and treat diseases and diagnose. Under that chapter, physicians are licensed to practice medicine; Sec. 147.17; while chiropractors receive a 'certificate of registration in the basic sciences and a license to practice chiropractic.' Sec. 147.23. But 'no certificate of registration shall be considered as the equivalent of a license (to practice medicine). Sec. 147.17. And 'no person not possessing a license to practice medicine and surgery, or osteopathy, or osteopathy and surgery under Sec. 147.17 shall use or assume the title 'doctor' or

(Continued on page 567—adv. xix)

(Continued from page 566—adv. vixii)

pend to his name the words or letters 'doctor,' Dr., 'specialist,' 'M.D.,' or 'D.O.' Sec. 147.14 3). Thus these names and letters may be applied only to those who are licensed as physicians to practice medicine and surgery, and conversely those to whom the names and letters may not be applied are not physicians."

PUBLIC HEALTH CONFERENCE IN WASHINGTON

The March issue of *Northwest Medicine* has the following editorial comment on a national public health conference:

"A meeting of federal, state, county and city health officers was held at Seattle, February 20, for the purpose of discussing medical economics and public health matters, under the direction of Dr. H. J. Whitacre, president of Washington State Medical Association. While it was well attended by public health officers, there was a disappointing absence of representatives from the medical profession who it was hoped might attend in considerable numbers. Papers were presented dealing with many aspects of public health matters and problems of health officials, the discussion of which further developed questions of interest to all physicians and affecting the welfare of the general public.

"Both among physicians and laity there is a confusion regarding the duties of the health officer and county physician. The health officer is appointed to supervise the health of his district, such as control of communicable diseases, regulation of sanitation and allied interests, while the county physician is expected to care for the indigent of his county, having nothing to do with public health matters. When a full-time health officer is employed, there is no misunderstanding, since his duties are clearly defined. The part time health officer, however, who is engaged in private practice as well as looking after health affairs and treating the indigent, is subject to much criticism. Often he receives no compensation as health officer and treats the indigent on a fee schedule which may be subject to much abuse. The counties in which this prevails are the ones most criticized for failure to report communicable diseases, often due to hesitation on the part of some physicians to report cases to a public official who is their competitor in practice. The solution of these problems, as well as the establishment of a more complete system of health supervision, can be obtained by the appointment of district health officers. Thus, several counties, unable individually to maintain full time health officers, can do so by combining into one district.

"In all medical gatherings where medical economics is the subject of discussion, it is inevitable that interest shall center about the question of the

(Continued on page 568—adv. vix)

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(Continued from page 567—adv. xix)

physician devoting a good share of his services without compensation. The unavoidable comparison is made between the free services expected from the physician and the compensated labor which are expended by all other professions and groups of citizens. This imposition upon the medical profession is constantly increasing in proportion of the multiplication of public hospitals and free clinics. Much attention was paid to this form of abuse. No adequate solution was proposed by which members of the medical profession might receive a square deal, but the general sentiment seemed to indicate that no relief may be anticipated until physicians shall unite in co operative effort which may bring relief."

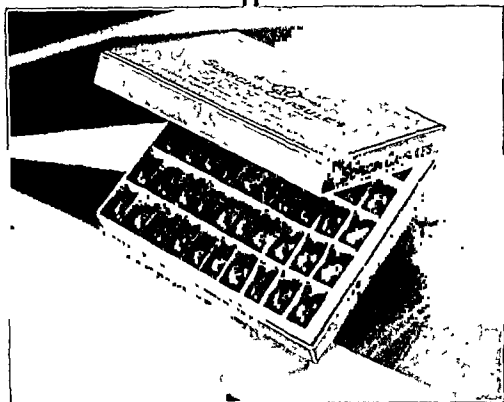
GRADUATE EDUCATION IN VIRGINIA

The February issue of the *Virginia Medical Monthly* has a report of the Committee of Clinical Education, showing the courses in graduate education had been conducted by four-fifths of the City Medical Societies, two-thirds of the District Societies, and one-fourth of the County Societies. The report concludes as follows:

"One of the most interesting suggestions submitted referred to the educational importance of full reports to the family physicians in regard to patients admitted to the college hospitals, a suggestion endorsed by the Chairman of this Department as one that 'is perfectly reasonable and should unquestionably be done.' The problem of stimulating interest in society meetings was brought up in several reports—a problem which will most likely tax the zeal of interested officers for some time to come. Gratifying willingness to cooperate in educational programs was expressed or implied. In only two answers was the purpose of the Department of Clinical Education patently misunderstood: 'Our members do not want an instructor to come into this territory to tell them on home ground how to do their work,' and 'Our Medical Society will not consider any educational program put on by the Medical Society of Virginia in their home towns as they believe that it lowers their standing in the district in which they work.'

"It cannot be too often emphasized that the Department of Clinical Education has no intention of trying to 'put over' any program not desired by the members of a group. It exists only to further the educational activities of societies which need and request its assistance. It is not an outside body attempting to interfere in professional matters, but the arm of the Medical Society of Virginia created by it to reach out with definite encouragement to those of its members who are big enough in mind and heart to admit that they do not know it all and that they want to keep on learning. Fortunately for medical progress, they are the vast majority!"

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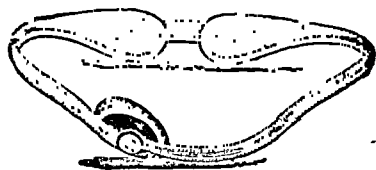
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CANCER CONTROL IN PENNSYLVANIA

The Commission on Cancer of the Medical Society of the State of Pennsylvania, of which Dr. J. M. Wainwright, of Scranton, is Chairman, offered a prize of one hundred dollars to the interne in a Pennsylvania hospital offering the best thesis on the subject "How to diminish deaths from cancer in Pennsylvania." The prize was awarded to Dr. W. A. Lell, of the Graduate Hospital, Philadelphia, whose plan is printed in the scientific department of the Journal. Dr. Lell would have the State establish and maintain six diagnostic cancer centers distributed throughout the State and outlines their plan as follows:

"These clinics should be conducted in an approved hospital by a full-time staff consisting of a capable surgeon, radiologist, internist, and well-trained assistants who shall carefully study the patient and obtain accurate records. This having been completed, the best plan of treatment is determined and carried out in an approved hospital of the district under combined supervision and cooperation of the tumor clinic and hospital staff. In addition to these diagnostic centers, a central bureau should be established whose function would be to supervise the activities of these clinics and of the approved hospitals in which patients are being treated. This bureau should serve as a central station for filing of records, data of tissue examinations, course of treatment, and ultimate fate of all the cancer patients being treated throughout the State."

Dr. Lell would have a commission appointed to establish and supervise the centers and set up the machinery for their administration. The Journal comments editorially on the plan as follows:

"The plan suggested by Dr. Lell for diminishing the death rate from cancer proposes no sensational method. He suggests a system of State diagnostic clinics, with a central bureau to keep records of cases, treatment, and cure, to suggest some conclusions in regard to causes and cures which might be obtained by the concentration of all the cancer records in the State as they are made, and a full study over a period of years. The dis-

"State clinics might be able to diminish the operations of quacks, and charge the public heavily for their unscientific and faked methods and methods of treatment. Very few of them have the approval of medical science. The proposed plan, indeed, is simple of social science because it sends the few scientific certainties. It is in the present on the of cancer.

"It is intended to give opportunity and impartial diagnosis and a chance with the help of such methods of treatment who have had some success. It admits that much rest they unknown and that medical science must have access to all available evidence if the cause and cure for cancer are to be determined."

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PUBLIC HEALTH PRACTICE IN ARKANSAS, No. 2

An abstract of a report of the Council of the Arkansas Medical Society on the activities of the State Board of Health was printed on page 161 of this Journal of January 15. The report contained our suggestions regarding cooperation between the State Board of Health and the State Medical Society. The January number of the Journal of the Arkansas Medical Society contains the following reply of C. W. Garrison, Secretary of the Arkansas State Board of Health.

"We have just read and discussed the recommendations of your committee regarding the cooperative program with the State Board of Health and desire to inform you and through you the members of the medical profession of the State that we heartily agree that in order for this Board to project its program most effectively that it must be based on sound principles and in turn must receive the support of the Arkansas Medical Society and the medical profession in general. We have fully considered your recommendations and find that there is nothing in your recommendations which cannot be reasonably well harmonized with opinion and policies of this Board.

We are pleased to note that there is complete agreement on many of the points under discussion, and we assure the Council and the Arkansas

Medical Society that it is the policy of this Board to avoid encroachment upon curative medicine and so called state medicine, and every effort will be made to confine its activities to purely preventive measures.

"The Board also desires to advise the Arkansas Medical Society through its Council of its eagerness to cooperate with the Council in all matters pertaining to its practices in relationship to organized medicine and public health, and to work with the county societies for the betterment of public health.

"The Board deeply appreciated the careful consideration your committee has given to this matter and feels that it will only be a matter of a short time until a complete understanding will obtain and all differences composed. The Board further wishes to express its deep appreciation for the fine support of the Arkansas Medical Society in the years past and expresses the hope that full confidence and cooperation will be re-established at a very early date.

"May we respectfully urge in this connection indulgence and tolerance on the part of the medical profession as we attempt to adjust all differences to the end that we may reach a feeling of goodwill and complete understanding."

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AN OLD MEDICAL BILL IN SOUTH CAROLINA

The February number of the Journal of the South Carolina Medical Association has a full-page reproduction of a medical bill of a Doctor Hill to John Martini for services rendered from September 28, 1736, to January 2, 1738, amounting to 55 pounds and 10 shillings. A number of the items were for attendance on a Mrs. Hatty, the cook, and other members of the household, the items for services to her being as follows:

L. S. D.

"May 16, A bleeding to Mrs. Hatty's foot	0	15	0
Six hysterige bolus for ditto....	2	5	0
A cordial and hysterig julyp four once to ditto	1	0	0
June 7, A vomit for ditto	0	10	0
7, A pint of coroboratif fomentation for ditto	1	0	0
8, The fomentation repetet to	1	0	0
9, A purg for ditto.....	0	10	0
11, Some cardus and camomill-flower to ditto.....	0	5	0
25, A febrifug draught to ditto.	0	10	0
26, The draught repetet to ditto	0	10	0
Aug. 4, A bottel of stomach drops to ditto	0	15	0
Sept. 6, A pectoral linctus for the cook	0	15	0
9, A box of absorbens powder for Mrs. Hatty.....	0	15	0
12, A bleeding to the cook...	0	10	0
13, The pectoral linctus repetet to ditto	0	15	0
18, A vomit for Mrs. Hatty....	0	10	0
25, A purg for a neigroe gurle.	0	10	0
26, A bottle of stomach drops for Mrs. Hatty.....	0	15	0
Oct. 21, A vomit for fiba.....	0	10	0
Nov. 3, Some oyntment for ditto..	0	5	0
29, A purg for a neigroe child..	0	10	0
Dec. 17, A bleeding to Mrs. Hatty foot	0	5	0
1, A bottel of cordial and hysterig bottel to ditto....	1	0	0
19, A pectoral linctus for the cook	0	15	0
21, The linctus repetet for ditto	0	15	0
25, Ditto Linctus repete.....	0	15	0
1737/8 January 2, A pot six ounces of pectoral electuary for ditto cook	1	0	0
Six pectoral tablets to ditto....	0	7	0"
The last item was as follows:			
"Attendance on Hester Fleming in the Small Pox	10	0	0"

(Continued on page 574—adv. xxvi)

G A S T R I C

F A B L E S



A TALE OF DOMESTIC HAPPINESS

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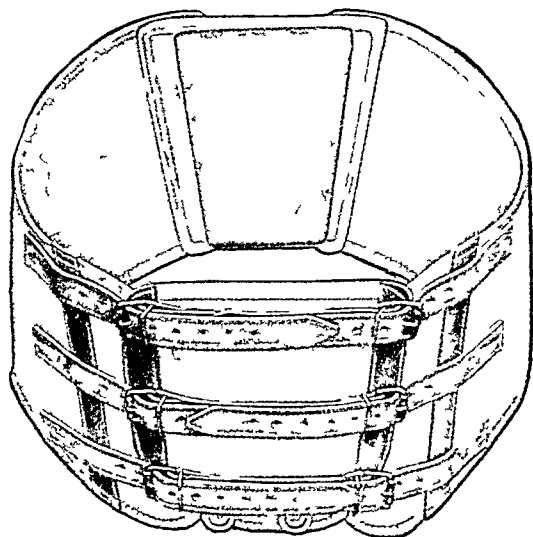


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OF THE
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OF THE
STATE OF NEW YORK
BUFFALO, N. Y.



MAY 23, 24 AND 25
1932

(Continued from page 572—adv. xxiv)

The bill was paid and receipted by "John Martini."

A linctus is defined by the Standard dictionary as "a syrup-like medicine to be taken by licking or sucking," and is derived from the Latin *lingo*, to lick.

A bolus is defined as a large soft pill, made extemporaneously, to be taken at once. The doctor seems to have made six to cure Mrs Hatty of hysteria.

EXECUTIVE SECRETARY FOR LOUISIANA

The April number of the *New Orleans Medical and Surgical Journal* has a President's page in which Dr. S. C. Barrow gives the following arguments for the employment of an executive secretary by the Louisiana State Medical Society:

"The time is fast approaching, if not already here, when the State Society must have a full time trained Executive Secretary; a man scientifically trained and versed in the problems of organization; one familiar with the basic evils besetting the medical profession; one who can teach the rank and file, methods of procedure, and formulate uniform programs of action by the various Parish Societies, which will tend to the enlightenment of the public, hasten the relief from many present ills and defeat the many evil tendencies.

"The State Association, sooner or later, must put in the field, a man with such qualifications, one whose program will be to travel from one end of the State to the other, meeting regularly the Parish Associations, working out their individual problems and collectively, those of the State Association.

"With only half, or less, of the qualified physicians of the State, members of the State Society, there can be but one conclusion reached; that conclusion is, 'There is something wrong with the State Association.'

"A little self analysis will do us good. Louisiana needs a medical association which will function three hundred and sixty-five days out of the year, rather than four or five; she needs an association with live departments looking to the solution of all problems which concern the doctor. Under our present plan, this is impossible. Money must be spent and for such a purpose it will prove a most wise and profitable investment.

"It is our intention to suggest to the House of Delegates on May 9, that a carefully selected committee be appointed to look into the feasibility of such a plan and to make suggestion after careful study and investigations."

CANCER CONTROL IN MASSACHUSETTS

The March eighth issue of the *New England Journal of Medicine* contains the following description of a new form of cancer clinic that is being conducted in several cities in Massachusetts

"Clinics devoted primarily to the showing of 'cured' cases of cancer would be of great value to the profession as a whole or this reason the Cancer Committee of the Massachusetts Medical Society in cooperation with the Massachusetts Branch of the American Society for the Control of Cancer and the State Department of Public Health as sponsored such clinics

"These 'cured' Cancer Clinics are to constitute an important part of the State-wide Cancer Achievement Week Program April 4-10. These clinics will be held April 5 and 6

"A booklet is being prepared which contains the history of the 'cured' cases to be presented at the clinics. In order to be assured of the initial existence of cancer, sections on all these cases have been reviewed by a committee of pathologists consisting of Dr. S. Burt Wolbach, Dr. Tracy Mallory and Dr. Shields Warren. There will be a dinner for the medical and dental groups at the Boston City Club, Tuesday April 5

"A luncheon for the medical and dental groups will be held Wednesday, April 6, at the Boston City Club

"All the dentists in the State will be invited to attend the course. Special clinics have been arranged for them at the Harvard and Tufts Dental Schools and they will join the physicians at the Boston Dispensary clinic, the dinner, and luncheon sessions

"In addition to these activities for the medical and dental groups meetings for the cancer education of the lay public are to be held in Boston and other clinic cities"

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PACKAGE LIBRARY SERVICE IN TEXAS

The service of the State Medical Association of Texas in supplying packages of printed material to the members is described in the March issue of the *Texas State Journal of Medicine* as follows

"Our Package Library Service may prove particularly useful just at this time, when our readers are preparing papers for the annual session, preparing to discuss papers at the annual session, or reading up on the subjects to be discussed there. We appreciate that quite probably most of the papers on the program have already been written and, as for that, read before county societies, as required by the State Association by laws, but even so, a check-up may be in order

"It may not be generally known, but the library of the State Medical Association has accumulated 23,401 reprints of articles published in the leading medical journals of the world. A large range of subjects is covered. They are filed in accordance with the classification of the Quarterly Cumulative Index Medicus. A whole-time, trained librarian, is in charge. Packages may be had, upon request, by any member of the State Medical Association. The cost of this service is nominal and intended merely to cover postage, which as a matter of fact it barely does. The charge is 25 cents per package, regardless of size or number of reprints included. Stamps will do. Packages may be held for two weeks or longer upon special request if the reprints included have not in the meantime been requested by others

"This service has received the enthusiastic and appreciative approval of quite a few of our members"

A packet Library service in California is described in the *New York State Journal of Medicine* of January 1, 1931, page 736, and a similar one in Wisconsin in the *JOURNAL of Medicine* 15, 1930, page 116

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WARNING ON BICHLORIDE TABLETS

The drug trade press recently contained a warning from Dr. E. Fullerton Cook, Chairman of the Committee of Revision of the United States Pharmacopœia, concerning the danger to the public of bichloride of mercury tablets that, because of their shape or color, may be confused with tablets intended for internal use. His warning follows the tragic death of a friend who took bichloride tablets by mistake. A physician had recommended these tablets; a pharmacist had dispensed them. They were white in color, discoid in shape. The word "POISON" appeared on each tablet in raised letters, yet the accident occurred.

Eli Lilly and Company are said to have been the first manufacturers to recognize the need for ample precautions surrounding the sale and use of tablets of bichloride of mercury. The outgrowth of their studies was a bottle of distinctive design, diamond shaped, with serrated edges and the word "POISON" in raised letters blown in the glass. Even in the dark, Diamond Antiseptics, Lilly, are recognizable by touching the container. Diamond Antiseptic Tablets are diamond shaped; therefore, it is claimed that they cannot easily be confused with headache or other tablets. The word "POISON" appears on one side of the large tablet, which contains 7.3 grains of mercury

bichloride, and a skull and crossbones is printed on the reverse. Diamond Antiseptics, Lilly, we are informed, meet fully the requirements of both Federal and state food and drug laws. Neither physician nor pharmacist should take any chances, it would seem, when such "safety first" products as Diamond Antiseptics, Lilly, are available. See page xiv.—*Adv.*

TECHNICAL EXHIBIT OF S.M.A. CORPORATION

Specimens of human milk fat will be shown by the S.M.A. Corporation at the Annual Meeting, Medical Society, State of N. Y., May 23-25. Physicians attending the convention will have an opportunity to see the close similarity of S.M.A. fat to breast milk fat in chemical and physical properties.

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THE ENEMA: ITS USE AND ABUSE*

By REUBEN FINKELSTEIN, M.D., BROOKLYN, N. Y.

THE use of the enema, as a therapeutic measure, dates back to very ancient times. An Egyptian papyrus of the fourteenth century B. C., gives directions for the preparation of enemas¹, and subsequently Herodotus noted their extensive use among the Egyptians², Hippocrates considered that enemas were preferable to purgatives and recommended the use of cylindrical suppositories of honey smeared with ox-gall as a still milder form of treatment. It is interesting to note that in the Jewish Talmud a number of centuries later, a rather similar method is mentioned. Instead of a suppository of honey, a short wooden stick was used to irritate the rectum, thereby causing a bowel movement³. In the second century B. C., Asclepiades recommended the enema for intestinal disorders, and later Celsus proposed it as a means for supplying nutrition per rectum⁴.

In the course of the following centuries, the enema was resorted to more or less regularly until the seventeenth century when it became very popular in France. During the next two hundred years, it was considered a panacea for all ills and its popularity spread to other countries of Europe. Even the medical caricatures of the period almost always represented the physician with a syringe ready to administer a clyster⁵. In early times the enema was given from a bladder or skin fixed to a metal or bone tube. The next improvement was the enema syringe invented by Avicenna in the tenth century. The present form of the enema bag with tube and nozzle dates from the middle of the nineteenth century⁶.

The enema is now chiefly administered for: The relief of constipation and intestinal distention.

2. The local application of medicaments to the rectum and colon.

3. The administration of absorbable medicaments.

4. The purpose of supplying nutrition and

fluids when mouth feeding becomes impossible or insufficient.

5. The diagnosis, with barium sulphate, of obstruction and various diseases of the colon.

6. Miscellaneous conditions.

Intestinal Relief: Constipation is the most frequent cause for the use of the enema. In this case, contrary to common belief, the solid masses are washed out only from the rectum and lower portion of the sigmoid, while the contents of the colon above the sigmoid are usually not affected. If, however, peristalsis of the colon has been stimulated, some of the contents may be forwarded into the sigmoid where they remain until a normal evacuation results or are again washed out by another enema. Much of the relief felt by the patient after an enema is due to the expulsion of the previously retained gases. However, constipation, caused by cecal retention which often follows appendectomy or chronic inflammation about the cecum, will not be benefited by the enema. Physiologically, the contents of the cecum are fluid and the addition of more fluid will not empty it, but will serve only to increase the pressure within the cecum, thus frequently causing pain because of the resulting overdistention.

The enema, nevertheless, is of undoubted value in treating spasm of the distal portion of the colon, in sigmoid retention, and rectal dyschezia. In these conditions, the enema breaks up and washes out the fecal masses. At the same time, the hot water will relieve the spasms of the bowel.

The usual case of constipation is due to the accumulation of solid material within the sigmoid and rectum, relief may therefore be obtained by an enema of normal saline or a five per cent solution of sodium bicarbonate. Such enemas do not overstimulate the bowel, and if the quantity is not excessive, they will not interfere with the normal peristalsis of the colon. In cases of severe impaction, however, more drastic measures are necessary. Four

* Read before the East New York Medical Society.

or five ounces of warm oil should be injected and retained as long as possible, even overnight. This is then washed out with a five per cent solution of bicarbonate of soda or even a solution of hydrogen peroxide, one part to three parts of water. The oil is not as irritating to the intestinal mucosa as soap suds⁷. Irritating clysters should not be administered in simple constipation and spasms of the bowel. They tend to increase the spasms and if used for any length of time will cause colitis or proctitis. Accordingly, such irritants as soap suds, ox-gall, turpentine and glycerin as a rule, should not be used in a simple enema.

The technique of administering the enema is as important as the contents. The lateral position is best; this avoids undue straining by the patient. At the same time the other organs fall away from the colon and thus lessen the pressure upon it. A short tip, or better, a catheter, should be inserted about two or three inches beyond the anus. In order to prevent undue distention of the rectal ampula and to permit the filling of the entire colon without cramps or spasms, the enema bag should be held no more than three feet above the patient.

The habit of using so-called colonic irrigations for the relief of constipation is of no more value than the usual enema, and under certain

circumstances may even be injurious to the bowel. The introduction of the rectal tube beyond the rectum is almost impossible and its improper manipulation may injure the delicate mucous membrane. The tube can be inserted beyond the recto-sigmoidal junction only when the entire colon is filled with fluid, as shown by the accompanying roentgenogram, Fig. 1. When the large rectal tube is introduced into a dry rectum it curls upon itself within the ampula and is of no more value than the ordinary rectal tip used in administering the usual low enema, Fig. 2.



FIGURE 2

Showing the rectal tube curled upon itself in an attempt to administer a high colonic irrigation.



FIGURE 1

The colon was first filled with an opaque enema. The double flow tube is pushed beyond the rectum into the sigmoid where its further progress is stopped by an angle in the colon. It also shows that only immediate part of the colon about the tip of the double flow tube is cleared of its contents by the so-called irrigation. The rectum below and the colon above the tip of the tube still retain their contents.

The return-flow tube, which is frequently employed in colonic irrigations, contains two channels, one for the introduction of the fluid and the other for its escape from the bowel. However, this method of washing out the colon presents a serious difficulty for, once the colon has been filled, further flushing takes place only around the openings of the return-flow tube. A simple demonstration of this fact can readily be obtained in the following manner. An opaque enema must be given and retained. Then a return-flow rectal tube should be introduced, under the fluoroscope, and water allowed to flow through one side and return through the other. It will be noticed that only that portion of the opaque enema will be removed which is reached by the openings in the return-flow tube. If the return-flow tube is placed six or eight inches above the anus the rectal ampula will remain filled as well as the entire colon above the point reached by the tip of the tube. This is likewise illustrated in Fig. 1.

The distention of the colon caused by the large amount of fluid injected into it when giv-

ing a high colonic irrigation, hinders its normal peristaltic action and often markedly delays it so that very little of the fluid is returned through the colon tube. Only when the colon regains its tone will the contents be discharged. The effect desired by the so called colon irrigation which is not obtained through the use of colonic tubes or return-flow tubes, can best be had by repeated enemas using the ordinary hard rubber rectal tip or catheter as previously mentioned.

Cleansing enemas continued for a long period of time are not advisable. They prevent proper peristaltic action of the bowel and gradually cause dilatation of the colon, at the same time removing the mucous so necessary as a lubricant to the mucosa. Such enemas should be used with other means to cure constipation and not as primary therapeutic measures.

Local Medication. In the treatment of diseases of the colon the medicaments should be applied in the form of a solution or powder. Powder should be applied through the proctoscope or sigmoidoscope and obviously will only reach a short distance from the tip of the inserted instrument.

Solutions of mild astringents, such as tannic acid, gallic acid, alkalies or weak solutions of silver nitrate, or massive doses of properly suspended acidophilus bacillus mixtures may be introduced by means of the enema. In cases of multiple polyposis, a six per cent solution of tannic acid will produce a tanning effect on the pedicles which will then atrophy and the polyps will be expelled.⁸ When a mild astringent is required a five per cent solution of powdered alum is often of value. All forms of colitis, dysentery, proctitis and parasitic diseases of the colon are benefited by the application of a proper enema.

Absorbable Medicaments. Such diseases as acute articular rheumatism, chorea, rheumatic cardiac diseases and sciatica are often benefited by rectal injections of solutions of sodium salicylate in large doses. On occasions, we have administered per rectum up to 250 grains of sodium salicylate in the course of twenty-four hours and have obtained remarkable results. It is well to remember that when sodium salicylate is administered per rectum and if the physiologic effects of this drug, such as head noises and ringing in the ears are not obtained within three days, either the dose given is not large enough or the absorption is poor because of some local disturbance and this form of treatment should be discontinued.

Nutrient Enemas. To supply nutrition and fluids to the patient in various diseases and after operations, is one of the most important

uses of the enema which has been developed within modern times. After operations, especially on the gastro intestinal tract, in shock in coma, in gastric or duodenal hemorrhages and in the treatment of peptic ulcers it is often necessary to supply nutrition and fluid per rectum. This may be accomplished by the Murphy drip or the continuous Harris drip, or by the so called "massive" enema in which case about ten ounces of fluid or nutrient material is injected into the sigmoid and forced to remain there until absorbed.

Until very recently, the erroneous idea was held that meat juices, eggs, salts, starch, sugar, milk and fruit juices, when administered per rectum, were all absorbed by the rectal mucous membrane. In 1901 Grutzner thought that he proved experimentally that particles introduced into the rectum ascend into the small intestine by retro peristalsis and were there digested. Riegal and Fleischer agreed with Grutzner. Hemeter, however, disagreed because he observed that after administering foodstuffs by enema they did not leave the rectum and were often evacuated by a cleansing enema the next morning. Hemeter on the other hand, believed that egg albumin, fat and milk may be absorbed from the colon as such and without previous digestion. In explanation of this phenomenon, he suggested the presence of a proteolytic ferment, working in an alkaline medium in the colon, which digests the proteins in the nutrient enema.⁹ We now know that this theory is erroneous, for no such ferment is to be found in the colon and organs of absorption for proteins, fats and carbohydrates, such as exist in the small intestines are not present in the colon and rectum. Only water, alcohol and crystalline material in solution, as dextrose, salts, sodium salicylate or sodium bicarbonate are absorbed by the rectum or colonic mucous membrane.

A five or ten per cent solution of dextrose is the ideal nutrient enema. Such an enema should be given either as a Murphy drip or continuous Harris drip. It may be combined with a physiologic solution of sodium chloride or a five per cent solution of sodium bicarbonate. Concentration of more than ten per cent is not advisable because it may irritate the mucosa with resulting proctitis. Alcohol is readily absorbed by any mucous membrane and may be given as a stimulant per rectum in dilute solutions.

Before the administration of rectal feeding in any form, the rectum should be flushed out with an enema of a physiologic solution of sodium chloride. The Murphy drip should be given slowly, not more than 30 to 40 drops per minute. The solution must be warm and the tip of the catheter should not be inserted

or five ounces of warm oil should be injected and retained as long as possible, even overnight. This is then washed out with a five per cent solution of bicarbonate of soda or even a solution of hydrogen peroxide, one part to three parts of water. The oil is not as irritating to the intestinal mucosa as soap suds⁷. Irritating clysters should not be administered in simple constipation and spasms of the bowel. They tend to increase the spasms and if used for any length of time will cause colitis or proctitis. Accordingly, such irritants as soap suds, ox-gall, turpentine and glycerine as a rule, should not be used in a simple enema.

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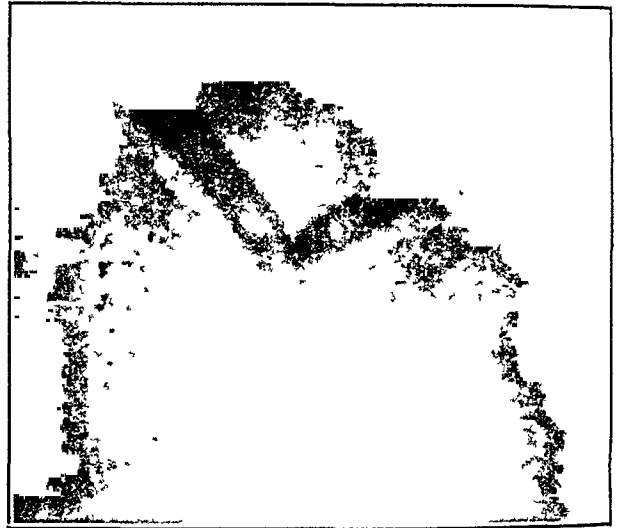


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PSYCHOPATHOLOGY AND ORGANIC DISEASE*

By SMITH ELY JELLIFFE, M D, NEW YORK, N Y

JUST at this point in this symposium might I introduce the story of two rather well-integrated citizens who would witness a wrestling match at the Madison Square Garden in New York City. As they entered and took their seats, Londos and his opponent were in a clinch. After about 10-15 minutes one of these visitors looking up and noting Londos still in a clinch, said "Come on, Joe, let's go out, here's where we came in."

I am not certain that my tale is quite *a propos* save as to that aspect of my reappearance on the platform wherein it might seem that "here's where you came in"—and may be your state of bewilderment may more properly follow my remarks rather than have preceded them.

You have listened to two important aspects of psychopathology and psychotherapy—prophylaxis in childhood and adolescence by Dr Williams, and the Psychoneuroses and Psychoses, by Dr Brill. I would like to bring you into still deeper waters where the footing is not so secure, nor the catch so certain. I would ask your attention to the relations between Psychopathology and what is known as "Organic Disease."

In order to prepare the way, permit me to take you back to the beginning of things and by a series of lantern slides develop a concept of the human machine which will, I hope, give you something to bite on even if it threatens to dislocate any but the most solid of jaws.

I shall avoid the more heavy scholastic repetition of what should be well known ideas, how for instance, Descartes (1596-1650) and de la Mettrie developed the idea of man as a machine, nor shall I weary you with the mumbo jumbo of the philosophers and metaphysicians who have squabbled and will continue so to do over mechanistic and vitalistic antagonistic hypotheses, nor with that equally threadbare controversial topic of the relationship of body and/or mind.

Although we shall lean fairly heavily on general mechanistic conceptions I would in more simple terms emphasize the fact that Man is not a 'Jack in the Box'. Practically every activity that goes on in man is infinitely more subtle and complex than what we at the present time understand. And the reason is obvious if we only stop a moment to think about man as a time-binding animal. Although we glibly use the terms "heredity" and "constitution" it is but rarely that we realize how

long this heaping up of the past upon the past has been going on and just what has been happening in the gradual evolutionary ascent from Amoeba to Man in the billion years that it took to have this goal of Man reached.

I like to recall the term that Samuel Butler used about this process by which all experience in time became bound up in bodily structures. He called it "Organic Memory." And if you would ask for a clue as to who had worked up this set of problems most consecutively I would refer you to the works of Hering, and more particularly to those of Semon, starting with his celebrated study on the "Mneme." Should we but stop to imagine what this mnemonic inheritance really means the stoutest of us would be staggered. Should I by way of an interpolation state that at times certain individuals suffer from what I shall provisionally call "total recall" of much of these memory traces, i.e., are unable to keep them from pressing over the portals of consciousness, such patients we speak of as psychotic, as in delirium or in manic-stuporous states, for instance, and we can well understand why in times, not too long gone by, so many of them have been spoken of as "possessed."

Thus I would call your specific attention to at least two important preliminary considerations, namely, that accumulation of organic memories of billions of years in the making and which we will speak of as the "wisdom of the body," and those devices which have arisen to bind, inhibit, or repress organic processes from expressing themselves as simply as does the "Jack in the Box" with which figure I began this paragraph.

Just what these protective devices of physico-chemical binding, or physiological inhibition and of psychological repression are, will occupy us later after attention is called to a schematic representation of the energetic hypothesis—grossly mechanistic if you will—whereby the human being as well as all living organisms may be conceived of as capturing, transforming and delivering the energy of the cosmos of which they are an integral part. Man and his environment are one. He is not an independent isolated experience. He exists only by reason of and through this interchange of activities between his organic processes which his organic memory of how to handle them has, when successful, enabled him to live.

* Read at the Annual Meeting of the Medical Society of the State of New York at Syracuse N Y, June 2, 1931.

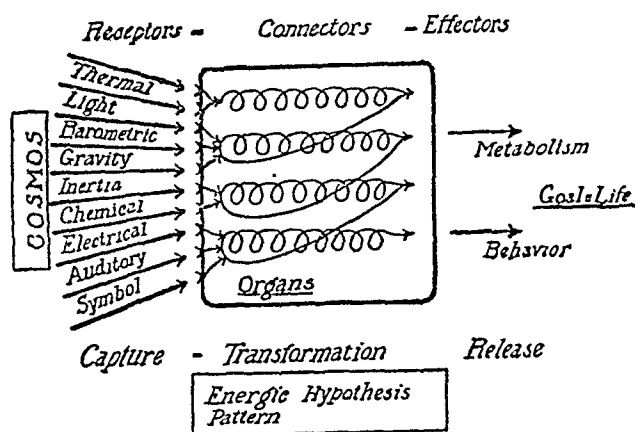


FIGURE 1

The slide before you (Figure 1) roughly indicates this situation. It is unnecessary for me to go into the details of the receptors which capture the energy any more than by saying that the kindergarten physiologies that speak of five senses must be relegated to oblivion. We have twenty and more definitely structuralized sensory receptors. Different types exist in every organ of the body and through the medium of a most highly complex switchboard series of nerve-net transformers all the literally billions of outside calls are handled by automatic processes. Here in the diagram may be seen a thumb sketch of physiology whereby and through which all the incoming experience becomes converted into processes of upkeep of the machine (anabolism and catabolism) and of the individual in society (behavior).

The moment one attempts to follow through any one of the incoming bits of cosmic reality—let us say a vestibular or an auditory stimulus we are into the thick of details of histological receptor, and physiological transmitter and connector complexities, the study of any one or the other of which some men devote an entire life to; as Helmholtz for instance did for the optical apparatus. I can refer you to no better guide of these complexities than C. Winkler's Manual of Neurology.

What does our "bodily wisdom" do with the billions of stimuli after they all stream in? Like any other billion year old factory which has been more and more successfully operated would do it has *organized* its responses, or if you will, they have organized themselves, and as in the next diagram certain patterns of performance have evolved. It is not of much particular moment what one calls these patterns; it is only desirable that in giving them a shorthand name, man should come to some sort of agreement as to what the name should stand for. Up to the present time biology has fairly well agreed, not without, of course, the usual clash of opinions about everything, to call the outstanding patterns of response

to these processes of capturing, transforming and delivering the cosmic energy—"instinct patterns."

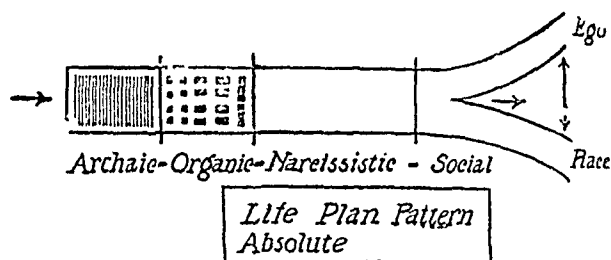


FIGURE 2

Without going into the numerous objections we will follow this lead and for all types of living things, plant and animal, distinguish two instinct patterns which have come to be called that of Self-Preservation and that of Race Propagation. Schiller, the poet, it will be recalled termed them "Hunger and Love." While there has been and still is much dispute, filling millions of books, as to the comparative importance and significance of these two patterns I shall arbitrarily state that the creative, race-propagation pattern is the one which fundamentally must lead else there would have been no such thing as the evolution of new types of structure from Amoeba to Man. A moment's reflection will show this is obvious, although thousands of books are written about the more intimate details of the conflicting claims between the "self" and the "race." The slogan that "self preservation is the first law of nature" is one of those universally shouted slogans which like most universal slogans are always wrong. A great philosopher has been quoted for 19 centuries—"He who would save his life must lose it." Even though this quotation is rarely thought of as contributing to the significance of the conception that the race-propagation instinct pattern is the one that has the "beat" in life's flow from form to form, nevertheless this is what it signifies.

This leads to the next diagram that would dissect this internal pattern of striving or impulse, or urge, or drive, or any other synonym that one wishes, a little more in order to bring it into some objective form. All of this is still in the "wisdom of the body" although we are now coming a bit more into the open out of the tunnel of the unknown past.

In short no such thing as reproduction is going to take place, at the biological level, unless a union takes place between differentiated carriers of life's experience, termed respectively male and female. Some "ninnies," I call them, meaning no offence, set up a great to do as to the comparative values of male and female in this respect. At the biological level this is hokum. As no lock

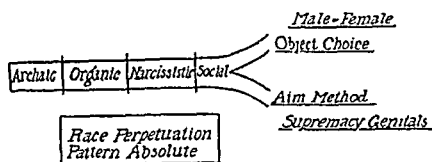


FIGURE 3

operates (rightly) without a key, so no key is any good except for a lock and so it goes—male and female are like our previous pair, individual and environment. If the latter is out of gear—life is impossible; if the former—continuance of life in new forms is impossible. The exceptional forms of repetition through fission as in bacteria, potatoes or lily bulbs, are of no moment at this juncture.

And as our diagram further shows—that unless male spermatozoon, through penis-vagina transmission, fertilizes female ova, no new form results. This is again so obvious as to almost make one naive in saying it and yet an important principle is here involved. As all of you here know that when the urge, or drive or impulse—originally named after the God Eros—sometimes misses its object-choice (male—female) and/or its aim (penis-vagina) there results those anomalies of behavior described in the large chapter of sociological pathology of the inversions and the perversions.

This leads to the first large generalization about pattern activities which I shall emphasize as of paramount significance if we are ever going to understand the relations of psychopathology to organic disease.

This is that: *Any deviation from object or aim threatens the harmonious action patterns within the machine.*

There's a catch somewhere in this simple statement. It is literally true but needs an important emphasis to be put upon those aspects of man's impulses, drives, urges or what have you, of which man is not aware—that is within his *Unconscious*. We are not here concerned in this formulation with the individual's conscious notions concerning his object choice or his aims, although such may be in line with the vastly more important automatic unconscious processes of the wisdom of the body of which mention has been made.

An ancient prophet once wrote "All men are liars." In these matters psychoanalytic science prefers to use a more careful term. It says "all men rationalize." They have the tendency to make their belief agreeable; as out of the fulness of the heart the mouth speaketh, so most of our

explanations of our pattern motivation is autistic—i.e., wish fulfilling. Here is the catch that is necessary to understand if one would understand what part is played in the entire picture that may be termed psychological, or physis, or what Socrates called the soul. We will not split hairs just now about these similar and differing conceptions.

If our original postulate be correct that man is a billion year time-bound series of structuralized experiences with Nature then it can be understood that the vast majority of his activities take place absolutely beyond his knowledge, i.e., beyond his conscious perceptions. Attention has been called to the chemical bindings, reflex inhibitions and reflexes and psychological repressions that protect him from instant response to all of the stimuli about him, and which if such traps or devices were not there would reduce him, as sometimes does happen, to that situation of the humorist who would ask "What happens if a chameleon be placed upon a Scotch plaid?" Out of this we emerge with a statement cast in the form of a proportion.

As from minute to minute is to a billion years so are our Conscious reasons for doing things to the "Unconscious" processes that really bring them about.

This means then an entirely new technique has to be employed to get at the truth locked up in the wisdom of the body, i.e., the "Unconscious." Before entering into this new technique, as a technique, let me briefly outline what it has seemed to teach us and I do so in the next diagram which would offer a picture of our mental systems. This is slightly modified, for our purposes, from the ideas that Freud has conceived. This egg-shaped figure (Figure 4) may be said to represent three essential parts of our mental systems.

During the billion years of accumulation of experience there was fashioned a vast variety of automatic responses to Nature's stimuli to which the general term, the *Id*, might be applied. All forms of life have a psychic life, for by psychic we would here mean *total response*, or purposeful pattern action. In higher forms there developed out of the *Id* a perceptive system which became what we call "conscious" when by reason of environmental fluctuations automatic adaptive action was faulty. Such fluctuations needed quick sizing up in order to alter older structural repetitive habitual actions. To that part of the *Id* which was in conscious touch with reality as a tester, Freud, in his metapsychology, gave the name of "Ego." This "Ego" must not be confused with the popular term "ego" which more properly is termed the *Self*—or for myself I prefer the term the "M-ego."

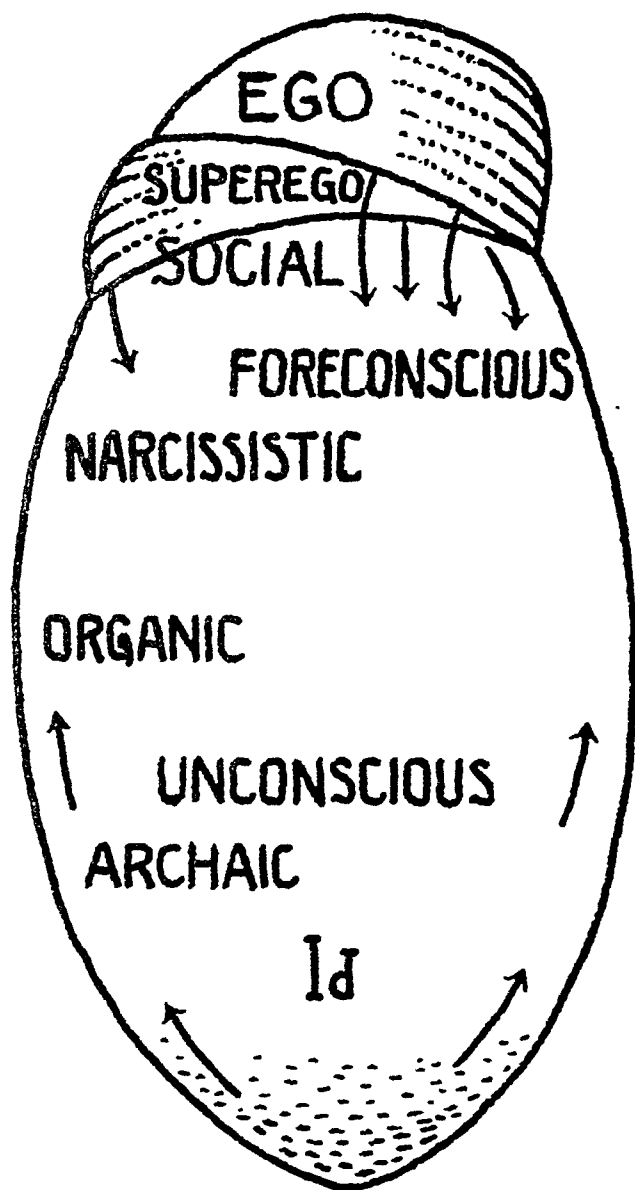


FIGURE 4

Purely schematic diagram of the arrangement of the mental apparatus. Physical-chemical-biological experiences and impulses operating as primitive id forces—controlled for socialized expression (creative libido) by inhibiting, repressing, and suppressing forces of the Ego and Super-Ego.

An outstanding function of this part of the mental system, the Ego is to suppress and to repress the urges, or impulses, or action patterns of the Id which would be disadvantageous to the self, the individual, or to society. We speak of them popularly as self control, judgment, reason, logic, etc., etc. Through the study of science has come the richest store for this guiding instrument of the Ego to suppress consciously and repress unconsciously powerful Id forces.

As Freud studied dreams carefully he noted an extremely interesting series of phenomena such as a chemist might, by analogy, note in the process of fractional distillation or its reverse. He saw

that another system was at work changing the crude Id symbols, fractionating them so that they could come to some form of expression acceptable to the individual's Ego. He called this "Censorship" and it too was of the nature of repression—not "Censor" as has been so widely written. It is a term for a dynamic "process." Further consideration led Freud—and I speak very, very briefly here of this highly important part of the mental systems—to call this the Ego-Ideal or Super Ego, because it was largely built up from childhood upon precept and example—i.e., upon authority, first of the father and mother images and later by others. In the popular parlance one aspect of this Super-Ego is what is known as "conscience." It is somewhat related to what some people speak of as intuition. Dr. Brill has written of it partly as "Unconscious Insight."

Consider for a moment the diagram—where it will be noted that the Super Ego is wedged in between the Id and the Ego—one part in contact with the Unconscious, there reaching through the preconscious or foreconscious and at its upper level in contact with the "Conscious." Here is a sort of balancing, repressing system working as an auxiliary to the repressing system of the Ego. It is certain that certain processes in the "Id" will always be inaccessible to conscious control: repression is absolute. How much no one yet knows and this is of great importance to the student of so-called organic disease processes. That which from moment to moment is held under by repression but maybe made accessible by effort or by other factors is the *foreconscious* or *preconscious*: That which occupies, as it were, the center of awareness we speak of as *conscious*. It will be seen that Freud's formulation here is not one of location but one of dynamics. There is no such thing as *in* the unconscious; unconscious mind, etc.; such are faulty phrasings of this general conception. If to use a chemical simile one says that gasoline is "unconscious" in crude oil, but by a definite heat and pressure technique can be isolated out, i.e., be made conscious, one can get a rough idea of how these terms are understood. The "Id" is the crude oil. Should I change my metaphor to one more mechanical and very rough, think of a running internal-combustion engine of a Rolls-Royce car turned out after a billion years of experience in building. The motive power comes from the Cosmos of our first diagram. It runs day and night and is always on its way (Immortality of the Race). Its goal is some definite place and purpose (Object and Aim). Its patterns of action are the roads that lead there. The Ego in our scheme is the steering gear and the gas feed. The Super Ego—the hand and foot brake. If one is perfectly clear as to the place and the road, one needs but to step on the gas and steer with judgment, ever alert for some variable in the environment to auto-

matically shut off the gas or suddenly to put on the foot brake or if needs be suppress and repress all movement by the hand brake. The human motor only stalls with death.

Why is all this complicated series of dynamics necessary? Because from the cradle to the grave some parts of the mental systems are called into action. In childhood the Id forces are all powerful and the Ego is weak. The care of authority, the "Super Ego," is necessary. Here is where religion has been of so much value in the gradual development of man from the primitive to the present.

For the weaker the Ego, as with the infant, the greater must be the parental care for the individual. In a civilized community the State must play a similar role. For the weaker the Ego the greater the Fear needed to control, hence at the lower levels of the Super Ego one finds magic, superstition, ritualistic observances, etc. As the Ego grows and begins to understand physical and chemical realities the needs for authority outside become less and less and little by little the creative and destructive forces of the Id are subjected to greater conscious control.

In diagram 2 the life pattern was roughly divided into four stages. We might have been Shakespearean and made seven but four are sufficiently illustrative of the general idea. In the Archaic period (intra uterine), the libido is actively creating organs to fulfill the ancestral hereditary patterns in structure and function. In the nine months the libido has rapidly recapitulated the ascent of life from protozoan to mammal. A piteous, helpless animal at birth, but with a richer heritage behind it than before it. In the next 7 years, to relapse to Shakespeare's numbers the adaptive harmony of the organ needs is to be established. Here environmental forces are more variable than in the intrauterine bath. There is great rivalry among these various organs. Each seeks its own functional satisfactions by obtaining pleasure and avoiding pain by hook or crook or by the reality or the phantasy pathways. It is to this period that search will have to be directed for the roots of those organic disorders with which psychopathology may be concerned. As the personality enters into the conscious stage.

Cogito ergo sum" of Descartes the individual enters a "Narcissistic" stage! "Papa look —

Mama look," "everybody look at me," "at my this and that"! The libido Id strivings having obtained a fair degree of organ satisfaction now is focussed on the entire Myself, the "Me ego." I love me is the keynote of this, roughly speaking 7-14 year old developmental stage during which certain organ supremacy of striving is maturing. Then man enters the puberty period and his greatest shove forward towards "Id" impulse gratification takes place. With the exception of his Ego organ—the brain chiefly—all of his or

gans are as mature as they are going to be, speaking generally and for the average. It is at this period that a great deal of personality breakdown takes place for which Morel, the penetrating French psychiatrist, coined the expression—"stranded on the rock of puberty" and which marks the period when personality development is subjected to the greatest whirlwinds of environmental stress because of the force of the Id impulses. Here is where a well-balanced super-ego, from successfully adapted parents plays an important role and when ignorant, bigoted and malignant forces of magic, superstition, and false authority of education, religion or social activities start conflicts within the mental systems which augur ill for the developing individual.

Two concurrent trends of action patterns have been maturing throughout these four stages. In Diagram 5 is roughly shown the evolution from the infantile to adult organ libido utilization. At first the child lives only to breathe (and holler), then to eat (and swallow), then to urinate and then to defecate. Here prudery "a la Comstock, Sumner and Co" suggests Latin terms for the latter two homely words of repressed or suppressed enjoyment. The Latin takes the fun out but admits a wider expression of gratification. What one loses thereby in quality perhaps is evened up in quantity, this sort of balancing between primitive joys with their more austere social permissions in modified form is the great work of the Super Ego and Ego inhibiting and

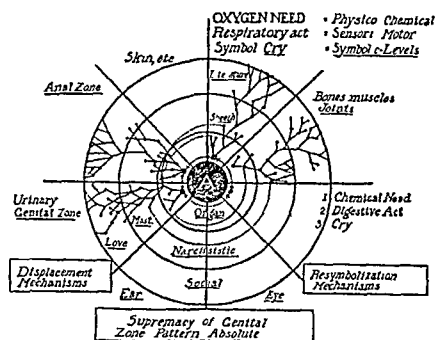


FIGURE 5

repressing systems. Thus by way of crude illustration one may say that the primitive joy of working over one's feces in the colon may be sublimated in the activities of the sculptor or dabbler in oils and paints. The plumber, hydraulic engineer or creator of "Muscle Shoals" works out to varying degrees of complete mastery the omnipotence that once gripped the bladder and started it on its pattern of eons of preparation

I might, had I the time and, you the endurance, trace out from the acorn of every organ's mastery of its destiny to the oak of its ultimate supremacy in the orderly socialized distribution of the titanic forces that reside in the Id of Everyman.

Of one special chapter in this evolution, that of the "supremacy of the genital" functioning, millions of words might be spoken and none ever the same that would trace the nascent impulses through organic growth, through adolescent self love, to object love and finally to the building of those values of the most supreme achievement in human society. If to that force the word "Libido" be attached I would remind you of its far reaching importance in every bit of living endeavor.

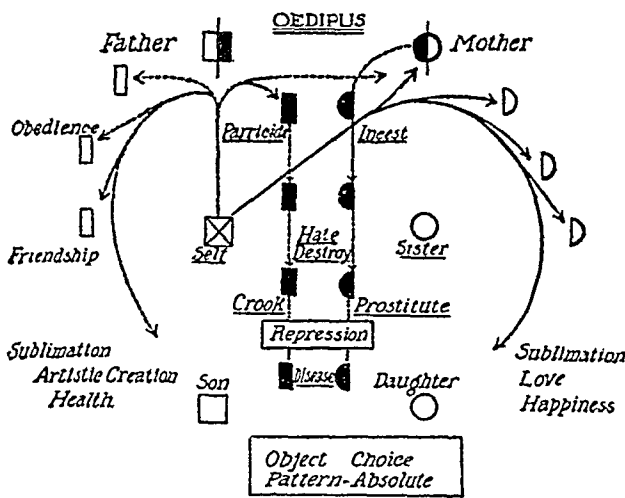


FIGURE 6

And finally to my last diagram which would seek to illustrate what Freud has called the "nuclear" complex in the human libido distribution, patterning it after the intuitive insight of Sophocles' tragic drama of King Oedipus. Were you to come with me into any one of our State Hospitals, you would very soon be amazed at the frank expressions of the Oedipus situation from numerous patients. As I have previously reminded you many of these patients are suffering from varying degrees of "total recall." The past of the "Id" breaks through the repressions of both Ego and Super Ego and the faint or stark skeletons of the Oedipus nucleus stand forth. Like Mark Twain's celebrated story of how human speech at the North Pole became frozen and then thawed out in a claque of strange sounds as the temperature became warmer, so the repressed material breaking through gives one a superior insight into "what everyone of us is dragging behind him unawares."

The pathway taken by the Libido in its developmental investments of objects away from those of the uterus, the cradle, the kindergarten, away from infantile bladder, or bowel, or muscular, or

skin pleasure—pain attachment to identifications of mother (pleasure principle) or father (reality principle) is roughly sketched in these two diagrams.

And this leads to the final statement and explanation of what is involved when certain types of organic disease are being dissected psychologically to endeavor to find the deviation from Object and Aim in the libido strivings.

To understand this attention might first be called to the universal mechanism of *Conversion* that mankind uses to as it were "pass the buck" to his Ego by paying penance to his Super Ego.

In its mildest forms it is seen behind the innumerable ready excuses that one gives when one would avoid something. Such are the innumerable make-believe "headaches" and "fatigue states" to get out of doing something and to continue doing something more desired. More heavily loaded conflicts bring about, not these semiconscious subterfuges, but repression, which pushing more strongly throws the conflict into the Unconscious. The Id, however, always demands expression and the Super Ego takes hold of it and says, "Yes, you can have it but it will hurt you." Here the hysteria conversion mechanism is in evidence. The punishment penance paid to the Super Ego blinds the Ego as to the real significance of the Id craving and so one has the innumerable kinds of bodily "organ neuroses" with which the hysteria literature is full. Now only one step further is needed to convert a benign conversion process which is called hysteria into a malignant conversion process which can make an "organ neurosis" over into an organic disease, when, for instance, a grasping, impatient stomach develops its peptic ulcer or an intestine its duodenal ulcer.

The one step further is simply a question as to the amount of libido investment that is frozen in a fixation at an organ erotic level and its persistence. I need hardly remind you how a frozen investment can upset one's financial adaptation after October, 1929's experience. The hysterical non-malignant conversion outbreak is a safety valve, a defence reaction against either specific local social environmental hardships or against discomforts of civilization at a more general level.

Finally I would show on the screen a rough outline of how a chronic malignant conversion might take the form of a hypertensive nephrosis. It could occupy me many hours discussing this one of similar mechanisms some of which I have put in print as have Groddeck, Deutsch, Allendy and others since my initial contribution to this type of problem in 1916.

Very briefly a distracted husband came to me demanding I save his wife. The doctors, he said, gave her six months to live. She had Bright's disease and needed a diet and rest in bed or she would die. It is no great news to you to be told

that some of us are a bit pessimistic and alarmists and I told him so and to calm down and tell me the story Here it is on the chart

A woman, aged 36, married, children 2, ♂, ♀, ♀, nephritis hypertension

Symptoms

Headache four years Blood pressure 240/250 mm
Albumin Diminished urea output Retention Asthenia
Edema Dyspnea. Constipation + + + Slight momentary lapses

Behavior

Able, energetic cultivated interests in home, children, society Two girls in family Devoted father, beautiful much admired mother Large family group of professional people Never peculiar No eccentricities

Unconscious

Oedipus evolutions, defective Strong father fixation
Rejection of male Homophilic Supremacy of genital zone, defective Urinary fixations Strong anal erotic components

FIGURE 7
Chart of symptoms of the case

I told him I had not treated kidney disease for many years but I would send her to the best hospital I know and take her over the works and then translate to his engineering mind the verbalizations of the internists They practically said "she had high blood pressure because she had kidney disease and kidney disease because she had high blood pressure" Being an engineer this did not go far with him, nor her as far as that goes and I agreed to do a little exploration of the "Unconscious" in the terms here already briefly sketched And since the dream is the royal road into the Unconscious my exploration began with the dream, the first one of which, she recalled while in the hospital was as follows

It was in the country somewhere, a path led from a house to a country road Coming from right to left, at a lickety-split rate of speed were two men in racing sulkies As they swept by in a cloud of dust, a woman ran out of the house towards them with dishevelled hair and apparently shrieking to stop—or what, she was not sure They went on their way up a steep hill without slackening their pace and when they got to the top one turned to the left and ran into a stone wall two feet high and smashed horse and sulky and everything to pieces

"Well," I said, "a cheerful picture and suppose you did a thing like that what would you think about it?"

"What do you mean?" she replied

"Well," I said, "an ancient Greek philosopher, Heraclitus, once said something like this This was 500 B C and long before Freud "For the waking there is one common life, but for those asleep, each one turns aside to his own privacy And do you imagine you could do with impunity what you dream? Is it not because you lie still and do not act that you can indulge your fancy?"

"Well," she said slowly, "one would be crazy to do a thing like that in the dream"

"Good," I said "let us see wherein there is a crazy drive that is destroying you" Here, you see, there is a different method of approach than the blood pressure—kidney disease—dog chasing his tail—mode of explanation

In the methodology of psychoanalysis it was very soon obvious wherein this woman was out of line with the inner laws of nature She was at odds with her own instinctive patterns The race instinct pattern was all wrong In spite of the fact that she had had 4 children she had been frigid Even clitoris manipulation left her cold Her organ erotic fixation was even more primitive than that, it was urethral She got her supreme gratification at that level She urinated quarts to get it, and drank gallons to get the quarts, and in a-b-c short order, the heart, the blood vessels and finally the kidney had to hand it along in double time and finally rebelled This is not the whole story It is only a glimpse at the main issues It would take many hours for me to outline to your or my satisfaction how this particular mode of organ outlet finally was chosen and what was the significance of early identifications and what were the patterns taken up into her "Super-Ego" And how this failure of the Super Ego to work with the Ego and the "Id" destroyed her, just as she had destroyed the man (her father) in the racing sulky in her dream

When the ancient psalmist said, "Vengeance is mine, I shall repay, saith the Lord," he was only saying in an intuitive lingo what the ancient dramatists said when they talked about Fate and what the modern scientific imagination calls the study of the immutable laws of nature When we refuse to get in line with nature, as registered in the faulty purposes of life—i.e., our mental states—even the kidneys, the blood-pressure and urea, proteid, ionic milieu become involved and this is but one formula for many diseases

She did not die in six months—she lived eight years of a useful, busy life and only went to bed in the last month of her life Innumerable details of what psychotherapy did to her blood pressure and her kidney states might be detailed here I might even be able to show how she escaped from the vigilance of the Ego and finally how the Super Ego forced the punishment of death But this would be a long, long story

NOTE

(Dr Jelliffe then demonstrated lantern slides with explanatory remarks of the malignant formation of a bony tumor, the development of oculogyric crises in post encephalitic states, a chronic esophageal diverticulum case that developed a psychosis when operation cured the diverticulum, a case of duodenal ulcer of psychogenic causation and an interesting chronic dyspepsia with rumination and cardiospasm which

was traced back to the infant's mastery over her mother when at the breast. Some of these cases have been reported more fully in special articles. See Bibliography.)

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EARLY MEDICAL HISTORY OF THE MOHAWK VALLEY*

By ELLIS KELLERT, M.D., ELLIS HOSPITAL, SCHENECTADY, N. Y.

MEDICAL practice, in the Mohawk Valley, began long before the advent of the white man. Through numberless centuries the functions of the physician among the aborigenes had been combined with those of the priest, a condition that existed among all primitive and pioneering peoples. To the native American, the Indian, injuries sustained in accidents, the hunt and warfare were comprehensible but the metabolic or infectious diseases which quickly or slowly sapped the individual vitality, or those epidemics that swept the tribes leaving mourning in every tent, an unseen withering power, struck terror to the heart of the simple-minded savage. Toward such events, he not infrequently adopted the attitude of the fatalist and either abided the result or fled. In certain localities in America, the sick natives were without aid of any kind, not even the cymbals of the gaudily attired medicine man and when stricken, were deserted and allowed to perish like cattle. Elsewhere the natives were abundantly able and willing to help the sick. They used herbs, leaves, roots, and even certain minerals many of which were known to the white invaders and which today are used by the medical profession. Chief among these are quinine used for fevers, particularly malarial, and sulphur for skin diseases although the latter were rare except for ulcers. Rheumatism and agues were said to be common.

Physically or mentally handicapped individuals could not survive in the struggle for

existence among primitive people and so it was that the early explorers found "an almost barbarous people well proportioned, without blemish, strong in body, and no limping, crippled, lame, cross-eyed or blind ones." The exigencies of war or the chase did not permit such to survive. Yet illness was not rare among them for the strange white man who came to visit was often besought to aid a sick one. That many of their diseases were self-limited is suggested in the frank statement of Father Simon Le Moine who cured the sick and who writes in 1654, that "they took me for a great medicine man, having no other remedy for the sick but a pinch of sugar."

In the Mohawk Valley the Indians were of a particularly intelligent and advanced order as evidenced by their political unions, their arts and agriculture and their influence over that large area extending from the Mississippi River to the Atlantic Coast. The restricted diets to which the Indians were subject in winter must have resulted in deficiency diseases at times, were it not for their custom of gathering cranberries which although not dried would last the whole winter. After months of a pure meat diet without a single fresh vegetable, scurvy would most certainly have appeared were it not for the use of the cranberry with its antiscorbutic vitamin.

The ambitious Dominie Megopolensis, also recognized as a physician, came over in 1644, to live among the Indians, learn their language and possibly write a book. In fact, he did attempt to formulate an Indian grammar but was much confused by their use of words and

* Address by the President, before the Medical Society of the County of Schenectady, December 1, 1931.

phrases with which he thought himself familiar, and almost believed what he was jokingly told that the Indians probably changed their language every two or three years. He noted the absence of a marriage custom and that women after giving birth to a child, regardless of weather, would wash themselves in cold water or snow and go about immediately performing the usual drudgery. They could not be persuaded to lie down, fearing, that to do so, would result in death.

Indian girls allowed their hair to be cut all around thus explaining the origin of the modern bobbed-hair craze. They married quite young. When unwell for the first time, they were kept in a separate house apart from the men and supplied with food on a stick. There they remained until sick a second time, when they emerged and were allowed to select a mate. Despite the hard life of the female Indian she often lived to a ripe old age. Officers in Gen. Sullivan's expedition frequently noted in their diaries, the finding in the deserted villages of squaws about 100 years of age.

Our real interest, however, lies not with the Indian and his medicine man but with the white physician whose history dates back to a much earlier period than is commonly realized. Canada was settled many years prior to New York or New England and the first man to bring out his family and make his home in Canada was Hebert, an apothecary. The first man to found a seigniory, was Dr. Robert Gifford of Beauport and to him King Louis XIV granted a patent of nobility, the first to be awarded an inhabitant of Canada. At a time when the early English and Dutch settlements had extended but little beyond the Atlantic coastline it was a physician who travelled up the Mohawk Valley and gave many hundreds of Indians their first view of a white man. Previously on rare occasions the natives may have seen a French-Canadian *coureur de bois* or bush ranger who perhaps differed but little from themselves. That physician, one of the first white men to penetrate the dense forests of the Mohawk Valley came on a voyage of exploration and his account of that journey is most interesting.

The Dutch West India Company, which assumed the task of settling the newly discovered lands, felt the necessity of furnishing medical service. Each large ship as it left Holland was usually provided with a surgeon who remained among the colonists either as a practitioner or a settler. One of the earliest of these ship-surgeons was Harmen Meyndertsz Van den Bogaerd who came over in 1631, as surgeon of the ship "Endragh" or "Endracht." He landed at New Amsterdam where for a long time he practiced and un-

doubtedly was the first licensed surgeon to locate in New York. But Van den Bogaerd evidently was afflicted with the wanderlust for in 1633, he became surgeon to Fort Orange, the present Albany, where he achieved notice because of his activity in saving the life of Father Joques who had been captured and tortured by the Mohawk Indians.

In about a year, however, Van den Bogaerd must have tired of waiting for the healthy Dutch stock to employ him for on the 11th of December, 1634, together with two companions, he started on a tour of exploration and travelled up the Valley a distance of about 120 miles. This doctor-explorer was an out-doors man. He knew the woods and trails, was accustomed to live out-doors in summer and winter and the calls of beasts and birds in the virgin forest were pleasant sounds to him. The three explorers travelled the barely perceptible Indian trails or pushed through dense woods, a short distance daily. They slept out in the rain and snow, at times when it was almost unbearably cold and not infrequently walked all night in order to keep warm. When Willem Tomaassen's legs became swollen from the march the doctor made a few cuts with a knife and rubbed bear grease over them. This let the fluid out and reduced the swelling. No first-aid kit, no anesthetics, no antiseptics, no dressings. The march was resumed. They were drenched by the rain; and shoes and stockings froze to the skin. They noted the abundance of flat land, so dear to the Dutch heart, the many fir trees, the favorable sites for settlement and the strategic points for building forts. The hills and streams were also charted; likewise the Indian castles and villages, and the distances separating them. They mingled with Indians who never before had seen a white man, but all were friendly, polite and hospitable; especially after the receipt of presents. In fact, one cold night, a chief loaned Van den Bogaerd a lion's skin which truly was warm, but in the morning he found himself possessed of a hundred lice, something he had not intended to borrow. The Indians were dirty, and yet there was little evidence of skin disease. He found them using sulphur for many conditions especially sore legs resulting from long marchings. But of all their discomforts he makes no complaint except over the lack of a sense of shame on the part of the savages who crowded about at their meals, in their sleeping room, and even when the whites attempted to go to stool.

While at one of the villages he was asked, as so frequently happened, to see a sick man and on entering the room found there two medicine men. The following scene took place: "Lighting a big fire and singing, the Indian doctors closed the house carefully and each of them wrapped a snake-skin about his head. They washed their hands and faces and laid the sick man alongside

jury the victim frequently revived and often lived to a ripe old age.

Scalping was performed in the following manner: a knife resembling a Bowie knife was used and a circular incision made, starting at the hair-line on the forehead. By means of a sudden jerk with the free hand or even the teeth, if the hands were both occupied, the Indian tore the scalp from the skull. The scalps were stretched on small hoops and tanned with the hair on and marked for identification.

When the Revolutionary war broke out, the British in Canada offered a reward for scalps regardless of age or sex and consequently scalping became a big business. For the scalps of ordinary individuals, eight dollars were paid, for those of officials, as high as twenty dollars. The scalps were sold in Montreal where they were gathered in great heaps. What a pathetic sight; the pieces of skin with masses of long black hair, others with shorter gray hair and many, many others of smaller size with light colored ringlets, mute evidence of some horrible tragedy on an isolated farm. The whites themselves, occasionally took to scalping and skinning, for in the diary of an officer in Gen. Sullivan's army we read how, one day, he found a number of dead Indians and skinned two from the hip down for boot-legs: "One pair for the Major and the other for myself."

Many epidemic diseases swept the Mohawk tribes particularly after the coming of the white man. In 1663, small-pox was very prevalent in Beverswyck and Rensselaerswyck and daily deaths were recorded. It is said that a thousand Indians died as a result of this infection. In 1720, the Mohican Indians suffered from yellow fever, which spread from New Amsterdam to Albany by means of shipping and thence along the Valley. Again in 1746, a disease thought to be yellow fever raged among the Indians and destroyed many of them. The epidemic began in August and ended with frost. It was associated with a crisis on the 9th day and the patient who survived that day usually got well although many were left in a state of imbecility and others with swollen legs.

The influence of disease on the rise and fall of nations is not generally appreciated. Many an ancient civilization crumbled and disappeared as a result of pestilence. Ancient Greece withered beneath the onslaught of the malarial parasite and many other more modern nations might never have been born or survived, as a result of that same parasite were it not for the very fundamental discoveries of a Mohawk Valley physician, Theobald Smith, who first pointed out, as a result of careful scientific experiments, the role of the insect in the transmission of disease. Were it not for disease the United States of America might never have endured. In 1775,

when war seemed imminent, it was deemed expedient to keep the New York Indians neutral, for they guarded the natural passage to the west. After a great meeting, the tribes returned to their castles and soon thereafter an epidemic broke out among them which greatly reduced their available warriors. The British agents convinced the Indians that they were being punished by the Great Spirit for not taking up the hatchet of the King, which they readily believed and joined forces with the English. They accomplished little except to harass the frontier towns and perpetrate several massacres. The Indian depredations led to Gen. Sullivan's expedition which so severely punished the red man as to forever destroy any further opposition from him in New York State. By the year 1886, the Indians were reduced to 5,000 or about an eighth of the original number.

In 1832, cholera appeared in the valley settlements and was thought to be due to the wells. The water, usually clear and sparkling, was examined by prominent chemist-physicians who pronounced the samples "all to be free from any impurities which could be injurious to health." The doctors had made chemical examinations only. Pathogenic bacteria were unknown then and doubtless the water was full of cholera and dysentery microbes. Owing to the public suspicion of water, beer and cider were the common drinks.

One hundred and twenty-three years ago, the Valley saw established a medical college. The resourceful, intelligent physicians of central New York always alert to advance the science and art of medicine and who believed above all things in self-help, decided to establish a medical school. The hamlet of Fairfield, in Herkimer County, eight miles from Little Falls, was selected, probably because of its central location and because living costs would be low. There, a stone edifice was constructed in 1812, which became the College of Physicians and Surgeons of the Western District of the State of New York. The building measured 63 x 38 feet, was three stories high, contained a museum, anatomical theatre, dissecting room, class rooms, etc. A charter from the state was obtained together with grants totalling 15,000 dollars.

The college issued an announcement setting forth its advantages and making a plea for aid. We find the following statements: "Mineralogical specimens will be thankfully received for the cabinet, and if gentlemen desire an analysis they can be gratified." "The Professor of Obstetrics has been furnished with a good machine." This statement probably referred to a mannikin. "During the session of the college, advice will be given and operations performed gratuitously, in all surgical cases at Fairfield or its immediate vicinity, provided the class can be present." The

school flourished until 1840, when it closed because of the increasing demand for clinical and laboratory facilities which the small village of Fairfield could not supply. During the 28 years of its existence, 217 students were graduated and 19 subsequently became professors in other institutions, a fine testimonial to the character of the teaching by the faculty of that school.

The faculty consisted mainly of physicians who came from various parts of the State and delivered a concentrated series of demonstrations and lectures of about three months each. The faculty group was headed by a Dr. Willoughby who, together with a medical partner lived in a log cabin between Fairfield and Newport. These men, both bachelors, kept house, cooked and washed for themselves and made their daily rounds on horseback through the thick forests to the widely separated farmhouses. Willoughby was the professor of obstetrics at Fairfield, the man who operated the machine and managed the school. Patients must have paid their fees in those days for this backwoods physician subsequently removed farther west and founded and liberally endowed the Willoughby Medical College in Ohio.

The group of teachers included many well known men but most famous of all were the Becks of whom Theodric Romeyn Beck may be stated to have been the most renowned physician connected with the early history of the Mohawk Valley proper. The Beck family were of English origin but intermarried with the Dutch population.

Dr. Theodric Beck was born at Schenectady, August 11th, 1791, became a student in the grammar school, entered Union College in 1803 and graduated in 1807, at the age of sixteen years. He graduated in 1811, from the College of Physicians and Surgeons of New York and subsequently was associated with the famous Dr. David Hosack of New York City. He established himself in practice in Albany and became Professor of the Institutes of Medicine at the Medical school in Fairfield. He was a notable teacher and was greatly revered by students and colleagues. Beck also lectured on medical jurisprudence, a subject in which he attained great eminence. He wrote a thesis on Insanity. Teaching and lecturing soon occupied so much of his time that he gave up practice and in 1817, became principal of the Albany academy, during the time of the famous Joseph Henry. In 1829 he became president of the state medical society and so pleased that organization that he was re-elected the following year and also a third time, an honor accorded to but few men. Beck's first address was entitled "Medical Evidence" and in it he discussed the interests of the public and profession. He particularly urged the appointment of trained and experienced men to perform

post-mortem examinations realizing that special work in medicine required special training. In his second annual address, just about 100 years ago, he again stressed the importance of the fundamental studies such as anatomy, pathology, chemistry, materia medica, and spoke of the antiquated medical theories that were being discarded. Of the pathologist he said, "He proceeds to his high office at the risk of health—often, indeed, of existence." In his third address, he spoke on small-pox, urging compulsory vaccination. Only 26 years earlier, the first inoculation in America for small-pox, was performed in Boston. It will be recalled that in 1747 Gov. Clinton had prohibited vaccination in New York and its environs.

Beck was also interested in the museum of natural history, in the geological survey of the state and also investigated the minerals of the country. But medical jurisprudence continued to be his main study and culminated in the most authoritative work on that subject ever printed. Issued first in 1923, Beck's Medical Jurisprudence has passed through ten editions; a work that acquired international fame, that startled Europe with its scientific insight and comprehensive knowledge. In it is a chapter by his brother John on the subject of infanticide. This article, even today, is regarded as standard.

After a prolonged illness of obscure origin and in which gastro-intestinal symptoms predominated, Beck died November 19, 1855, at the age of 64 years. An autopsy was performed, probably by Dr. James McNaughton in the presence of seven other intimates of Dr. Beck. These gentlemen found a large heart with calcification of the mitral valve. "The coronary arteries were ossified," is a statement in the report. It is interesting to note, at that early day, reference to coronary sclerosis. There was thickening and induration of the pyloric orifice. Microscopic studies were not made in those days and the real nature of the stomach lesion will remain unknown but it is not unlikely that it represented that rare form of gastric cancer called linitis plastica.

Because of popular prejudice and lack of skilled observers, autopsies were very rare. The first post-mortem examination in the state was performed in 1690, on the body of Gov. Slaughter who died suddenly following a drinking party which celebrated the execution of Leisler and Milborne, who had rebelled against the governor's authority. Foul play and poisoning especially were suspected and because of great public clamor, an autopsy was ordered which was performed by Dr. Johannes Kerfbyle—assisted by five physicians. After a complete examination it was found that "he died of a defect in his blood and lungs occasioned by some glutinous tough humor in the blood, which stopped the passage thereof and occasioned its settling in

the lungs." Certainly one might apply that description to the modern diagnosis of pulmonary embolism, an interpretation suggested by Walsh.

One of the reasons for the decline of the medical school at Fairfield; the Old Pioneer School, as it was then called, was the opening of the Geneva Medical College in 1835, which attained considerable publicity over the enrollment of a woman student. Miss Blackwell, the student, sought to enter the college but the faculty did not wish to admit her and also did not wish to incur criticism for failing to do so. The professors felt confident that the student body would not want a female in class and so referred her request to the students. The students, however, voted unanimously to admit her to the college thus demonstrating how little faculties can judge the temperament of student bodies. Miss Blackwell ranked high in her studies and graduated and the faculty subsequently testified that the presence of a woman student "exercised a beneficial influence upon her fellow students in all respects." Nevertheless, a few years later Miss Blackwell's sister requested admittance to the school, and this time the faculty did not permit the students to vote on the matter and took sole responsibility for rejecting her. Shortly afterward, in 1837, this school because of diminishing classes, merged with Syracuse University becoming its medical department. After the close of the Fairfield school, the fine museum collection by Dr. McNaughton was transferred to Albany.

It was in 1820, that Dr. Alden March began his demonstrations and lectures in anatomy in Albany. He was capable and successful and his classes became so large that in 1830, he delivered a lecture on the establishment of a medical college in the city of Albany. He discussed the organization of such an institution and even considered full-time salaried clinical professors, something generally believed to be a recent invention. He did not approve such officials, however, for he said, "These professors, though able men, would soon become mere theorists, if not visionary speculators. They could not be sound, practical men, which seems to be at least important, if not absolutely necessary, in most branches of our profession." At that time the population of Albany was about twenty thousand and there was no hospital. He pointed out that most of the students at the Fairfield school came from eastern and central New York, that Albany could well support a medical school; that students could obtain good board and lodgings for two dollars a week and complete tuition for sixty dollars. Most medical institutes of that period, relied entirely on the reputation of one individual to attract students but March believed that a group of twelve or fifteen men of medium talents

but working in harmony could accomplish more than any one individual regardless of his ability. He also recommended that with the college there be established a Hospital and an Asylum for the Insane; a combination that after many years came into existence. Shortly after the closing of the Fairfield school the Albany Medical College was established in 1839, two years before the birth of one of its most eminent students and teachers. Born in the town of Root, near Canajoharie, in 1841, Dr. Albert Vander Veer obtained his preliminary education under the tutelage of a country practitioner. He became a student of the Albany Medical College during the first year of the Civil War and was then sent to the National Medical College in Washington where he received his degree in 1862. Returning to Albany in 1866, he began the practice of surgery and soon received appointments in the college and hospital. Dr. Vander Veer was among the first surgeons in the country to perform abdominal operations and attained a national and international reputation as a practical surgeon and medical educator. He received the highest honors accorded by State and National medical societies and was decorated by foreign potentates. He was to practical surgery what Beck was to medical jurisprudence and it is of interest to know that two such eminent men were born and labored in the Mohawk Valley.

The medical societies of the state were the original licensing bodies and so we find the Medical Society of the County of Schenectady organized June 11, 1810, under "An act to incorporate medical societies for the purpose of regulating the practice of physic and surgery." Article 5, of the act, provided that the censors should meet, on request, to examine all students in anatomy, physiology, surgery, midwifery, materia medica, pharmacy, theory, and practice of physic, and chemistry. The initiation fee was one dollar and dues, two dollars, payable quarterly. If a member failed to attend a regular meeting he was fined one dollar.

The members engaged in the highest type of medical practice characteristic of the times. No one was permitted under penalty of loss of membership to pretend that he possessed a secret remedy or cure for any disease not known to the profession as a whole. A fee schedule was also adopted and it was considered proper to charge one dollar and not less than fifty cents for visit and medicine for ordinary cases.

In 1841, owing to internal dissensions, meetings ceased for a period of 28 years. In 1869, the society reorganized and adopted a new set of by-laws January 11, 1870, from which date the society has enjoyed active scientific work and harmonious meetings.

SPOROTRICHOSIS IN NEW YORK STATE

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SPOROTRICHOSIS is an infection which is usually confined to the subcutaneous tissues and the skin but which may occasionally attack internal organs. The various clinical forms were studied and classified by de Beurmann and Gougerot¹ and their work has been well summarized by Foerster.² Grutz³ has recently published a full discussion of the subject.

1 Lymphangitic form The most common form of sporotrichosis in the United States is a localized infection which begins with a primary lesion usually on exposed parts of the body, most frequently on the backs of the hands or fingers. This sporothric chancre is a granuloma which may form an abscess, but is more frequently verrucous or covered with moist vegetations. There is a variable degree of ulceration. It is surrounded by a red inflamed area which is moderately infiltrated. Usually secondary nodules develop along the course of the lymphatics draining the region. The nodules are at first freely movable, but later adhere to the overlying skin which becomes reddened, infiltrated and frequently ulcerates discharging a small amount of thin pus. The lymphatic vessels between the nodules are often so thickened as to be felt as hard cords. The regional lymph nodes rarely become involved. Infections of this type run an exceedingly long and chronic course if untreated. Fever and systemic symptoms are absent or mild. Extension to the internal organs is very rare. Solitary gummatous nodules and solitary abscesses have also been described as due to the sporotrichum.

2 Disseminated form In France a disseminated form of sporotrichosis has been more frequently observed. The lesions begin as rather hard subcutaneous nodules which are usually numerous. They appear scattered over the body as if resulting from a blood stream infection. As they grow they usually involve the overlying skin but the whole disease may run its course without ulceration. In some cases, however, all the nodules tend to form indolent ulcers of the type already described. DeBeurmann has described syphilitic forms in which the lesions fuse and break down to form extensive ulcers.

3 Epidermal form Although in most cases sporotrichosis begins with subcutaneous lesions, secondary superficial papular, pustular, or ulcerating lesions are sometimes seen in the neighborhood of the ulcers of the deeper origin. These were referred to by deBeurmann as sporotrichoides on account of their resemblance to papulo necrotic tuberculides. In some cases of facial infection the entire lesions are localized in the skin and form nodular crusted areas similar to those

seen in lupus vulgaris. Benedek has described a superficial form of sporotrichosis due to a different species of sporothrix from that found in the deeper lesions, and Guy and Jacob⁴ reported a case of intertrigo of the toes from which they isolated *Sporotrichum Schenckii*.

4 Sporotrichosis of the mucous membranes Secondary involvement of the mucous membrane of the mouth has been observed in the disseminated cases and Gougerot, Quellen and Escomal have described cases of primary infection of the pharynx. Sporotrichosis of the conjunctiva has also been observed and Wilder reported such a case due to a laboratory infection.

5 Skeletal Sporotrichosis A number of cases of sporotrichosis of the bones and joints and of the tendon sheaths and muscles have been reported. Some of these occurred without cutaneous lesions.

6 Visceral Sporotrichosis Pyelonephritis, orchitis and epididymitis due to the sporotrichum have been observed in patients with general infection. The question of pulmonary sporotrichosis is of considerable interest and has recently been discussed by Forbus.⁵ The fact that the sporotrichum has been isolated from healthy mouths, pharynx, and tonsils makes the finding of the organism in the sputum insufficient evidence of pulmonary involvement. In one patient, however, Shulman and Masson cultivated the organism on aspiration of tumor masses in the lungs which were localized by x-ray examination.

Diagnosis

The lymphangitic form of sporotrichosis begins with a chronic ulcerating and almost painless lesion of traumatic origin and followed by the development of nodules along the course of the regional lymphatics presents a characteristic picture that makes a presumptive clinical diagnosis possible. Pyogenic cellulitis, tuberculosis, syphilis and glanders must be excluded, although they rarely present a similar picture. Hodges⁶ and Shelmire⁷ have observed that tularemia may closely imitate sporotrichosis especially when aberrant subcutaneous lymph nodules along the forearm are involved. The prominent enlargement of the main lymph nodes usually present in tularemia and absent in sporotrichosis would seem important in the differentiation of these two conditions.

The disseminated gummatous form of sporotrichosis described by Gougerot also presents a strongly suggestive clinical picture. The localized forms of the disease may, however, closely

simulate syphilis, tuberculosis, blastomycosis, deep-seated trichophytosis leishmaniasis and granulomas due to drugs. The bone and visceral lesions also have no diagnostic clinical characteristics. The possibility of sporotrichosis must be borne in mind in diagnosis of all granulomas of obscure origin.

The most important means of diagnosis is direct culture from pus or an excised lesion. This is usually successful if made on Sabouraud's agar or other media of a pH of about 6.0 and grown at room temperature. The organism is practically never detected in smears of pus and rarely in sections from the lesions.

Widal and Abrami found that patients with sporotrichosis agglutinated suspensions of sporotrichum spores in dilutions of 1-100 to 1-500 and occasionally in 1-1500, whereas normal sera did not agglutinate above 1-50. Bloch and deBeurmann have obtained positive skin reactions with extracts of the organism similar to those obtained with tuberculin. (As the necessary materials are rarely at hand in an emergency, these indirect methods of diagnosis have been, in practice, of less value than the simpler method by culturing specimens taken from the lesion.)

Treatment

Sporotrichosis responds remarkably well to potassium iodide given internally in large doses. There are numerous reported cases where extensive surgical procedure has failed utterly and where cure followed the use of iodides. X-ray has apparently also been of value in treatment of the skin lesions.



FIGURE 1

Culture of *Sporotrichum Schenckii* in hanging drop showing typical clusters of spores at the end of short lateral branches.

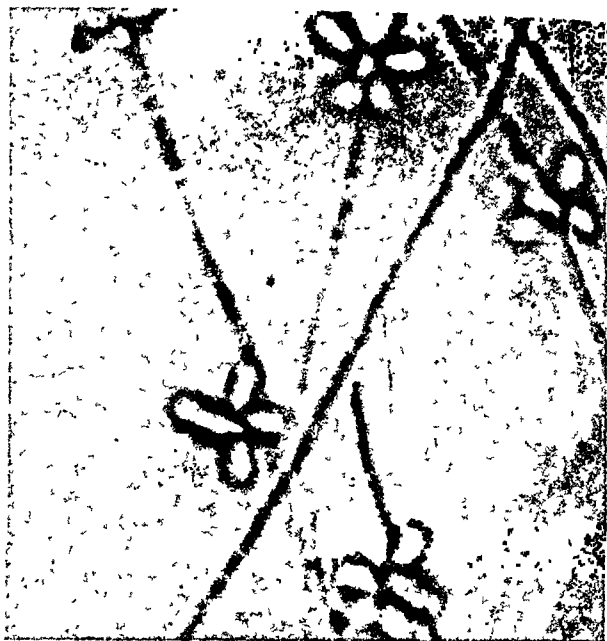


FIGURE 2

Another hanging drop culture showing clusters of spores along mycelial threads.

Sporotricha

The organisms obtained from the large majority of the human cases of sporotrichosis resemble closely those originally described by Schenck and by Hektoen and Perkins. Strains vary somewhat in pigmentation, in the profusion of spores and in other minor characteristics. DeBeurmann has separated several species and varieties of the organism, but the differentiations that he has made have not achieved general acceptance. The careful studies of Davis indicate that the organisms called by de Beurmann *Sporotrichum Schenckii*, *Sporotrichum Beurmanni*, *Sporotrichum asteroides* and *Sporotrichum indicum* are all of the same species. Consequently the name, *Sporotrichum Schenckii*, is used in this report as synonymous with the more commonly used term, *Sporotrichum Beurmanni*. Two other distinct species have been recovered from human lesions—a *Sporotrichum Gougeroti* isolated first by Gougerot from a gummatous sporotrichosis and since reported in a few isolated cases and the *Sporotrichum Councilmanni* recovered once by Wolbach, Sisson and Meyer from a case of arthritis of the knee. *Sporotrichum Carougeaui*, *Sporotrichum Jaenselmi*, *Sporotrichum Lipsiensi* and *Sporotrichum Lesnei* are also apparently distinct, though rare, pathogenic species.

The organisms described as *Sporotrichum Dori* and *Sporotrichum Cracoviense* should probably not be classed under the genus *Sporotrichum*.

Sporotrichosis in New York State

Sporotrichosis is a disease of curious geographical distribution. It seems common in France

and in Brazil, very rare in England and Germany. Foerster collected one hundred forty-eight cases reported from the United States and there have doubtless been many others unreported. The great majority of these infections have occurred in the Mississippi Valley. The disease is apparently rare in New York State. We could find only four published cases originating here and in none of these was the diagnosis made definite by culture. Dr. Earl D. Osborne of Buffalo has told us of a case of his from which the sporotrichum was recovered. There may well have been other unpublished observations. In Sutton's textbook is a photograph of a case contributed by the late Dr. Wende of Buffalo, but no published account of it has been found. The first recorded cases were reported by Dr. G. H. Turrell,⁸ Smithtown Branch, Suffolk County, 1911. One was a boy of twelve, an inmate of the children's home, who presented two chronic ulcers on the toe and foot and a bluish-red fluctuating subcutaneous nodule on the back of the wrist. He later developed two similar lesions on the forearm and one on the scalp. The second boy in the same home developed similar nodules on the back of the hand and wrist. Smears taken from one of the ulcers showed, "an interlacing network of mycelial threads interspersed with sharply defined oval bodies." No cultures were made. The first patient had failed to improve under ordinary surgical treatment and in both there was marked improvement after administration of potassium iodide.

The clinical description of these cases makes the diagnosis of sporotrichosis highly probable. The microscopic findings were not convincing as spores are rarely found on direct examination of pus and mycelial forms have never been observed in lesions.

A third case was one presented by Dr. Lapowski⁹ at the New York Academy of Medicine, December 1918. The patient presented three nodular lesions on the anterior surface of the leg, the dorsum of the hand and a third extending around the right eye and adjacent portion of the forehead. The lesions improved under potassium iodide. No cultures or microscopic examinations were made. Neither Dr. Lapowski nor Dr. Wise who discussed the case would venture a positive diagnosis.

A fourth case was presented by Dr. Fred Wise¹⁰ before the New York Academy of Medicine in May 1921. The patient was an Armenian, age thirty-three, who had been in the United States only a few months. He presented a dime size ulcerated lesion on the dorsum of the right hand. There were also pea size subcutaneous nodules extending from the wrist to the shoulder. These nodules were hard and showed no signs of breaking down.

A case of sporotrichosis in which the diagnosis

was confirmed by finding the sporothrix in culture was presented by Dr. Howard Fox¹¹ before the New York Academy of Medicine in December 1921. The patient, however, was a sailor recently arrived in New York and the infection was probably acquired in the tropics.

The first case of sporotrichosis of which we are aware proven by culture and originating in New York State was observed by Dr. Earl D. Osborne.¹² We are indebted to him for the following report:

A young boy, age six, in excellent general health was brought in to me on June 27, 1928, with a history of having been cut on the forehead over the right eye two months previously. The cut was received while climbing a fence adjacent to which some shrubbery was growing. The cut had not healed although cleaned out and sewed up by a competent physician. The stitches had been pulled out and the cut opened up and had been draining for two months.

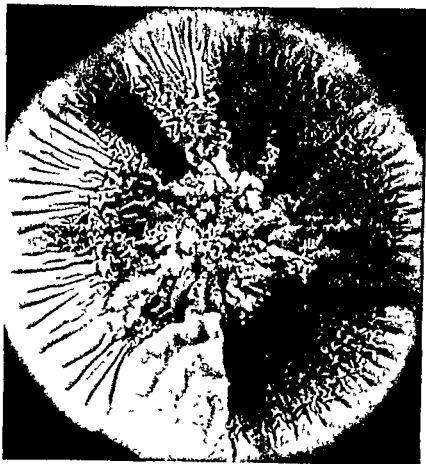


FIGURE 3
Colony of sporothrix recovered by Dr. Osborne from his case.

Examination revealed a linear lesion, one and one-half inches in length with a cystic, granulomatous appearance. A sero-sanguinous discharge was present. A number of small satellite lesions were present around the border. These lesions on pressure exuded a clear fluid, but no pus.

Smears and cultures were taken, examination of which revealed *Sporotrichum Schenckii*.

The lesion was treated with two skin units of 1-ray and the boy given 15 grains of potassium iodide three times a day. In three weeks time the lesion was completely healed.

Subsequent inquiry from the parents of this boy revealed the fact that there were numerous barberry bushes in the hedge adjacent to the fence.

We would like to present the report of a second case observed at the Vanderbilt Clinic last year. The patient S. K., was a Russian Jewess, married, age sixty-two, who was admitted in October 1929. Two months before she had injured her index finger with steel wool and a small pimple had developed from which she expressed a drop of pus. Following this, vesicular lesions appeared on the finger in the region of the puncture. A few days later she was in Monticello, Sullivan County, and as the finger was still sore she applied a poultice made of chopped leaves on the advice of friends. A week later the finger became more sore and inflamed and a group of pimples appeared on the back of the hand. From week to week, more pimples appeared extending up the arm, a few of them enlarged, looked like boils and discharged pus, but none of them hurt except when pressed. At times the entire arm became swollen and she had chills and fever. On

examination she presented a chronic paronychia of the index finger nail which when trimmed back exposed a granulating surface occupying the nail bed and a red swelling involving the distal phalanx of the finger. On the dorsum of the hand near the base of the index finger was an infiltrated plaque made up of individual, hard, papular lesions. Extending along the radial border of the wrist and forearm and around into the antecubital fossa was a chain of nodular lesions. Most of them were bluish-red and crusted on the surface. One was fluctuant. The most recent one in front of the elbow was of rubbery consistency. Several could not be seen, but could be palpated beneath the skin. There was no glandular enlargement, no skin lesions elsewhere and the patient complained of no systemic symptoms at the time.

Histological Examination

The lesion in front of the elbow flexure was excised and on section showed an inflammatory mass occupying the deep cutis and the neighboring portion of the subcutaneous fat. The mass was fairly well defined. The upper portion was made up of lymphocytes closely packed between fibrils of collagen. Fragments of disintegrating collagen bundles were distributed through the mass and scattered eosinophiles and mast cells. In the deeper portion were streaks of hemorrhage and wide areas of necrosis. In this portion there were numerous leucocytes, groups of plasma cells and large mononuclears and a few giant cells of the Langhan's type. Around the main mass were areas of lymphocytic infiltration around the blood vessels. This extended up into the papillary layer. These blood vessels showed marked swelling of the endothelium and degeneration of the walls which were infiltrated with wandering cells. Many blood vessels in the main mass were completely disintegrated. The epidermis was normal. No spores or mycelium could be found.

Animal Inoculations

An emulsion of portions of the excised nodule was injected into the testicles of two rats. These animals developed an orchitis and when killed, at autopsy a month later showed whitish nodules in the liver and spleen. The same sporotrichum was cultivated from these lesions. In further inoculation experiments multiple nodular lesions were produced in a monkey closely simulating the lymphangitic form of the disease in man.

Cultures

Cultures were made from pus expressed from the finger lesion and also from portions of the excised lesion and planted on Sabouraud's honey agar and on other media. After five days at room temperature small white colonies appeared which slowly enlarged becoming brown and later

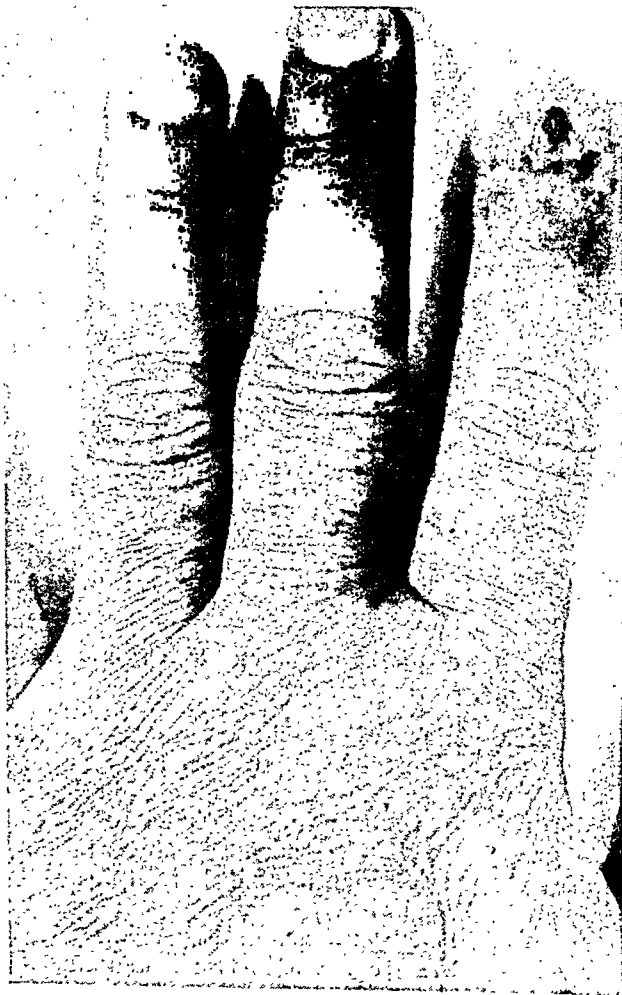


FIGURE 4

Patient S. K.: Sporotrichic chancre on forefinger.
Secondary nodules on hand.

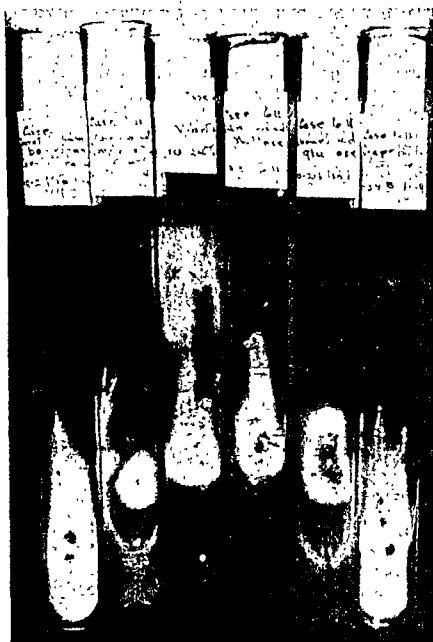


FIGURE 5

Sporothrix recovered from Case S. K., showing varied appearance on different media: Left to right, Corn meal agar, Sabouraud's Conservation agar, Wort agar, Sabouraud's maltose agar, Sabouraud's glucose agar and Czapek's agar.

almost black at the borders. The centers became raised and convoluted, the borders flatish with faint radial grooves. Microscopic preparations showed the growth to be made up of delicate branching mycelium about 2 μ in diameter with rounded or pyriform spores and 4 by 6 μ . These were born in clusters at the ends of the short hyphal branches and also along the sides of the hyphae where in some cultures they accumulated in dense masses forming a sleeve around the hyphal thread. Numerous bundles of parallel hyphae (coræmia) were observed and in some cultures typical chlamyds spores. The organism was considered to be *Sporotrichum Schenkii*.

Cutaneous Tests

Scratch tests to stock preparations of *Sporotrichum Schenkii* and with a suspension of spores of cultures isolated from the patient produced no characteristic reactions.

Course

The patient disappeared from observation after

a week and the course of the disease could not be followed.

Sporotrichosis in Animals

There are two cases on record where sporotrichosis has been acquired by handling infected dressings (Foerster). In most instances, however, there is no evidence of contact with a previous case and the curious geographical distribution of the disease suggests that infections usually occur from some other source. In this connection there has been considerable interest in sporotrichosis of animals. In horses the disease takes

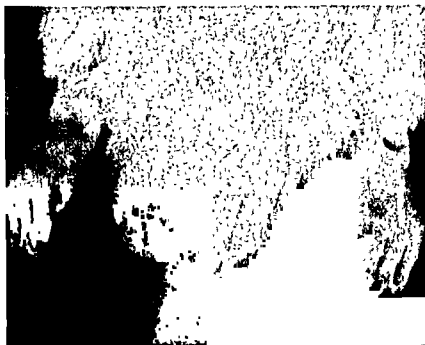


FIGURE 6

Rat inoculated with *Sporotrichum Schenkii* showing sporotrichic tumors of the testicles and feet.

the form of a lymphangitis of the legs. The first case was reported by Carrougeau from Madagascar; the second case by Page, Frothingham and Page from Pennsylvania. Meyer¹³ later made a thorough study of this disease and found it prevalent in certain parts of the United States.

In a case reported by Sutton¹⁴ it seemed prob-



FIGURE 7

Cross-section through foot of rat infected with *Sporotrichum Schenkii* showing osteomyelitis of all metatarsal bones.

able that a human infection originated from contact with a diseased horse, but in no other instance has such transmission been proved. Meyer concluded that the equine and human cases both originated from some other source of infection and were not directly related to each other.

Spontaneous sporotrichosis of dogs has been reported by Gougerot in France and by Meyer

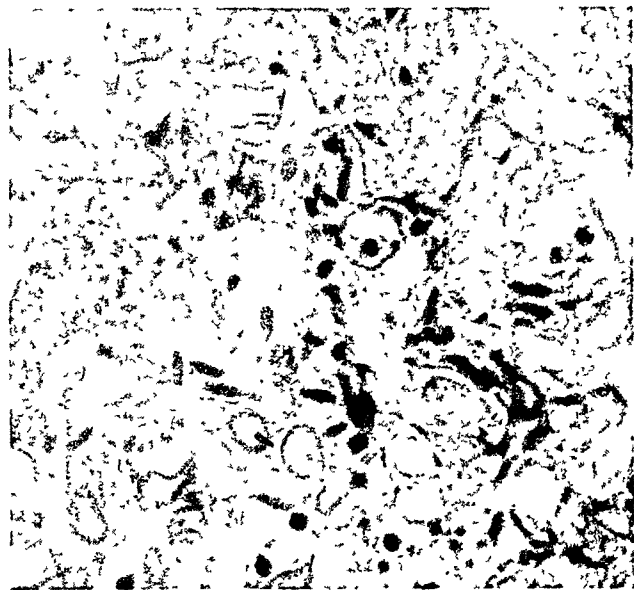


FIGURE 8

Section through rat testicle showing sporothrix spores.

in the United States, but no human infections have been due to dogs with sporotrichosis.

Sporotrichosis of rats was observed by Lutz and Splendore¹⁵ at about the same time that they observed their first human case and one of these cases they attributed to the bite of a rat. They also observed the disease in rabbits and in cats.

Saprophytic Sporotricha

Sporotrichum Schenkii has been found in many isolated instances growing saprophytically, but no one frequent habitat has been discovered. After a long search for possible outside sources of infection Gougerot discovered sporotricha indistinguishable from the human strains and highly pathogenic for rats after repeated passage growing saprophytically in the French Alps. Cultures were obtained from the bark of a beech tree, from a horsetail fern and from thorns. Sartory cultivated the organism from the husks of blighted wheat and deBeurmann cultivated it from flies, wasps and ants. Lutz and Splendore found the organism in the mouths and on the fur of healthy rats and Meyer recovered it from the coats of horses, both from healthy animals and from those suffering from the disease.

All of these observations have indicated that

human infection with sporotrichosis is probably acquired either from contamination of a wound, by inhalation or by ingestion of sporotricha growing saprophytically in nature. In most of the instances where sporotrichosis has followed bites there is no evidence that the biting animal or bird was diseased. The most probable explanation is that their mouths had been contaminated with saprophytic sporotricha.

A most interesting observation in this connection was that of Foerster,¹⁶ that in a series of eighteen cases of sporotrichosis which he observed fourteen were employees in a tree nursery and ten had probably acquired the infection by inoculation of thorns of the barberry shrub. A thorn was removed from the initial lesion of two of the cases and in six others thorns had been removed from the fingers preceding development of the disease.

The frequency of the disease in gardeners, florists and other workers handling plants has been noted by other authors and while the evidence all points toward plant material as the commonest source of infection no one source has been established.

Sporotrichosis in Plants

It is of interest in this connection that there is a disease in plants caused by a sporotrichum. Carnations in greenhouses are frequently at-

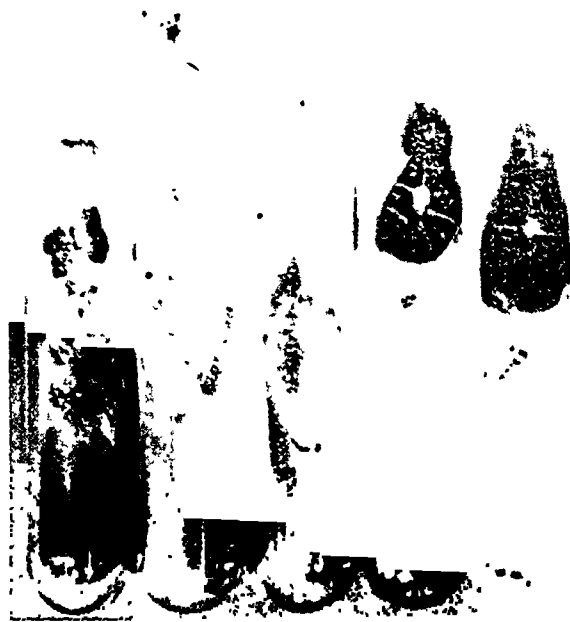


FIGURE 9

Cultures of *Sporotrichum Schenkii*. From left to right:

1. Culture from infected rat
2. Culture from infected monkey.
3. Culture from infected carnation.
4. Culture from human case.
5. Stock culture from Col. B. K. Ashford.

tacked by bud-rot which occurs in epidemics. This disease has been shown by Wolcott (1905) to be due to *Sporotrichum poae* which is carried from plant to plant by a mite. The same sporotrichum causes a disease of June grass, but this species has never been found in a human case. In experiments reported elsewhere¹⁷ it was found that its inoculation into a monkey and rats produced only transient and uncharacteristic lesions. In this connection it seemed of interest to test the pathogenicity of the human sporotrichum for plants and it was found by one of us that the *Sporotrichum Schenckii* isolated from the case here reported would produce typical bud-rot in carnations. This is of some theoretical interest as it is perhaps the first instance of the transmission

of a human disease to a plant, but it has not greatly aided in the explanation of the origin of human sporotrichosis. The evidence so far collected by numerous workers suggests, however, that the *Sporotrichum Schenckii* will eventually be found to be a parasite on one or more plant forms.

Conclusions

Sporotrichosis which is common in the Mississippi Valley is a rare infection in New York. Two cases are reported proved by culture which originated in this state.

The same disease occurs occasionally in animals, but human cases usually originate from infection by plant material.

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SCARLET FEVER CASE-FINDING

By FRANK W. LAIDLAW, M.D., MIDDLETOWN, N. Y.

From the March Number of the Mimeographed Bulletin of the District State Health Officer for Sullivan, Ulster, Orange and Rockland Counties.

Scarlet fever merits the thoughtful consideration of health officers, public health nurses, and all other workers in public health. School medical inspectors and school nurses may also find it worthy of attention.

The names *scarlet rash* and *scarlatina* are confusing to the people. Every physician, health officer, and nurse knows that they are both synonymous with the term "scarlet fever", and yet the names are often used in connection with actual mild cases or for the purpose of allaying the fears of parents in more severe cases. And, incidentally, the idea is conveyed or encouraged that "scarlatina" or "scarlet rash" is not so liable to be conveyed to others as the form dignified as "scarlet fever".

Every one who knows anything about the trans-

mission of scarlet fever knows that mild and atypical cases play a most active part in the spread of the disease in a community, and that their recognition and control is of great importance.

Instead of talking about "A light attack of scarlatina," or a "mild scarlet rash," while we are removing our hat and overcoat, and taking leave of the family, why not say "scarlet fever"? Everyone knows what that means.

The Diagnosis. Don't examine a case with the object of convincing yourself that it is *not* scarlet fever. Unless you can approach the problem with an "open mind" and with the intention of weighing the evidence for and against, you are not a diagnostician any way.

Don't reject the diagnosis of scarlet fever just because the tongue isn't "quite right", and don't

depend on the eruption alone. Consider the *entire evidence*, including possible exposure. The diagnosis is not easy in many instances, and it always deserves careful inquiry and study.

Inefficient methods of control: We frequently devote our attention wholly to the "known case," and stop there, doing, of course, the things tradition has prescribed.

A great deal of attention is placed upon the *location*, the *size* and the *color* of the placard placed on the outside of the house.

The severity of the restrictions placed upon the well members of the family, including the dog, seems to be thought by some to bear a direct ratio to the benefits accruing to the public. We mention the dog deliberately, for we had a perturbed school teacher 'phone us two or three days ago in regard to the activities of a canine belonging to a family in which a scarlet fever case existed.

The public, however, is beginning to expect more sensible, logical, and scientific work along this line.

Finding the source of infection: The time to control an outbreak of scarlet fever is when it begins—and it begins with the first case. Of course, if your previous policy has been one of main force, you won't know when the first case occurs; but we assume that you are getting reports of the cases.

The case should be intelligently and sensibly isolated, of course, *but don't stop there*. The infection was received from a source not more than a week back, and in the majority of instances less than a week. *That source may still be active; and other persons may have been infected at the same time.*

We know all about the alibis, "We ain't been nowheres and nobody ain't been here," and "Nobody has been sick at school," etc. A source existed *or the case would not have occurred*. Sources cannot always be found, but a lot more would be found if attempts were made to locate them. The efficiency of your control will depend upon your success in locating both sources and contacts.

Suppose that B is a regularly reported case of scarlet fever. You may not have other cases from B *after the case is isolated*; but what about those exposed to B before isolation? Unless these "contacts" are kept under observation (and they cannot be quarantined unless they are household contacts), other exposures will result.

But, B contracted the disease from some one, not more than a week before. Inquiry discloses

case A, perhaps a child who returned to school after a few days' absence on account of an alleged "cold." A has exposed others at the same time B was exposed—C, D, E, F, and G; these are probably sick at the same time as B; or perhaps were mild cases and were supposed to have recovered, but who constitute foci from which other cases result.

The following report describes an outbreak in which real scarlet fever work was done: On February 5 a case, G. R., was reported in one of the cities of the district. Instead of merely spiking up a sign, giving the necessary directions regarding the milk bottles, restricting the activities of the well members of the family, and directing the family to take down the sign in thirty days, some real information was secured.

It was found that the onset of case G. R. was February 4, and that there was reason to suspect that the infection was received at school. W. R. was found by the school record to have been absent, sick from January 22 to February 1. W. R. returned to school without the certificate required by Sec. 575 of the Education Law. It was ascertained that W. R. had undoubtedly been ill with scarlet fever.

An investigation of the contacts and their families disclosed 13 additional cases. These were found by active search in most instances. The easiest way, of course, is to wait for the reports to come in, for the energy of the nurse and the wear and tear on the health officer are thereby economized, and the outbreak takes the natural course.

In this particular instance it was found that a previous case, M. K., had developed on January 1, had returned to school on January 18, and had not been checked up. Further search showed that a sister, A. K., had come down with scarlet fever on December 27. Here, then, was a source or chain of infection running back through three generations of cases—a parent case, a grandparent case, and a great-grandparent case.

On further search the health officer found six other cases whose source of infection was the same as that of G. R., the first reported case. The health officer also found that four of these cases were the sources of infection of seven secondary cases.

This is an example of a real investigation, without which scarlet fever control amounts to very little.

A CASE OF ECTOPIC KIDNEY

By A. STRACHSTEIN, M.D., NEW YORK, N. Y.

QUOTING Young,¹ ectopic kidney may be either acquired or congenital.

The acquired form constitutes those cases of nephroptosis in which the descensus is due to increased weight of the organ through hydro-nephrosis or tumor, or faulty attachments. They are characterized by elongated ureters which by their bends or loops show evidence of descent.

The congenital ectopic kidney, on the other hand, is one which has never reached the normal level and is characterized by a ureter which is shorter than normal. The condition is usually unilateral, but may be bilateral.

The frequency of ectopic kidney is shown by Nauman,² who in a collected series of ten thousand one hundred and seventy-seven autopsies found twenty cases of this condition. Of these, twelve cases were on the left side, five on the right side and three bilateral. Of the thirty-eight anomalies of the kidneys studied by Braasch,³ three were ectopic kidneys. The condition is more common among women than in men, for in sixty-six cases collected by Strater,⁴ fifty-three were in women and thirteen in men.

I wish to report the following case that came under my observation: B. R. G. White male, married, age 35, was referred to me in July, 1930, with the following history: One year ago he was treated for prostatitis, although he denies ever having had any Neisserian infection. Three weeks ago he had an attack of pain in his right lumbar region simulating renal colic. This was followed by hematuria. As far as he can remember, this was the only attack of renal colic he ever had.

Prior to his consulting me, he received uroselectan intravenously with the result that while the left kidney showed normal outline and excretion, no trace or outline could be found of the right kidney.

Subsequently, I took a flat x-ray plate with negative findings.

Cystoscopic examination first at my office, and one week later at the Beth Israel Hospital, revealed a normal bladder, normal ureter openings. Both ureters were catheterized without any difficulty and both sides were secreting urine alike; indigocarmine intravenously showed up in strong concentration within three minutes from the left side, and only the faintest trace from the right side after a lapse of fifteen minutes. A retrograde injection for a pyelogram of the right side was now resorted to with the ultimate finding that

the right kidney is located in the median line of the pelvis, and that the upper aspect of the renal pelvis reaches a point directly below the brim of the pelvis. The ureter appears considerably shorter than its mate on the opposite side.



Summary: The salient points are:

- a. The rarity of ectopic kidney.
- b. Retrograde pyelography in many instances brings forward diagnostic facts that remain obscure to intravenous pyelography.

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For list of officers of County Medical Societies, see this issue, advertising page xxii

Annual meeting, Hotel Statler, Buffalo, N. Y., May 23-25, 1932

NEW CONDITIONS IN MEDICINE

Physicians are discussing the changes incident to modern times, and their adjustment to new conditions in medical practice. For over five years the Medical Society of the State of New York has had an extremely active standing Committee on Public Relations whose specific object is the promotion of the adjustment of doctors to the new conditions which have arisen in society

generally, as well as in the methods of medical practice.

The new conditions, both medical and social, are the result of a natural evolution in medical science and in the social instincts of the people. Physicians have shared the inspirations and aspirations of teachers, preachers, lawyers, and engineers in wishing to bring all forms of their

professional service to all classes of people. To do this requires extensive adjustments by both the physicians and the people.

Modern Methods—The first basic reason for a readjustment of medical practice is the great progress in the science and art of medicine and in its practice.

Former practice = Healing diseases

New practice = Preventing sickness

Future practice = Promoting health and vigor

Let no one make the mistake of supposing that the healing of diseases is an out-of-date form of medical practice—it is of greater importance and of wider application than ever, and will continue to require the services of the great majority of graduates in medicine.

There could be no practice of preventive medicine a half a century ago, before the germ theory of disease was accepted. Doctors began to practice it a generation ago when the nature of serums and the chemical processes of living cells became known. But preventive medicine cannot come into its full fruition until more extensive scientific discoveries have been made, and the people have become educated to its value and the certainty of its results.

The practice of the promotion of health and vigor will continue to be a long way in the future, for people will conform to their old customs involving over-work, excitement, and indulgence of appetites.

The adjustment of physicians to new conditions of disease prevention consists largely in pushing back the time of recognizing and treating a disease to its earliest stages—cancer while it is only a superficial sore; diphtheria before a membrane is visible; and tuberculosis while it is only a slight "cold." The older physicians generally are adjusting themselves to methods of early diagnosis remarkably well, while the recent graduates have been taught them routinely as if they had always been practiced. The doctor who keeps his own medical knowledge up-to-date is making a praiseworthy adjustment of his practice to changing times.

Evolution in Human Relationships—The second basic reason for the adjustment of methods of practice to changing times is found in the evolution of human relationships.

Former practice = The individual

New practice = The group

Future practice = The community

The practice of medicine is founded on individualism—the contact of an individual doctor with an individual sick person; and this relationship must necessarily continue, for it is the only principle that satisfies human nature. The mother chooses a school because she likes the teacher; the client chooses the lawyer whom he likes; and the churchman worships with the pastor of his choice. To the sick person, the doctor is always

an individual—"my" doctor. It is unthinkable that this relation will ever be abolished; but the doctor will do well to keep it in mind in trying to adjust his methods of practice to the changes of modern times. The most influential doctor is the one who is friendly—whose chief concern in life is to bring that particular patient with whom he is talking back to health and strength.

However, changed conditions of modern times have introduced the element of civic responsibility. No man in New York State can live a self-contained life as he could half a century ago. The physician, most of all, is keenly aware of the effects of community conditions on both the production and the cure of disease. A laboring man, for example, cannot control the sanitary conditions of the factory in which he works, nor can he pay for the nursing care and hospitalization for his sick child. A realization of these needs came first upon groups of citizens who organized hospitals and public health nursing services, and supported them by their voluntary offerings; but the inequality of the burden has led to the evolution of public sentiment and the enactment of laws that the official community—the town, city, or state—shall provide the medical care which the individual citizen cannot provide for himself. If this evolution is carried to its logical conclusion, all medical services will be under government control, and all doctors will work for the State.

Medical Societies—Physicians have realized the tendencies of the times, and have organized themselves into voluntary groups for the purpose of considering medical problems. A group everywhere recognized as necessary and fundamental is the County Medical Society. Although only about seventy per cent of practicing physicians belong to county medical societies, yet it is by far the largest and most representative of all groups of physicians, and is generally accepted as being the "Medical Profession" of a community.

While the courts have held that a corporation cannot practice medicine, yet practically the county society is the natural medical advisor of the county and its component communities. County societies have taken up this activity so recently that many of them are like recent graduates whom no one knows. But a county medical society has the advantage over the young doctor in that it is impersonal, and can offer its services to the officials, and even insist that they shall listen to the advice of the doctors.

The adjustment of physicians to new conditions consists largely in the assumption of the practice of "civic medicine" by county medical societies. If a physician is dissatisfied with the public health actions of a public official, the county medical society offers him a natural medium for correction; or if a doctor wishes to promote a new public health activity, his county

medical society is the authority to represent the medical profession. An individual doctor who wishes to adjust himself to new conditions in the practice of medicine can do so by engaging actively in the work of his county medical society.

Medical Leadership—A doctor is neither a dictator, nor a propagandist. He offers his services to the people; and they accept them for two reasons:

1. They feel the need of his guidance.
2. They have confidence in him.

The ideal condition of medical practice is that the physicians of a community, either individually, or as a county medical society, shall be the source of advice in all matters relating to disease and health. But, as a matter of fact, three groups of medical advisors are in active operation:

1. Physicians and their societies.
2. Boards of health.
3. Lay health organizations.

Public sentiment in health subjects is molded largely by lay health organizations which have

abundant endowments to be used largely for educating the people, and for financing "demonstrations" of clinics and other public health activities. Physicians are not always receptive to administrative ideas dropped upon them by outside "authority." By whatever methods these organizations came into existence, they are here, and physicians are compelled to deal with them. They constitute a "new condition" to which physicians must adjust themselves. It is entirely practical that the county medical societies shall deal with these lay health organizations, and shall offer them medical advice; especially regarding the administrative methods to be adopted. A physician is first of all a healer, and is primarily constructive in his suggestions. If he considers a lay health organization as a patient needing treatment, let him make his diagnosis and therapeutic suggestions in the same spirit and manner that he would give advice to an influential business man. If the doctor approves the objects and methods of the lay health organization, he will best adjust himself to new conditions by friendly cooperation.

LOOKING BACKWARD

This Journal Twenty-Five Years Ago

Sending tuberculosis cases to the country:—The dangers of sending cases of tuberculosis to the country to enjoy the "fresh air" without supervision, are set forth in the following editorial in this Journal of May, 1907:

"In an article on the dangers of sending consumptives to the country, published in *Charities*, March 16, 1907, the tuberculosis nurse of the Instructive Visiting Association, of Baltimore, reports upon fifty-five cases sent to the country during the last eighteen months. Of these, only two were really benefited; thirty-two returned to the city worse than when they went away; and eight died in the country. It is further stated that it is safe to assume that fifty-five centres of infection were created (as the cases were sent to farm houses), and it is doubtful if any of these infected houses was afterwards cleaned or dis-

infected with a view to making them harmless. In one instance, three members of the household contracted tuberculosis after the death of the primary patient. Another case was that of a woman who, while under surveillance of the tuberculosis nurse, used a sputum cup and slept alone. She was sent to the country, where she quickly relaxed her discipline, slept with her little child, and returned to the city in a dying condition, the child also having contracted the disease.

"It is very properly contended that if a patient cannot be watched over by a sanitarium or competent authority, he should remain at home. The facts seem to show that rarely is a consumptive capable of sufficient moral courage to undertake the rigorous open-air treatment alone. Ordering the patient to the country often simply shifts the responsibility and spreads the disease."



MEDICAL PROGRESS



Treatment of Some of the Commoner Lid Conditions — In the treatment of *blepharitis* Oscar Wilkinson recommends that attention should first be directed to diet—removal of excessive carbohydrates—and to personal and local hygiene. In the squamous type the margins of the lids should be cleansed with 5 per cent solution of sodium bicarbonate, and after thorough massage, the borders of the lids should be swabbed with 1 or 2 per cent yellow oxide of mercury ointment. In ulcerative *blepharitis* citrine ointment and vaseline, equal parts, massaged into the lid borders hot once a day is most effective. Recurring pustules of the lid should be carefully touched with 50 per cent solution of carbolic acid or with Lugol's solution. The treatment of *chalazion* is both local and surgical. The lid edges should be massaged and 1 per cent yellow oxide of mercury applied, or cold boric acid. If, in removing the tumor surgically, the thickened membrane is not excised, the bottom of the cavity should be dried and trichloroacetic acid applied, and thoroughly neutralized with bicarbonate of soda solution. *Ectropion* and *entropion* may be spastic, senile, or cicatricial. In the spastic type the associated eye disease should be treated. In obstinate non-inflammatory cases relief may be had by the injection of alcohol or the use of the galvano cautery point. The latter measure is also useful in the senile type of this condition. The treatment of the cicatricial types is surgical, the procedure being adapted to the individual case. For entropion of the upper lid Wilkinson prefers the Webster operation. *Eczema* of the lids demands the same general treatment as *eczema* in other regions of the body. The local treatment consists in the application of mild astringents, such as mild boric acid, glycerin, and camphor lotion. Calamine wash is one of the most effective remedies. Where itching is annoying zinc oxide ointment to which is added 5 grains of carbolic acid to the ounce will often give relief. In chronic cases ammoniated mercuric ointment is useful. In intractable cases the *trays* carefully used are often beneficial. *Nevi* and *warts* may be readily removed by fulguration. Excision followed by cauterization with trichloroacetic acid is effective. *Sties*, if seen early, may sometimes be aborted by the application of citrine ointment and vaseline applied with a heated probe. Early incision, however, is desirable. The best anaesthesia can be obtained by painting the proposed line of incision with carbolic acid on the tip of a fine applicator covered with a mere strand of cotton. For debilitated subjects with recurrent sties iron and arsenic are indicated together with

autogenous vaccines. *Trichiasis* may be treated by electrolysis or by surgery. Where only a few hairs are present electrolysis is the method of choice. For *xanthelasma* some process of removal is necessary. Trichloroacetic acid and fulguration have been recommended, but excision is the method of choice.—*Southern Medical Journal*, March, 1932, xxv, 3.

Observations on a Case of Agranulocytosis.

—A case that appears somewhat out of the common is reported by Theodore Dumitresco in the *Archives des maladies du coeur* of January, 1932, in which there was total absence of granulocytes in the blood, and in which the characteristic vesico-bullous elements were distributed not only in the throat but over nearly the entire surface of the body. The case was further characterized by the presence of a bacillus morphologically resembling *B. perfringens* in the histologic sections, in the organs and in the smears of the bone marrow. An exanthem resembling measles was observed scattered over almost the entire body, which developed in places into bullous and ulcerated vesicles. The patient a man of 41, had been ill only 3 days when admitted, and the case terminated fatally 32 hours later. Microscopic examination of 6 smears of the bone-marrow revealed only 65 white cells, most of which were mononuclears, and the rest myeloblasts. There were no polynuclears and no myelocytes. Nucleated red cells were numerous. Large bacilli resembling the perfringens were scattered irregularly through the bone marrow. This picture demonstrates that agranulocytosis is due to insufficient formation of granular elements, and not to their excessive destruction in the blood. Examination of the bone marrow is thus shown to be of great interest in determining the etiology, since there is a tendency among diagnosticians to trust the results of blood examination, whereas it is the myelopathy that should concern them. In the majority of cases the patient succumbs because the bone-marrow is no longer capable of producing the granular elements required to combat the infection. The etiology of the agranulocytosis itself is still obscure. In the case outlined, the distribution of the bacilli throughout the organs and bone-marrow suggested an anaerobic septicemia, perhaps of dental origin. There is, however, the possibility that this agranulocytosis was provoked by some antispecific treatment unknown to the author and of more or less recent date, the patient having been in too clouded a mental condition to be questioned about this. Again the fact that the patient's work had exposed him to ben-

zene vapors may have played a part in the causation. The total absence of granulocytes both in the blood during life and in the bone-marrow smears is stressed as well as the possible correlation between this finding and the very rapid evolution of the agranulocyte syndrome in this case.

Some Clinical Aspects of Coronary Disease.

—Thomas F. Cotton, writing in the *British Medical Journal*, February 27, 1932, i, 3712, emphasizes the importance of distinguishing the symptoms of angina pectoris from the syndrome of coronary obstruction, since upon this differentiation depends the treatment, and not infrequently the life of the patient. In relation to angina he stresses the importance of vasoconstriction, not only local and involving the coronary arteries, but also as a widespread phenomenon, producing elevation of blood pressure during the attack in certain patients. He brings out the fact that the contributory toxic causes of secondary angina, such as gall-bladder infection, goiter, or other focus of sepsis may influence the course of true angina pectoris. He comments on the variable rôle of the higher centers in the production of angina pectoris; in some patients there exists almost a mathematical relationship between the degree of effort and the production of pain, emotional factors being insignificant or absent; others are predominantly influenced by anxiety, anger, and excitement. It is in the latter group, and in patients in whom widespread vasoconstrictor influences are manifest, that aspects of angina pectoris appear which have hitherto been largely neglected. This group in which there is no clinical evidence of structural disease constitutes perhaps 25 per cent of all cases with symptoms resembling true angina.

The coronary thrombosis syndrome is sudden in onset, the pain is anginal in character and distribution, lasts for hours or days, and, contrary to the pain of angina, usually occurs when the patient is at rest. It is often accompanied by respiratory distress and vomiting. Signs of embolism may be expected. Of those who recover, probably 50 per cent of all cases, some may lose their symptoms within a few days; others develop signs of congestive failure or of angina pectoris, and may have exhaustion symptoms and a low blood pressure for weeks or months. The average anginal patient is likely to die within five years from the onset of symptoms, while with coronary occlusion the period of survival is not more than two or three years. The treatment of angina pectoris is largely ambulatory, while in coronary occlusion rest in bed for a month is essential, and preferably for six weeks. Good nursing and sedatives are more important than circulatory stimulants. If there are signs of congestive failure and auricular fibrillation or flutter, digitalis is indicated. Adrenaline should be reserved for patients with signs of heart block, and quinidine

should be restricted to rare cases of tachycardia of unusual duration.

Hypophysis and Metabolism.—In addition to its morphogenetic, sexual, and endocrine rôle, says B. A. Houssay, writing in the *Revue française d'endocrinologie*, of December, 1931, the hypophysis has important metabolic functions. Its insufficiency produces a moderate and inconstant lowering of the basal metabolism, while its excessive functioning frequently has the opposite effect. It stimulates endogenous protein metabolism and fixation of proteins in the tissues; hence its rôle in growth, acromegaly and gigantism. Exogenous protein metabolism is, however, little affected. In hypophyseal insufficiency, destruction of proteins in the tissues is diminished; this is especially striking under fasting conditions and in induced pancreatic and phlorizin diabetes; bacterial action is decreased; thus we may understand the extraordinary survival of hypophyseoprivic dogs in which the pancreas has been removed. Elimination of creatinin is less in hypophyseoprivic animals, whether fasting or otherwise. The specific dynamic action is frequently diminished in hypopituitarism in human beings and in rats (omnivorous species), but is generally normal in dogs, which are carnivorous. The blood sugar is normal in well nourished hypophyseoprivic animals, but is lower during fasting than in the controls. Hypoglycemic crises are rather frequent, and are fatal if not treated promptly by sugar. These animals do not tolerate well those substances (insulin, phlorizin) that produce hypoglycemia. Induced hyperglycemia and glycosuria are less intense, and are greatly influenced by fasting. Implantation of hypophysis (in the toad), on the contrary, aggravates these conditions. It is quite probable that acromegalic diabetes is due essentially to hyperpituitarism. All these modifications are explained by assuming that hypophyseoprivic animals form less sugar at the expense of endogenous proteins. At the same time, in diabetic conditions, they consume more sugar than the controls (there being partial retention of the sugar administered, and often increase of the respiratory quotient). Disturbances are due essentially to a lessened formation of sugar, and not to a greater consumption. The hypophysis would tend to stimulate the consumption of endogenous protein and its transformation into sugar.

Medical Applications of Anti-Colibacillary Serum.—H. Vincent directs attention to the great frequency and importance of *B. coli*. He reminds us that this microorganism may implant itself in any organ or tissue of the body. It may be the cause of grave septicemias, especially in children. It is not only dangerous by reason of its infective properties, but because of the toxin it produces. Contrary to the general opinion,

Vincent holds that there is only one variety of *B. coli*. This species produces two types of toxin (1) A neurotropic thermolabile exotoxin, which causes widespread damage to the motor and sensory cells of the spinal cord, and also attacks the encephalon, the peripheral nerves, and the sympathetic and vagus systems (2) an enterotropic thermolabile endotoxin, the ill-effects of which are exerted on the intestine, the mucosa, the intestinal glands, and Peyer's patches, as well as upon the hepatobiliary apparatus. Close observation reveals symptoms more particularly due to one or the other of these toxins or to their association. Experimentally, it is possible with these toxins to set up choleraform symptoms in rabbits (endotoxin), or even nervous symptoms, such as ascending paralysis, monoplegia, fantastic behavior. Vincent has prepared a therapeutic anti-colibacillary serum which in numerous cases of grave colibacillosis yielded rapid and conclusive results. Its use is indicated in colibacillary septicemia. As this condition closely resembles typhoid and paratyphoid fevers, the diagnosis must be based on the blood culture. With the injection of from 20 to 40 c.c. of the serum a day the temperature usually returns to normal on the second or third day, and other symptoms subside. Suppurative pyelonephritis and cholecystitis caused by *B. coli* likewise yield to this treatment. It is quite possible that some of the cases described as Landry's ascending paralysis are due to intoxication produced by the neurotropic exotoxin of *B. coli*. As soon as symptoms of this condition make their appearance, the anti-colibacillary serum should be injected, as it will neutralize the toxins and bring about recovery. Typical illustrative cases of this kind are cited. In cases of double intoxication with gastrointestinal disorders associated with excessive mental irritability, periods of depression, symptoms of neurasthenia or even of psychasthenia the serum has brought about recovery. The rapid disappearance of this complex group of symptoms demonstrates that the etiology and pathogeny of chronic enterocolitis must be regarded from a new angle. It should be considered as a toxic-infectious disease, more toxic than infectious. Vincent also cites examples of dementia praecox, following colibacillary septicemia, in which six injections of 40 c.c. each of the serum effected a cure. — *American Journal of the Medical Sciences*, March, 1932, LXXXIII, 3.

Treatment of Pneumococcus Peritonitis — According to Nové-Jossierand, it must be maintained in a general way that patients suffering with pneumococcus peritonitis are likely to be in a state of pneumococemia, that is to say, that they have to combat a grave general infection which may have involved other organs without giving any definite signs of the fact in the early stages of the disease. The peritonitis is diffuse at the outset. All that is seen at first is a marked

tumefaction of the mesenteric ganglions, and a peculiar condition of the small intestine, which is vascularized and gives back, upon palpation, a viscid sensation that is quite unique. After 24 hours there is a mucous exudate of no great amount, diffused among the loops, and it is not until the second day that a serous or purulent effusion of any importance is observed. The question arises whether this peritonitis should be operated on emergently like other grave cases of peritonitis. Such operation is useless during the early hours, owing to the slightness of the exudate and the impossibility of its evacuation. Moreover, the source of the infection cannot be correctly determined, in view of its diffuse and often septicemic nature. But in actual practice, the difficulty of its differential diagnosis from appendicitis does not permit the laying down of abstention from operation as a formal rule. Every effort should be made to reach a diagnosis, and if there is a reasonable amount of certainty, one should play a waiting game, keeping the patient under strict observation meanwhile, since in diffuse forms of peritonitis the indication for operation may exist from the second day on. If, however, the diagnosis remains doubtful, it is safer to operate, but the procedure should be of the simplest and as short as possible, in order to reduce the dangers to a minimum. Local anesthesia is the method of choice. The peritoneum should be opened, for the inspection of the appendix, and if this is not incriminated, there should be no intraperitoneal maneuvering; a drain should be placed in Douglas' cul-de-sac, and the peritoneum closed again. The decision is easier at the end of 24 to 48 hours, when either the patient will be in a state of general peritonitis with nothing to lose through operation, or there will be definite signs pointing toward resolution or an encysted peritonitis, in which case the operation may be deferred until the third week. — *Journal de médecine de Lyon*, February 20, 1932.

Intravenous Glucose Infusion by the Drip Method in the Treatment of Severe Puerperal Infection — Kirstein, writing in the *Deutsche medizinische Wochenschrift* of January 8, 1932, says that in 1925 he announced to the Gynecological Congress in Vienna his method of treating severe puerperal infections with slow intravenous infusion of 10 per cent glucose solution given by the drip method. He has since used the method in coli-peritonitis, and has never lost a case. Very recently a grave case of streptococcus peritonitis was brought to a successful outcome by its use. Kirstein attributes this cure to the simultaneous administration of enormous amounts of adrenalin, of which the patient received 93 c.c. of a 1:1000 solution in 72 hours, partly in the infusion and partly by subcutaneous injection. Twice during this time the woman appeared to be in extremis, but no let up of the treatment was

allowed, 1 c.c. being given every 15 minutes. After a few hours of the drip-infusion it is customary to observe (though there are exceptions) a very steep drop of the temperature and pulse curves. This must not in the least be regarded as a collapse phenomenon, though one at first has the impression of its being such. While one must not, of course, rely solely on the infusions in severe puerperal infection, it is worthy of mention that 3 desperate cases in which large doses of anti-streptococcus serum had proved useless responded to glucose infusion. Instead of antitoxin Kirstein advises an iodine preparation. The intravenous drip-infusions of 10 per cent glucose should be begun as early as possible, and should be accompanied by large doses of alcohol. It is recommended that surgeons make use of slow glucose infusions in cases of severe infection in all fields. Apart from its effect in diseases of bacterial origin, the infusion is a useful supportive measure, especially in connection with postoperative treatment.

The Clinical Significance of Precordial Tenderness and Its Relationship to Pain.—Because of the lack of knowledge concerning the common finding of precordial and substernal tenderness Frederick Kellogg and Paul D. White have made a clinical study of the subject with particular reference to the presence or absence of heart disease. From 3,770 consultation cases they collected 328 cases of definite precordial tenderness, an incidence of 8.7 per cent. The sign was more than three times as common in women as in men. It was found more often after the age of forty than before. There was no relation between the degree of tenderness and the type of pain complained of. Fifty-three patients who showed precordial tenderness complained of no pain. In the tenderness series effort syndrome was common and the combination of organic disease with effort syndrome decidedly common. Congestive failure was twice as common, relatively, in males with tenderness as in females. Nervousness was noted in 40 per cent of all cases. There was a tendency for the knee jerks to be hyperactive in the tenderness series, presumably because of a hypersensitive nervous system. The general condition of these patients is apt to improve, while the tenderness is likely to persist for years. The results in this series differ from those of Kahn who found tenderness present in 90 per cent of all patients with angina pectoris and in no patients with normal hearts, whereas in this series it was present in only 12 per cent of cases of angina pectoris and in 2.3 to 15 per cent of the patients with normal hearts. The authors conclude that precordial tenderness may occur in an individual with a hypersensitive nervous system, whether or not there is serious heart disease. In the present series it was more often found when there was a combination of heart disease and

nervousness than with either condition alone. The factor of nervous irritability and fatigue is certainly of greater importance in the production of the sign than is organic cardiovascular disease, for in cases of very severe, acute and fatal coronary thrombosis there may be no tenderness whatsoever.—*New England Journal of Medicine*, March 31, 1932, ccvi, 13.

Ventricular Fibrillation: An Overlooked Cause of Death in Diphtheria.—There appears to be no doubt, say J. Chaliel and Roger Fromont, in the *Archives des maladies du cœur* of February, 1932, that diphtheria sometimes produces troubles of rhythm which we know today under the name of prefibrillatory ventricular disturbances, and which embrace the entire gamut from double rhythm, ventricular extrasystoles of a polymorphous nature, to salvos of terminal ventricular tachycardia and fatal ventricular fibrillation. These are the disturbances that constitute a number of complex diphtheritic arrhythmias. It is a striking fact that side by side with those diphtheria cases which present evidence of heart block through auriculo-ventricular dissociation, during the days or hours just preceding death, there are other very different ones, characterized by marked tachy-arrhythmia, which appears to be due to the interception of a basic rhythm, that is already rapid, by extrasystoles, sometimes single and sometimes coupled or grouped in short salvos. The P wave has disappeared, and there is a deformation of the ventricular complexes, the form of which is also variable from one moment to another, and the direction now negative, now positive. It is difficult to determine with precision the frequency of this death from ventricular fibrillation. Death from heart failure in diphtheria is relatively rare, not being over 10 per cent. But this ventricular fibrillation can certainly be held responsible for a certain number of sudden deaths during the course of diphtheria. A case of Strecher's is on record in which a common sinus tachycardia on the eighth day of diphtheria had become 4 hours later a rhythm chopped with polymorphous ventricular extrasystoles, followed by death one hour after the last tracing. It is thus seen that a diphtheritic heart may pass in 5 hours from a normal rhythm to ventricular fibrillation, and that death may under these circumstances be not only sudden but absolutely unforeseen. There are, nevertheless, in diphtheria, ventricular extrasystoles in salvos that show a benign evolution; in such cases the toxic or inflammatory disturbances that underlie the phenomenon, instead of evolving fatally toward death, regress rapidly under the influence of energetic treatment. It thus appears that the usual elements of prognosis in this disturbance hold good during the course of diphtheria.

LEGAL

A REVIEW OF SOME INTERESTING X-RAY BURN CASES

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In recent years a number of cases have been instituted against doctors based upon burns received by a patient from the use of the x-ray, either for treatment or for diagnosis. A case recently decided by one of the Federal courts may be of interest as illustrative of how the courts deal with such cases.

A woman had consulted a doctor H, the defendant, with respect to an ailment of the glands of her neck and throat. Dr. H was a well trained specialist in skin diseases, specializing particularly with the use of x-ray in relation to skin diseases. He had been practicing medicine for about twenty years and specializing in x-ray work for about twelve. The condition of the woman was diagnosed as a pronounced case of tubercular adenitis of the lymph nodes, a tubercular condition of the glands on both sides of the neck running down to the middle of the clavicle and in the armpits. There seems to have been no question but that her condition was serious, for one doctor subsequently testified that if such a condition remained without treatment the usual result would be either a breakdown of the glands involved, and a chronic discharge through open sinuses, or rupture into the blood vessels, with consequent general spreading of the tubercular condition, and resultant death. Dr. H considered the proper treatment to be the administration of the x-ray, for a surgical operation to remove the glands would have necessitated an incision extending from a point near the ear down to the middle of the clavicle, and as the court described it, "with the complete cleaning out of everything in the neck on both sides, and in addition to that would have required operation in both armpits, and probably the operation would have extended from either the armpit up to the clavicle, or from the clavicle down, or both, so as to get out the intervening glands." Dr. H undertook the treatment of the case with x-ray, and such treatment extended over a period of about ten months, one side of the neck being exposed every other week. At the end of that time, the condition of tubercular adenitis was completely cured but some time after the administration of the last x-ray treatment, a condition of x-ray burn appeared on the patient's neck.

Some time thereafter, a suit was brought claiming damages for negligence in causing the burn asserting in particular that the doctor was negligent in too frequently exposing the plaintiff to

his x-ray apparatus and in subjecting her to exposures of excessive duration.

When the case came up for trial the plaintiff called a physician as an expert on her behalf, who qualified as an x-ray specialist. A hypothetical question was put to him embodying the plaintiff's theory of the treatment administered to her by the doctor and the opinion was expressed that the treatment so accorded her was not proper practice. He asserted that if exposures to x-ray treatment were continued by the defendant after the appearance of a "reddish glow characterized as a recent sunburn," in his opinion the doctor was not exercising ordinary skill and ability. Upon cross examination, however, the plaintiff's expert admitted that x-ray treatment was proper care for tubercular glands and said in addition:

"The factors employed in the giving of x-ray treatment depend entirely upon what the treatment is given for. The treatment and dosage and distance and duration of treatment in the case of tubercular adenitis would be different from many other troubles. I know of x-ray treatments being given when there has been an erythema.

That is largely a question of judgment on the part of the person giving the treatment. Whether they would give a subsequent treatment or not would depend upon the man's judgment, of course, upon the exercise of judgment upon his part, regardless of technique, the erythema following a dose of x-ray probably is the one more or less constant factor that controls the man's subsequent dosage, and that of course does depend on his judgment, and that is the only way it can be determined. It is a matter of judgment in the light of the skill possessed by the man who is giving the treatment. I do not know anything about the treatment in this case."

On behalf of Dr. H, the defendant, several physicians, who qualified as experts, testified that telangiectasis may follow x-ray treatment where the highest degree of skill and care has been exercised, and further that there is no known method of determining in advance whether a reaction resulting in a burn will follow the administration of x-ray. Such experts also asserted that the operator is bound to exercise his best judgment in view of the conditions that he is treating and in view of all the conditions he alone using his best judgment, must decide, erythema or not being present, whether he should continue his treatments.

The defendant himself testified that he had used his best judgment in the matter and stated, among other things:

"As to whether I could have afforded her greater protection by extending the length of time between exposure of the same area, that again is entirely and absolutely a question of individual judgment. It was a question based largely upon the condition of plaintiff, and I felt that the chances for the grave yard were very, very good, if the treatment were not pushed and the intervals were not made short."

A verdict was rendered in favor of the plaintiff by the jury for the sum of \$15,000. An appeal was taken. The Appellate Court, however, reversed the judgment of the trial court on the ground that it found no evidence in the record to justify a conclusion that the defendant was negligent. It stated in its opinion:

"It is conceded that Dr. H. possessed the requisite degree of skill and ability; that *x-ray* treatment was the recognized treatment for tubercular glands; it clearly appears that the length of time between exposures of the same area depends upon existing conditions and the judgment of the operator; that telangiectasis may occur even if the highest skill is exercised in the treatment. As already observed, there is no evidence upon which it reasonably may be found that Dr. H. did not exercise his best judgment and ability in treating the plaintiff, or that in his treatment of the plaintiff he failed to exercise the care and skill ordinarily possessed and exercised by others in the profession."

It seems clear that the trial court and the plaintiff in said case proceeded principally on the theory that the burn itself was evidence of negligence, and could not otherwise be explained. The attempt was to establish liability through the so-called doctrine of *res ipsa loquitur*, which is explained by a leading legal encyclopedia as follows:

"Where the thing which caused the injury complained of is shown to be under the management of defendant or his servants, and the accident is such as in the ordinary course of things does not happen if those who have its management or control use proper care, it affords reasonable evidence in the absence of explanation by defendant, that the accident rose from want of care."

If such a doctrine were applicable to cases of *x-ray* burn a doctor would practically be held to insure the result in such a case. However, the courts have taken a more sensible attitude. In another similar case it was recently said:

"The standard of care, skill and diligence required of an *x-ray* operator is not fixed by the *ipse dixit* of an expert, but by the care, skill and diligence ordinarily possessed and exercised by

others in the same line of practice and work in similar localities." . . .

"Plaintiff's case rested upon the charge of negligence on the part of the defendant in administering an excessive dosage, but depended in the main upon his own testimony. The doctrine of *res ipsa loquitur* is not recognized in this State and therefore proof of the burn was no proof of defendant's negligence. Plaintiff had the burden of showing that he suffered an *x-ray* burn, occasioned by an overdosage or exposure of his foot, and that such happened because defendant failed to exercise the reasonable and ordinary care, skill and diligence possessed by others in the same line or practice and work in similar localities.

The evidence discloses that *x-ray* burns do occasionally occur in the ordinary course of exposure and in spite of the highest diligence and skill to prevent them; the risk being that persons of a certain type and temperament are susceptible to a burn while persons of a different type and temperament, under the same circumstances will not suffer a burn. It also appears that this idiosyncrasy cannot be determined before or during the time of exposure, but is manifested only by subsequent developments. Plaintiff assumed the risk of a burn from a proper exposure to the *x-ray* and defendant incurred the liability to respond in damages if the burn was occasioned by his negligence."

Likewise, in a recent case where a plaintiff who had received *x-ray* treatments for eczema with a burn resulting therefrom, was prosecuting a malpractice action, another court said:

"One who is an *x-ray* expert is not an insurer and does not bind himself to make a correct diagnosis and effect a cure or to respond in damages. He is only bound to possess reasonable skill and to use ordinary care, and if he makes a mistake in his conclusion, he is excused from liability if, possessing reasonable skill, he has used ordinary care. He is not liable for an honest mistake in judgment. . . . A failure to cure is not enough, in itself, to raise an inference of negligence in the diagnosis and in the treatment adopted."

The court further stated:

"Only those are qualified to testify as to whether there was negligence in the method of treatment who possess the skill required to administer such treatment, who are themselves experts in such treatment, and to them the jury must listen. The uncontradicted evidence in this case shows that appellant had the necessary knowledge and skill to treat the appellee for eczema with an *x-ray* machine; that the treatment of that disease by *x-ray* is a proper treatment and recognized by all authorities; that appellee was suffering with that disease; that appellant treated, but once therefor with an *x-ray* machine, using a standard machine. All of the expert witnesses who testified as to the method

of treatment used by appellant, as given by himself, testified that such method was proper for the treatment of eczema."

A review of these and other cases on the same subject demonstrates that in nearly every instance where a court has submitted an x-ray burn case to the jury, the lay jury has resolved the is-

sue adversely to the physician. In other words, the lay mind cannot contemplate that under certain circumstances an x-ray burn may occur even with the best of care and skill. Fortunately, the injustice of some of the verdicts in these cases has been rectified by the appellate courts to which the cases have been carried.

ALLEGED NEGLIGENT TREATMENT OF HEMORRHOIDS

A doctor who specializes in the treatment of rectal diseases was consulted by a young man with respect to rectal bleeding. The doctor found a number of hemorrhoids, sore and bleeding, and advised an operation. Under a spinal anesthesia the hemorrhoids were lifted, tied off, and excess tissue removed. Vaseline dressings were applied, held in place by adhesive strips. The patient remained in the hospital under the doctor's care for about a week, and thereafter on two occasions called at the doctor's office for dressings. About three weeks after the operation the doctor received word that the man had entered a hospital because the hemorrhoids had again begun to bleed. The doctor immediately went to the hospital, took the man to the operating room, tied off the bleeding areas, and packed the rectum. As the hospital was a considerable distance from the doctor's office he left the patient under the care of a member of the staff of that hospital, and gave full instructions as to the further care of the case. He left instructions that a blood transfusion be given the man, and was subsequently informed that the transfusion was given, and that the patient improved rapidly. The doctor never saw the patient again, and heard nothing further

of the matter until several weeks later a letter was received by him threatening suit based on malpractice in performing the operation on the plaintiff.

The patient instituted such an action, claiming in his complaint that the operation performed by the defendant doctor was so negligent that as a result he ever after was caused frequent bleeding to such an extent as to make him anemic. Plaintiff in his complaint further attempted to charge the defendant with responsibility for his being unable to attend to his vocation for many months and the expense of medical treatment undergone subsequent to the first operation performed by the defendant.

Plaintiff started said case in a county other than the county in which the defendant resided and treated the plaintiff. A motion was made to change the place of trial to the county where the doctor resided on the ground of convenience of witnesses. Said motion was adjourned from time to time at the request of the plaintiff's attorney, and before the same was ever argued the plaintiff and his attorney consented to discontinue the action, terminating the matter in favor of the doctor without trial.

LOSS OF TEETH DURING TONSILLECTOMY

A young man made arrangements with the defendant, a doctor who specialized in general surgery, to have his tonsils removed. The patient entered a hospital and was prepared for the operation. An assisting physician undertook to anesthetize the patient by ether. It was found that double the normal amount of ether was required to render him unconscious. When examination showed that he was sleeping and relaxed, a gag was adjusted in his mouth and his throat was examined. Just as the surgeon was about to remove the left tonsil the patient suddenly came partly out of the anaesthetic, snapping his jaws shut on the mouth gag which caused the two central upper incisor teeth to be bent forward and loosened from their sockets so that they were in a horizontal position. The gag flew out of the patient's mouth and before pro-

ceeding further with the operation the surgeon removed the two teeth. The ether anaesthetic was then supplemented by a hypodermic of morphine, and the surgeon proceeded with the tonsillectomy. So far as the actual removal of the tonsils were concerned the operation and the recovery therefrom were normal.

The patient some time later brought an action charging that the defendant was responsible in damages to him for negligently breaking off two of his front teeth during the operation of tonsillectomy.

The case, however, was never noticed for trial and after a considerable period of time had elapsed, a motion was made on the part of the defendant to dismiss the case for failure to prosecute. Said motion was granted and the case was thus terminated in favor of the defendant doctor.



NEWS NOTES



REDUCED RAILROAD FARE TO BUFFALO

All members of the Medical Society of the State of New York purchasing tickets to Buffalo on account of the State meeting which begins on May 23rd, should be sure to secure a certificate

from the ticket agent at the time the ticket is purchased, as fare and one-half on the certificate plan will be authorized by the New York Central Railroad.

ANNIVERSARY MEETING AND BANQUET

The law of April 10, 1813, incorporating the Medical Society of the State of New York required the society to fix the time and place of the annual meeting, which was called the *anniversary* meeting.

The Anniversary Meeting this year will be held on the evening of Tuesday, May 24, in the Hotel

Statler, Buffalo, immediately following the banquet. The principal speaker will be Dr. George David Stewart, Professor of Surgery in the University and Bellevue Hospital Medical College, who has a rare faculty of combining science and literature with entertainment worthy of an audience of high class physicians.

COMMITTEE ON PUBLIC RELATIONS

The regular monthly meeting of the Public Relations Committee was held in the Hotel Syracuse, Syracuse, on Thursday, April 21, 1932. The following were present: Drs. Sadlier, Fisher, Hambrook, Mitchell and Lawrence; Dr. W. D. Johnson, President of the State Society; Dr. T. P. Farmer, Chairman Public Health and Medical Education; and Dr. F. H. Flaherty, of Syracuse.

The Committee considered a report made to the Executive Committee of the State Society on February 1, 1932, by Dr. J. N. Vander Veer who had been appointed Liaison Officer between the Medical Society of the State of New York and the New York State Department of Health in regard to the public health aspects of venereal disease control. The Committee also considered the plan promoted by the State Charities Aid Association, the principal features of which are as follows:

1. The establishment of clinics in rural communities.
2. Securing State aid for the clinics.
3. Enlisting the aid of the county committees on tuberculosis and public health.
4. Educating the public.

The attitude of Dr. Vander Veer is indicated in his article, "The County Medical Society in Venereal Disease Control," printed in this Journal June 1, 1931, page 712.

The Committee adopted the following resolution:

"WHEREAS, we are informed that the State Charities Aid Association proposes to develop a program for the dissemination of information regarding venereal diseases and their treatment;

"BE IT RESOLVED, that it is the sense of the Public Relations Committee of the Medical Society of the State of New York that we favor the educational program as outlined to us, when carried out in conjunction with the State and Local Health Departments; but we are opposed to the State Charities Aid Association or any lay organization engaging in the treatment of venereal diseases or superintendence of such treatment as outlined in their report. We consider the treatment of venereal diseases to be a responsibility only of the State and Local Health Departments in conjunction with the private physicians, and we are further opposed to any program which would induce other than indigents to seek treatment at public clinics, for two reasons: first, it is intruding upon the prerogative of every practitioner who wishes to treat said diseases; and second, it would incur unnecessary expense upon the State and community, as well as pauperize those members of society who accept while being able to pay for their treatment."

A meeting of the Committee was held with the chairmen of the Public Relations Committees of the section in the vicinity of Syracuse. The following representatives were present:

G. S. Lape	Broome County
C. F. McCarthy	Cayuga "
J. D. Olin	Jefferson "
D. H. Porter	Lewis "
Charles D. Post	Onondaga "
W. B. Clapper	Ontario "
M. J. Stearns	St. Lawrence "
F. W. Lester	Seneca "
G. S. Carpenter	Tioga "
Ralph Sheldon	Wayne "
E. C. Foster	Yates "

Representatives from the following counties were excused because of illness or other reason: Chemung, Chenango, Herkimer, Oneida, and Tompkins.

Doctor Farmer referred to the injunction given by the House of Delegates at its special meeting to the public health committee to assist county societies who may desire such assistance in informing themselves upon the advantages of the county health unit form of public health work.

Doctor Mitchell emphasized the necessity of regular meetings of the county committees.

Doctor Hambrook dwelt upon the desirability of having the personnel of county committees remain permanent. The work of a public relations committee is not readily initiated, and if the personnel is changed each year, a committee cannot be expected to accomplish very much.

Doctor Post, chairman of the committee of the Onondaga County Society, reviewed some instances where the county society might have profited by the assistance of an active public relations committee,—for instance, at the time when the Milbank Fund was developing its public health demonstration in Syracuse. The county society has formed a working relationship with the local tuberculosis association, but this could have been done much more effectively had it been done through the public relations committee. The county society and the tuberculosis association have an active joint committee that has conducted a radio program. The county society also, as such, has been instrumental in assisting in having an inefficient welfare officer removed.

Dr. G. S. Carpenter, from Tioga County, presented the following report of his committee's activities:

"The society had four members on the Tioga County Public Health Committee, which had charge of the nursing service throughout the county. Much publicity was given in this way to the general public through the press.

"Members of the public relations committee were also on the committee of the local charities aid, and with them organized and financed a clinic in tuberculosis held at the Tioga County General Hospital, quarterly. This clinic is being continued in 1932.

"Due to lack of appropriation by the Tioga

County Board of Supervisors, the public nursing service was discontinued January 1, 1932. However, this work is being carried on, in a measure, through the cooperation of the local State Charities Aid Committee, on which committee is serving several members of the Tioga County Medical Society who are assisting materially in directing the work of that organization."

A public health exhibit was sponsored at the County Fair in the fall of 1931, under the joint auspices of the Tioga County Medical Society, Tioga County Public Health Committee, the Tioga County General Hospital, and the State Charities Aid. At this Fair a tent was kept open with a nurse in charge, with whom mothers could leave their babies, and food was provided for the children. Each afternoon a lecture on some public health topic was given. The subjects included tuberculosis, cancer, and annual health examination.

Doctor Sheldon, of Wayne County, reported that his committee had worked hard to have the health work of the county organized under the unit plan; that the County Society had passed a resolution, but the board of supervisors had turned them down. His committee is now endeavoring to prevent the supervisors from abolishing their public health nurse program. The committee is planning to ask the board of supervisors for the appointment of a county board of health. Since the last election they have had a new board of supervisors and his Public Relations Committee has been enlarged by two members, for the purpose of presenting to the supervisors a program by which the physicians will receive remuneration for services rendered to charges of the commissioner of public welfare. Last year, owing to the depression, no fund was available for the conduct of the children's health camp, an activity which the county has always supported. When his committee presented the matter to the board of supervisors it received authority to conduct the camp as usual, with assurance that the supervisors would finance it.

Doctor McCarthy, of Cayuga County, stated that there is great need for an active public relations committee in his county. He emphasized the necessity that physicians insist on the appointment of their nominees upon health organizations, both lay and official.

Doctor Stearns, of St. Lawrence County, stated that the Committee on Tuberculosis and Public Health in his county is particularly solicitous regarding the cooperation of the county society. It has rendered especially valuable service in helping the physicians secure public health nurses. The chairman of the public health committee of the county society is also chairman of the county committee on tuberculosis and public health. In conjunction, the two organizations have recently secured tuberculosis hospital facili-

ties for people of the county. They have in past years developed very successful clinics for immunization of children against diphtheria. This year, by agreement, no clinics will be held until after the parents have been given ample opportunity to have their children immunized by the family physician. This committee has started a survey of health activities in the county along the line requested by the public relations committee and hopes to be able to report its completion at the next meeting.

About a year ago the Federation of Women's Clubs made a survey of Ogdenburg and in their report made certain recommendations regarding the manner in which health conditions might be improved.

Doctor Olin, of Jefferson County, reported that the Public Relations Committee of the Jefferson County Medical Society is composed of five members, three from the city of Watertown, and two from the country towns. The membership directly links the medical society with important lay organizations dealing with health matters. Meetings are held monthly immediately preceding the Society meetings and on occasion. He gave a long list of lay organizations whose health activities are directed by physicians who are members of the committee.

The committee works in harmonious cooperation with the public health committee of the society. During the last two years our major activity has been the promotion of the county health unit plan for Jefferson County. Through the activity of these combined committees, which were charged by the Society with the work of the promotion of this plan, the matter was presented to the Board of Supervisors December, 1930, and in cooperation with the Jefferson County Tuberculosis and Public Health Committee many addresses have been given by members of the Society throughout the county, as well as press publicity to educate the public in the provisions and advantages of the county health unit. Under these auspices a county-wide organization has been formed to work for this end, entirely under the guidance of the society. The combined committee has also presented to the society a general plan for a unit adopted to our local needs. Much effort has been put into this work, which the committee has regarded as perhaps the paramount duty of the local profession to the county at the present time.

The committee has been in consultation with the central council of the Parent-Teachers' Association of Watertown to arrange for the examination and correction of defects in pre-school children in the city, the examinations being voluntarily conducted by Doctor Heizer, school physician.

Arrangements have recently been made by the

public health and public relations committees with the Medical Inspection Bureau of the State Department of Education, for more systematic sight testing of the school children throughout the county and recording of degrees of acuity of vision, for an efficient follow-up for proper correction, and for sight-saving and education of children with more serious defects.

Doctor G. M. Fisher read a report on Oneida County sent by Doctor T. H. Farrell. This is published on page 617 of this Journal.

Doctor Clapper, of Ontario County, reported that his committee had assisted in arranging clinics for the immunization of children against diphtheria and in having the high school children of Victor x-rayed and tuberculosis tested. They are now engaged upon developing a school clinical program. He regretted that the Society's relationship with lay agencies is not as harmonious and effective as it might be.

Doctor Lape, of Broome County, said that a very successful anti-diphtheria program had been conducted in Binghamton during the past year. Much work for an active public relations committee remains to be done. Examination of school children is done almost entirely by school physicians. Last year the Y.W.C.A. sought cooperation with the medical society in giving employed women in the city a physical examination.

Doctor Lester, of Seneca County stated that cooperation with the lay agencies in his county stands much in need of development. While the relationships are cordial, yet initiative for work rests almost entirely with the lay agencies, and the need of medical supervision has not been forcibly impressed upon them.

Doctor Foster, speaking for Yates County, said that the physicians individually have very pleasant relationships with the lay agencies. The individual physician is quite satisfied with the way in which the county welfare work is conducted, but the society as such has had practically no share in any of these activities and it might be much to the advantage both of the public and the physicians if the work were systematized by a County Public Relations Committee.

Doctor Porter, of Lewis County, stated that his public relations committee is but six months old, and therefore he had not much to report; but he was stimulated by the reports he had heard and felt that he could, on his return, develop an active and useful committee. He spoke at length of the problems involving the development of the new county hospital, but he said that he thought many of the difficulties would in time right themselves. He particularly called attention to the fact that under the rules and regulations which were suggested by the public relations committee, the physicians of the county do not seem to have as much responsibility and authority as they deserve

PUBLIC RELATIONS COMMITTEE IN ONEIDA COUNTY

The following report of the Public Relations Committee of the Medical Society of the County of Oneida by its chairman Dr. T. H. Farrell of Utica, was read at a conference of the chairmen of the Public Relations Committees of fifteen counties of Central New York conducted on April 21, 1917, in Syracuse by the Committee on Public Relations of the Medical Society of the State of New York.

In reviewing the work of the Public Relations Committee of Oneida County, it may be of interest to note the factors which have made for success. In the first place, the membership of the committee was chosen with great care, so as to represent all sections of the county. Only doctors were selected who were known to take an interest in health matters beyond their own practice. Then no line of action was decided on until it had been thoroughly discussed by the full committee plus the President and Secretary of the Society. As far as possible the chairman always associated with him some other member in the personal work that is so essential in getting results.

Council on Tuberculosis and Public Health. Our first and most valuable contact was with the Oneida County Council on Tuberculosis and Public Health. This was made easy by the fact that Dr. G. M. Fisher was a member of this executive committee. The members were looking for other avenues of promoting public health besides their work for the control of tuberculosis. They welcomed most heartily the interest and cooperation of the county medical society. After a free and frank discussion with our committee they enlisted in a campaign to promote periodic health examinations. They supplied all the clerical help and arranged with various groups of women for talks by such doctors as we could persuade of the importance of this work and of their ability to tell lay people about it. The diffidence of the individual doctor to speaking in public has been one of our greatest handicaps. Once the ice is broken and he finds that he has an inexhaustible fund of information, he is keen to do it again, if he has any flair for speaking.

Tuberculosis Tests. About one year ago this organization appealed to our committee for help in extending its preventative work in the tuberculosis of children. The superintendent of our new County Tuberculosis Sanitarium was willing, yes anxious, to apply the tuberculin test to all school children, and to make x rays of the chests of those who had a positive reaction, but this met with much opposition from the school doctors. We finally succeeded in having the county society adopt a resolution to the effect that all contact cases in the schools and children underweight should be given the tuberculin test. The result is shown in table one.

Age Years	CONTACTS			NON CONTACTS		
	No Tested	% Reacting	Percent Reacting	No Tested	% Reacting	Percent Reacting
5 & under	14	11	78.5	44	1	2.5
6	4	3	75.0	92	6	6.5
7	29	14	48.0	112	20	17.0
8	14	10	71.0	110	29	26.5
9	23	18	82.0	124	53	42.0
10	24	19	79.0	129	50	39.0
11	22	20	90.0	138	82	59.0
12	22	19	86.5	80	47	58.0
13	16	14	87.0	73	45	61.0
	168	128	76.2	902	333	36.9

Table 1 Results of tuberculin tests

X-ray Tests. The superintendent of the Oneida County Tuberculosis Sanitarium also cooperated in taking x-rays of the chests of children suspected of having tuberculosis with the result shown in table 2.

	Contacts	Non Contacts
No x-rays taken	188	193
Recommended to Sanitarium	20	5
Recommended for Symptom Study	22	8
Recommended to open air class	16	5

Table 2 Result of x-ray diagnosis in 381 children

Council of Social Agencies. We are fortunate in Utica in having a Council of Social Agencies. The Council is a group of two persons—one an executive and one a Board member—from each of the eighty or more health, relief and welfare organizations in this city associated for the common good. The council is, therefore made up of persons acquainted and responsible for all work in the City of Utica, which is supported either by public or private philanthropy.

During the second year the Council for convenience, was divided into four groups, viz. Health Group, Children's Group, Family Group, and Character Building Group. These groups made special study of the work in their respective fields, taking up case study or tracing an involved social problem through the various organizations which would naturally be concerned or involved. The group leaders directed this study and the results were summarized and brought before the general council.

The health group comprises 19 organizations as follows: Board of Health, County Tuberculosis Sanitarium, Summer Tuberculosis Camp, Oneida County Tuberculosis Council, Utica Academy of Medicine, Oneida County Medical Society, 5 hospitals, Children's Hospital Home, Central Association for the Blind, School Inspectors, Dental Society, Dispensary, Visiting Nurses and Child

Health Association, Y. W. C. A., Y. M. C. A. For two years the chairman of the Public Relations Committee has been chairman of this group. In response to a questionnaire, the following special problems were suggested for study:

1. Ascertain the working forces of health agencies and the kind of services each organization is equipped to render. How can this present system be improved?

2. The education of the family in the care of children after they are dismissed from the Children's Hospital Home.

3. A clearer correlation of the child health group, schools and Camp Healthmore Organization for the prevention of tuberculosis.

4. Systematic examination of teeth in schools; who should get free service and who should pay; not a wholesale free service.

5. How best to segregate persons afflicted with infectious eye diseases.

6. Preservation of county health department.

7. Health progress as a convenient responsibility.

8. Systematic follow up work on hospital cases.

9. Periodic health examinations.

10. The cost of health and other institutional service.

This will give some idea of the diversity of interest and the lines of thinking of this group. This last winter the special problem was, "How can we improve the educational facilities for training our nurses?"

Health Talks: A work which has brought the County Society a great deal of publicity in the press is the series of health talks given in the various industrial plants in the city during the last three winters. These are under the auspices of the County Medical Society, Utica Dental Society, and the Industrial Department of the Y. M. C. A. The detail work is all done by the secretary of this latter department. We are responsible for providing fifteen doctors as speakers on topics mutually agreed upon. Some doctors enjoy speaking to the workers in these plants; some do it out of a sense of loyalty to the County Society. Part of our job is to find out how each talk went over and be guided accordingly in making up the list of speakers for the next year. The talks for winter were on these topics:

Heart strain in industry.
Visual efficiency.
Wounds and bruises.
Coughs and colds.
Contagious diseases.
Care of the teeth.

Public Welfare Law: Our relations with the Commissioner of Public Welfare have been quite cordial. One of our committee happens to be a supervisor of the county, which facilitates our relations with this department. We found that the commissioner recognized the rights of the doctors under the law, but emphasized the necessity of his adhering to certain simple rules in order to enjoy the benefits. In order to familiarize the doctors of the county with these requirements, we embodied them in a letter and later arranged for the commissioner to address the county society and to answer questions. The following standards were agreed upon for the administration of the State Welfare Law.

1. The family physician of the patient shall be employed as in private practice.

2. When a doctor is called to attend a patient under this welfare law, he shall *at once* notify the commissioner and get a written authorization for his attendance. This authorization must be renewed every two weeks for continued attendance.

3. In an emergency, the physician shall give the proper treatment at once; and within 24, or at most 48, hours, obtain the proper authorization for his treatment.

4. Additional authorization shall be obtained for unusual problems such as x-rays, laboratory analysis, consultation and surgical operations.

5. The following shall be considered standard in regard to medical fees:

Office Calls	\$1.00 to \$ 2.00
House	2.00
Uncomplicated Confinement	25.00
Surgical Operations	5.00 to 50.00
Anæsthetist	5.00
Assistant	5.00 to 10.00
Complications	Extra
Tonsil and Adenoid Operation ..	10.00
Hospital	10.00
Ordinary X-ray	5.00 to 10.00

Owing to the fact that the Medical Society of the County of Oneida a year ago last fall voted against a compulsory health department, after the Public Relations Committee had carried on a campaign of education for several months, we have done nothing further along this line so far as the doctors are concerned.

Our committee tries to keep the county society informed of the self-sacrificing work of the Public Relations Committee members of the Medical Society of the State of New York, and of their decisions and advice.

FINAL LEGISLATIVE BULLETIN

April 26, 1932

Now that the thirty-day period has expired, you are without doubt eager to have the legislative season closed on your books. There follows a statement of the bills that were enacted into law and their chapter number.

Senate Int No 256—Westall, Public Health Law, providing each city becoming part of a county health district shall be entitled to one additional representative on county health board, all members of the board to be residents of the health district. Chapter No 81.

Senate Int. No 368—Wicks, Public Health Law, by empowering health commissioner to make rules with reference to disposition of bodies of persons dying on trams, boats, or other carriers for transporting persons. Chapter No 267.

Senate Int No 399—Nunan, Greater New York Charter, to permit medical board of teachers' retirement system to designate a physician or physicians to make medical examinations. Chapter No 393.

Senate Int No 417—Lord, by providing property held for hospital purposes in name of corporation organized to manage hospital for benefit of city shall be exempt from taxation to same extent as property of corporation organized exclusively for hospital purposes. Chapter No 328.

Senate Int No 634—Wicks, Public Health Law, by requiring State Health Commissioner on request to supply certified copy of birth and death records unless same does not appear to be necessary or required for judicial or other proper purposes. Chapter No 113.

Senate Int No 635—Wicks, Public Health Law, by changing provisions relative to requirements to practice midwifery. Chapter No 198.

Senate Int No 636—Wicks, Public Health Law, relative to district records to be kept by registrars of births or deaths. Chapter No 93.

Senate Int No 913—Webb, abolishes office of coroner in Dutchess County and creates office of county medical examiner. Chapter No 376.

Senate Int No 967—Thompson, Mental Hygiene Law, by providing hospital unit at Kings Park shall be known as Veterans' Memorial Hospital division devoted exclusively to care of war veterans. Chapter No 436.

Senate Int No 1219—Wicks, Public Health Law, relative to approval of laboratory examinations by the Health Commissioner. Chapter No 310.

Senate Int No 1383—Hewitt, Education Law, relative to payment of fees, fines, penalties and other moneys into State Treasury. Chapter No 446.

Senate Int No 1444—Hewitt, Public Health

Law, by naming new state tuberculosis hospital near Ithaca as the Herman M. Biggs Memorial Hospital. Chapter No 246.

Assembly Int No 277—Esmond, Public Health Law, relative to pathogenic germs, to use of bacteria for criminal purposes and to method of transporting live germs. Chapter No 151.

Assembly Int No 440—Jenks, Mental Hygiene Law, relative to committing certain mentally defective persons to state institutions. Chapter No 73.

Assembly No 526—Ostertag, General Municipal Law, authorizing a superintendent of a public general hospital to maintain a revolving petty cash fund not to exceed \$100.00. Chapter No 102.

Assembly Int No 1137—Potter, Mental Hygiene Law, to permit use for civilian patients of acute medical and surgical building in hospital unit at Kings Park, if commissioner thinks care of veteran soldiers and sailors treated there will be promoted. Chapter No 195.

Assembly Int No 1271—Wallace, Penal Law, by making it a felony to wilfully or unjustifiably interfere with, injure, destroy or tamper with any horse, mule, dog or other domestic animal used for racing, breeding or competitive exhibition of skill. Chapter No 413.

The amendment which probably will have the widest interest is the Westall bill, which increases the number of physicians required on county health boards from two to three (chapter No 81).

May we say again that the Committee is most grateful to the chairmen for the hearty cooperation we have had this year. We hope that you will not completely lay aside your legislative ideas, but prepare immediately for a conference with the legislative candidates. Many of the societies held conferences with their legislators last fall and in every instance they were considered both by the physicians and the legislators as of great value. Two important matters that can be discussed at such conference this year are: The need of opposition to the anti-vivisection bill (dog bill) and the distinction between the Medical Society and State Departments.

We hope that you have written your legislators thanking them for their cooperation.

If changes occur in chairmanship, will you please advise Dr. Lawrence of the name of the new chairman, or have the secretary of the society do so?

HARRY ARANOW,
JOHN J. BUETTNER,
MARSHALL CLINTON,

Committee on Legislation

ONEIDA COUNTY

The monthly meeting of the Oneida County Medical Society was held on April 12 in Faxon Hospital, Dr. E. M. Griffith, Chadwicks, presiding. In the absence of Dr. T. H. Farrell, chairman of the committee on public relations, the secretary, Dr. William Hale, Jr., read his report, which included testing for tuberculosis of all city school children who are known to be contacts of other members of tubercular families. This work has been carried on by Dr. William C. Jensen of Broadacres Sanatorium, under direction of Dr. Stephen A. Mahady and Dr. James W. W. Dimon. (See page 617.)

Beginning this week the same type of work will be extended to include the entire county, under the combined efforts of Dr. Jensen and Dr. Halsey J. Ball, district health officer. Dr. Farrell's report also showed the work done for local institutions in the way of health lectures under the auspices of the Utica Dental Society and the Oneida County Medical Society so arranged by the industrial secretary of the Y.M.C.A. It is planned to have similar courses the coming year, with more industries entering into the project.

Dr. H. J. Ball, District State Health Officer, reported for the public health committee, outlining community health work that is its project.

Dr. George M. Fisher, reporting for the legislative committee, announced approval by the county society of the action taken by the Legislature in its recent session on medical bills.

Dr. F. M. Miller, reporting for the committee on medical economics, outlined the work his committee is doing as an adjunct to the committee of the State Medical Society, with particular reference to investigating the cost of sickness in families.

The speaker for the day was Dr. R. C. Van Etten, professor of obstetrics at the Physicians and Surgeons Hospital, and attending obstetrician at Sloane Hospital, New York City.

There were about sixty physicians present. Luncheon was served by the hospital staff, following which the physicians were extended the privilege of reviewing the maternity setup and inspecting minutely the operating rooms, utility rooms and ward services.

WILLIAM HALE, M.D.,
Secretary.

CORTLAND COUNTY

The Cortland County Society met at the Cortland County Hospital on April 22nd to hear a paper read by our full-time health officer, Dr. D. R. Reilly, on the timely subject "The Care of the Indigent Sick."

Dr. Reilly stated that no satisfactory plan was being followed at the present time, but a plan should be drawn up as the new Welfare Law furnished a basis on which to work. At the present time the Welfare Committee is swamped with requests and may collapse under the pressure.

Dr. Reilly believes the Iowa plan of contract between the governmental officials and the county

medical society can not be used in New York State because it would interfere with the Welfare Law.

Warning was given that if the medical profession does not act and make suitable plans, then others less able will do so and the physicians will be the losers.

President High Frail appointed the following Welfare Committee to study the subject: James Walse, Chairman, Claude E. Chapin and Dr. R. Paul Higgins.

ORTON E. WHITE, Secretary.

BRONX COUNTY

A regular meeting of the Bronx County Medical Society, held at Elsmere Hall on April 19, 1932, was called to order at 9 P.M., the President, Dr. Smiley, in the Chair.

Election of candidates being in order, it was moved and carried that the Secretary be instructed to cast one ballot for the following applicants for membership:

Drs. Max Hochman, George A. Howley,

William LaVine, Joseph Rosenheck and Henry L. Sanft.

The Secretary presented the Report of the Nominating Committee designating candidates for all offices for 1932-33.

Dr. Projector reported in the matter of the Study of the Report of the Governor's Committee on the Workmen's Compensation Law. The Subcommittee's Report was presented at

the meeting called by Dr. Smiley and was adopted with certain changes. This report will be ready for presentation to the Society at its next meeting and shall be brought before the State Medical Society meeting in May.

The scientific program proceeded as follows:

A. The Roles of the Internal Secretions of the Ovary in Health and Disease, Robert T. Frank.

B. The Enduring Quest for Rejuvenation: Retrospect and Prospect, Carl R. Moore.

C. Discussion, Abraham J. Rongy, Harry Aranow, Raphael Kurzrock, Joshua H. Leiner. The discussion was closed by Drs. Frank and Moore.

The President expressed the thanks of the Society to the readers of the papers and to the gentlemen who discussed them.

I. J. LANDSMAN, M.D., *Secretary*.

MONROE COUNTY

A meeting of the Medical Society of the County of Monroe was held in the Academy of Medicine Building, Rochester, on March 15, 1932, with the President, Dr. B. J. Slater, presiding.

Drs. K. E. Birkhaug, Abraham Fischer, and Frank Valve, were elected to membership.

Chairmen of Committees for 1932 were announced as follows:

Membership: Dr. J. J. Rooney.

Legislative: Dr. L. F. Simpson.

Post-Graduate: Dr. S. S. Bullen.

Public Relations: Dr. A. G. Morris.

Public Health: Dr. E. G. Whipple.

The following Sub-Committee Chairmen were also announced:

Tuberculosis: Dr. J. J. Lloyd.

Heart: Dr. R. B. Crain.

Cancer: Dr. J. M. Swan.

Social Hygiene: F. J. Garlick.

Child Welfare: Dr. John Aikman.

Communicable Diseases: Dr. G. S. Price.

Mental Diseases: Dr. Kirby Collier.

Prenatal Care: Dr. L. E. McCaffrey.

Health Education and Periodic Examinations: Dr. W. A. Sawyer.

The speaker of the evening, Dr. Grant C. Madill of Ogdensburg, N. Y., spoke on "Medical Education; Its General Trend and Problems," bringing out the following points of interest:

1. Today there are 13,000 applications for the 7,000 available accommodations in our medical school.

2. The problem of the relation of hospital practice to private practice as yet is unsolved.

3. Dr. Madill favors the awarding of advanced medical degrees for physicians who specialize in a particular field.

4. It was the opinion of the speaker that if the Regents required of all groups concerned in the treatment of the sick the equivalent of premedical training now required by all doctors of medicine, it is inconceivable that the applicant would wish to limit his activity to a single therapeutic regimen.

5. The recent legislative activity of the osteopaths was discussed by the speaker.

The meeting was adjourned at 10:20 P.M. Attendance: 64.

W. A. MACVAY, *Secretary*.

RENSSELAER COUNTY

A regular meeting of the Medical Society of the County of Rensselaer was held at the health center, Troy, on Tuesday evening, April 12th, with the President, Dr. J. B. Burke, in the chair, and the Secretary, Dr. C. J. Handron, recording.

Mr. George Roth, representing the Credit Bureau of the Chamber of Commerce, spoke on the service given by that Bureau to the merchants of Troy and vicinity. He said the Bureau furnished its patrons with information relative to the pay

habits of individuals and not opinions. Such information is impersonal and absolutely confidential.

The society went on record as approving the work of the Rensselaer County Tuberculosis and Public Health Association in eradicating tuberculosis.

Dr. Mathew Kehou of Cohoes was proposed as an associate member by Dr. Hambrook.

Dr. C. F. Kivlin addressed the society on the

subject of "Mucocoele of the Appendix." He cited a case of his own and showed photographs. It was discussed by Dr. P. L. Harvie.

Dr. Wm. B. D. Van Auken read a paper on "General Practice of Medicine before Specialism of Practice." It was discussed by Drs. C. A. Birmingham, C. Hemstreet, and T. F. Judge.

Dr. A. W. Benson read a paper entitled "Troy and the White House Conference," giving a brief description of the conference, and reporting the findings which were obtained through the cooperation of our County Society and various local welfare agencies. A corps of registered nurses made a house to house canvass and secured the necessary data in 350 families, representing 574 children. Dr. Benson reported that 65 per cent

of our pre-school children had received a health examination; 38 per cent had been immunized against diphtheria (a very good showing and due largely to the campaign in which 26 of our physicians donated their services). The figures showed that 15 per cent had been vaccinated against smallpox, and only 4 per cent had ever received a dental examination. Dr. Benson asked for a continued interest in the recommendations of the Division of the White House Conference dealing with the medical care of children.

The meeting adjourned for a social hour at 11 p.m.

WILLIAM B. D. VAN AUKEN, M.D.,
Reporter.

ROCKLAND COUNTY

Forty members of the Medical Society of the County of Rockland were guests of the Lederle Laboratories at Pearl River for their regular meeting held on Wednesday afternoon, April 27th, 1932.

A tour of inspection of the institution was made with an explanation of the use of the newer products. The recent development of liver extract for injection in the treatment of pernicious anemia was of unusual interest. The value of the maggot treatment for chronic infections was amply demonstrated. The preparation of various serums was shown.

The speaker of the day was Dr. Richard Kovacs, Professor of Physical Therapy at the Polyclinic Hospital, and Chairman of the Committee on Physical Therapy of the New York State Medical Society. Since this field, which includes all forms of electrical therapy, natural and artificial light, and massage and other forms of manipulation, is broad, the doctor could only cover it in outline, but he emphasized that such treatment should be used only by those who are well trained in the fundamentals of medicine and surgery. Many interesting lantern slides were shown.

Dr. Adolph Eichorn, Director of the Veterinary Department at Lederle, spoke of the growing menace from undulant or Malta fever, and stated that thirty per cent of all marketed milk contains the organism. The only means of preventing its transmission to man is by the active pasteurization milk. Its diagnosis can be made only by the agglutination test.

Dr. Edward Roberts and Mr. Stanley Beard, officials of the Lederle Laboratories, welcomed the members to the institution.

Dr. Russell E. Blaisdell, Superintendent of the Rockland State Hospital, invited the Medical Society to his institution for the June meeting.

A resolution on the death of Dr. Merton J. Sanford of Suffern, was presented and adopted.

The applications for membership in the Society of Dr. George G. Stone and Dr. Alan J. Maged both of Suffern were received.

Among the guests present were Dr. A. B. Hirsch of New York City, Editor of the *New York Medical Week*, and Dr. H. G. Wahlig of Seacliff, New York, Secretary of the Nassau County Medical Society.

WILLIAM J. RYAN, M.D., *Secretary.*



KINGS COUNTY

A regular meeting of the Medical Society of the County of Kings was held on Tuesday, March 15, 1932, in the MacNaughton Auditorium of the Library Building, 1313 Bedford Avenue, Brooklyn

The scientific program was as follows

- 1 Address "Method in the Study of Bright's Disease" Jean R. Oliver, M.D., Brooklyn, Professor of Pathology, Long Island College of Medicine
- 2 Address "Characteristics of Different Types of Bright's Disease" Donald D. Van Slyke, Ph.D., Sc.D., New York City, Member of Rockefeller Institute

THE MONTH IN ABSTRACT

The Director of Medical Activities reported to the Trustees and Council that during the month of February the Coordinating Committee of the Five County Medical Societies had given consideration to the health examination problem, municipal hospital conditions, and various other items, that the Coordinating Committee had received a request for action from Kings County, with regard to joint meetings between dentists and doctors, the regulation of massage operators under the Sanitary Code, and a diphtheria prevention plan. This plan had been approved by the Coordinating Committee for transmission to the other county societies.

During the month the Committee on Medical Economics had considered a number of problems, including a series of questionnaires from the American Medical Association.

The Committee on Public Health had elaborated a diphtheria program, had conducted the medical information service, which involved the answering of over thirty inquiries a week covering information on cancer hospitals, reference to physicians, assistance in locating physicians and the like, had conducted radio broadcasts, and had conferred with the Visiting Nurse Association.

The Committee on Illegal Practice had conferred with representatives of the State Department of Education regarding various complaints. During 1931 over twenty of the cases were investigated in Kings County by the Department, but had not required any action, a number of violations had been stopped without prosecution, of the cases requiring criminal prosecution all had been convicted except one that is pending trial.

The Milk Commission had conducted its usual activities and had held its regular monthly meeting. It desires to call the attention of the medical profession to the importance of Certified milk. The profession does

not thoroughly realize the nutritional value of unpasteurized milk which is produced and distributed under the supervision of the County Society—A milk received by the consumer under a seal which is placed upon the bottle at the farm—A milk which comes from cows tested for tuberculosis and undulant fever—A milk of low bacterial content, delivered by express service from the cow to the consumer—A milk, in short, which the medical profession should prescribe under all circumstances where a nutritional problem will be aided by including in the diet a fresh, clean, wholesome, natural milk.

The Sub Committee on Polymyelitis had continued its study of cases occurring in the epidemic of last Summer, and had received valued assistance from the Visiting Nurse Association hospitals and individuals. Much information is being accumulated for analysis about what did occur, the need for and the amount of after care, and similar items.

The Chamber of Commerce Public Health Committee had, through sub committees, considered the diphtheria problem, the transportation of polymyelitis cases in need of orthopedic clinic care, and similar problems of community interest in the field of health.

On March 1, 1932, the Executive Committee of the Second District Branch met in the offices of the Queens County Medical Society, to consider plans for future activities of the Second District Branch. It was decided that the Second District Branch would hold an informal outing and meeting in June, Queens County Medical Society acting as host. It was also decided that the regular annual meeting would be held on November 17th, 1932, at the Hotel St. George, in Brooklyn, with Kings County acting as host. A clinical program is to be arranged for the annual meeting in November. The committee from the Medical Society of the County of Kings, arranging the scientific program, will provide formal papers for the meeting on the evening of November 17th. This committee has arranged for clinics and conferences at various hospitals for the morning of November 18th, and, on the afternoon of the 18th, demonstrations of fresh pathology, presented from the point of view of pathologists and clinicians. During these two days, it is expected that the Section on Pathology of the Medical Society of the County of Kings will provide a suitable exhibit, correlated with the program to be arranged.

Our librarian, Mr. Charles Frankenberger, is giving his annual course of lectures to the first year men of the Long Island College of Medicine, on "Medical Literature and Bibliology."

The purpose of these lectures is to acquaint medical students with the literature of their profession; to instruct them in the use of the various bibliographic indices and reference works; and to explain the first steps in consulting medical literature. The Long Island

College of Medicine is the first medical school to inaugurate such a course as a required part of its curriculum.

JOSEPH RAPHAEL, M. D.,
Associate Secretary.

A regular meeting of the Medical Society of the County of Kings was held on Tuesday, April 19, 1932, in the MacNaughton Auditorium of the Library Building, 1313 Bedford Avenue, Brooklyn.

The following scientific program was presented:

1. Address: "Histological, Pathological and Bacteriological Considerations in Valvular Defects in Rheumatic Fever." Louis Gross, M.D., New York City.

2. Address: "Undulant Fever" (Brucelliasis). Walter M. Simpson, M.D., F.A.C.P., Dayton, Ohio.

In his monthly report to the Council of the Society, the Director of Medical Activities indicated the increasing volume of work that has been coming before the Society. In illustration, he stated that he had attended a number of meetings and conferences outside of the Society building, and that committee activities in the form of meetings and special work on the part of committee members had been greater than usual.

It was reported that the Executive Committee of the Second District Branch had formulated plans for an outing meeting on Wednesday, June 8th, at a golf club, with Queens County acting as host. The Executive Committee of the Branch also determined to hold the 26th Annual Meeting on Thursday, November 17, 1932, in Brooklyn, repeating the successful scientific meeting and banquet which was held last November. The tentative program calls for a morning devoted to clinics, an afternoon of papers on practical medical topics, and an evening banquet and business meeting, at which the officers of the Branch will be elected for the coming year.

With regard to medical service under the home relief plan, the Director reported that the City's inability to provide sufficient funds had resulted in a few authorizations for physicians to receive. Those which had been given were for payment through the Society office.

Dr. J. H. H. attended the Tenth Annual Con-Milbank Memorial Fund and deliberations of the Section on The conference, as a whole, had and endorsed a report from the 4 Centers. Surgeon-General

Cumming of the United States Public Health Service presented the Section's report which indicated the difference between the promotion of preventive medicine as an educational procedure and the application of the principles of preventive medicine, which is the practice of medicine and surgery and should be conducted by the medical facilities of the community rather than by the health agencies. The Conference adopted the recommendation of the Health Center Section that "Every health center should have as one of its important functions a definite program for the development of cooperation between families and physicians to the end that there shall be more universal participation (outside of official health work) in preventive medicine and health promotion. This would involve the development of such a program through county medical societies and the adequate provision of personnel for the organized medical profession."

The Milk Commission and the Special Committee appointed by the Council has been particularly active during the month.

The Committee on Medical Economics, through various sub-committees, has been active during the month considering the problems of group practice, contract practice, the dispensary question, the workmen's compensation problem, and the like. Its members have attended many meetings.

The work of the Committee on Illegal Practice during the month involved a number of conferences with representatives of the State Department. Some anonymous complaints were received with regard to the practice of medicine by unlicensed individuals. Such complaints usually receive no consideration. Investigation in one case brought out the apparent fact, as was to be expected, that a complainant lacking sufficient stamina to give a name, is in all likelihood spitefully attempting to harass an individual. The person complained about indicated a desire for a full investigation and offered to cooperate.

The educational activities of the Society during the month have been confined, as far as the laity are concerned, to radio broadcasts and one talk on Diphtheria.

A special diphtheria program is being conducted by the Department of Health in the section of Brooklyn known as the Red Hook-Gowanus Health District. This area is bounded

by the East River, Gowanus Canal, Atlantic Avenue, Flatbush Avenue, Prospect Park West and Ninth Street. Physicians practising in this section are requested to report to the Committee on Public Health their observations in regard to Diphtheria work, and to urge their clientele to

have their children immunized in the physician's office.

The Friday afternoon lectures at five o'clock on clinical subjects are being continued under the management of the Kings County Medical Society.

A special meeting of the Medical Society of the County of Kings was held on Thursday, April 28, 1932, in the Library Building, under the auspices of the Committee on Medical Economics.

At this meeting there was an endorsement of the formation of a Loan and Relief Committee to

seek out and aid those members of the medical profession in the county who may be in need of financial help. Other questions discussed were the dispensary problem, the economic aspects of health examinations, group clinic activities, and compensation cases.

ALBANY COUNTY

The February meeting of the Medical Society of the County of Albany was held in the auditorium of the Albany College of Pharmacy on Tuesday evening, February 23, 1932.

On motion of Dr. James N. Vander Veer the Society accepted the recommendation of the Press Relations Committee of the State Society that we affiliate with the Third District Branch Group. The President was instructed to appoint one member to serve as our local representative. Dr. Arthur W. Wright, Director of the Bender Hygienic Laboratory, was subsequently appointed.

A memorial of our late member, Dr. Baxter T. Smeltzer, was read by Dr. La Salle Archambault, and on motion of the Society these resolutions were ordered spread upon our minutes and copies sent to the family of the deceased.

Dr. Curtis T. Prout was unanimously elected to membership.

The resignation of Dr. M. J. Keough of Cohoes was presented and accepted.

On motion of Dr. Daniel O'Leary the President was instructed to appoint a special committee to confer with the Council of Social Agencies for the purpose of considering a program of establishing a central registry for dispensary patients.

The scientific program was presented by the following physicians, all members of our society:

"Recent Progress in the Study of Focal Infections," Dr. James W. Bucci. Discussion led by Dr. Kenneth Crounse.

"Gas Gangrene Complicating Appendicitis," Dr. Clarence Traver. Discussion led by Dr. Edgar A. Vander Veer.

"Carcinoma of the Body of the Uterus Associated with Pregnancy," Dr. Arthur J. Wallingford. Discussion led by Dr. John A. Sampson.

"Excretion Urography," Dr. I. J. Murname. Discussion led by Dr. James N. Vander Veer.

The Society had no delinquent members during the past year. I quote from a letter recently received by our Treasurer, Dr. Frances E. Vosburgh, from Dr. Frederick E. Sondern, Treasurer of the Medical Society of the State of New York:

"Thank you very much for your check, thus placing Albany County in the well deserved and much to be envied position of an Honor County, something I do not think has ever happened before in any county with a membership of 249."

HOMER L. NELMS, Secretary.

DUTCHESS-PUTNAM

A regular meeting of the Dutchess-Putnam Medical Society was held on Wednesday, November 18, 1931, at 9 p.m. at Vassar Brothers Hospital, Poughkeepsie, N. Y., with the Vice-President, Dr. William H. Krieger, in the Chair.

The following physicians of Poughkeepsie were elected to membership.

Drs. B. E. Roberts, H. J. Christensen, and H. C. Rosenthal.

Drs. Sobel, Breed and Gosse were appointed a nominating committee to report at the December meeting.

Dr. J. E. Sadlier presented a memorial to the late Dr. Samuel I. Jacobus, who practiced medicine in the village of Millbrook for forty-three years until his death on August 12, 1931, aged 70 years. The outstanding service recorded in the memorial was as follows:

Dr. Jacobus kept in touch with each advance in surgery as well as medicine and saw that his patients, poor and rich alike, received the benefit of such knowledge. Hence for many years the Town of Washington was in the advance guard in having proper and timely attention given to such cases. Again this intense interest in his patients and desire for their welfare was duplicated by his co-worker and friend, the late Dr. David H. MacKenzie, and together they gave to their com-

munity an advanced type of service which speaks in no uncertain terms of the advantage of the personal and individual attention of the family physician, and constitutes a warning to those who would relegate medicine to state control or any other plan which subordinates the family doctor.

The following special committee on Economics was appointed:

Dr. A. W. Thomson, Chairman; Drs. S. E. Appel and Earle Voorhees.

Scientific Program:

Dr. Albert Pfeiffer and Dr. James N. Vander Veer of Albany addressed the Society on "The Venereal Disease Program."

Present: Drs. Pfeiffer, Krieger, Rogers, Williams, Conger, Gosse, Jacobus, Breed, Bulkley, Cadwell, Peckham, Coborn, Poucher, Christensen, Rivenburgh, Borst, Card, Le Soine, Conklin, Marks, C. E. Lane, Davison, Voorhees, Wicks, Tabor, O'Neill, three Vassar Brothers Hospital internes, Rosenthal, Harrington, Vander Veer, Carpenter, Deyo, Leonidoff, Stoller, Sobel, Stibbs, Harold Crispell, Sadlier, C. A. Crispell, J. N. Boyce, Mr. Spross and Mrs. Myers. Total, 44.

The meeting adjourned at 11:15 p.m. for refreshments.

H. P. CARPENTER, *Secretary*.

A regular meeting of the Dutchess-Putnam Medical Society was held at St. Francis Hospital, Poughkeepsie, N. Y., April 13, 1932, at 8:45 p.m., with the President, Dr. William A. Krieger in the chair.

Dr. Burton T. Simpson, Director, New York State Institute for the Study of Malignant Disease, gave a paper on "The Responsibility of the Practicing Physician in the Control of Cancer."

Discussion by Drs. Pallister, Marks, Breed, Sadlier and Card.

Dr. Maurice C. Ashley, of Wappingers Falls, N. Y., was elected to membership.

Dr. John A. Card gave a verbal report of the legislative committee.

Dr. J. W. Poucher read the following memorial to the late Doctor Burns.

"Dr. Edward M. Burns, during his thirty-seven years of professional life, has typified the ideal relationship between patient and physician. Service in its truest, broadest meaning actuated him in his work. He gave freely of his knowledge and skill acquired by years of study and hard earned experience, but always with so much humanity and kindness that it had become so natural to him that it was expected and was always given. He was worthy of the following epitaph by Kipling:

"For as he trod that day to God
So walked he from his birth,
In simpleness, and gentleness, and honor, and
clean mirth."

See also the editorial on page 397 of the April first Journal.

A report of the committee on blindness was read and the President was appointed chairman of the committee to act with Doctors Card and Roberts on the report.

The meeting adjourned at 10:45 p.m. for refreshments.

Thirty-seven members were present as follows:

Drs. Krieger, Cavanaugh, Palliser, Peckham, Thomson, Borst, Rogers, Tabor, Gilbert C. MacKenzie, Bauer, O'Brien, Breed, Marks, Card, Roberts, Rivenburgh, Carpenter, Sadlier, Christensen, Voorhees, Simpson, Gosse, C. J. McCambridge, Richard Boyce, Sobel, Poucher, Malone, J. N. Boyce, Davison, Toomey, Price, Green, Simon, Harrington, Rosenthal, Coborn, Benson.

Twenty-four nurses from St. Francis Hospital were also present.

H. P. CARPENTER, *Secretary*.

THE DAILY PRESS

Reg'lar Fellers

His First Flight

By Gene Byrnes



From New York Herald Tribune January 22 1937

THE PHYSIOLOGICAL EFFECTS OF COLOR

The appreciation of color may be as keen as that of sound, but it is far more rare. Yet there are a few people in whom jarring colors produce the same degree of discomfort that discordant noises induce. The laws of color harmony are as definite as those of music, but most persons are blind to them, and even deaf to their vocabulary. The *New York Herald Tribune* of March 30 describes a lecture on the laws of color, a description of which is reproduced here in order to inform physicians that there is a scientific basis for the suffering which color sensitive persons undergo when they are compelled to look at jarring colors.

"The laws of color as they apply to modern designs in fabrics, costume design and interior decorating were described by Miss Grace Cornell, associate instructor in the education de-

partment of the Metropolitan Museum of Art, in a lecture before the Fashion Group yesterday afternoon at the museum.

"She described color knowledge as coming from three sources in the experience of every individual. These included the sight of colored objects in gardens, or grocery store windows, colors of the passing moment and not to be studied too seriously, second, colors to be studied and appreciated, such as the design in an Oriental rug, and third, colors which stirred the emotions, such as those in a magnificent sunset or a Titian painting.

"The three elements in color she described as value, chroma and hue. These were applied on the stage to two interior decorating schemes, one warm and one cool, and to three costume schemes all using Corsair blue, but varied to suit the individuality of the model."

FINGERPRINTS

The *New York Times* of March 28, comments editorially on the value of fingerprints.

"At the hearing in Albany last week on the pistol bills, Governor Roosevelt asked one of the champions of the new legislation if he thought it derogatory to be fingerprinted. 'Yes, I certainly do,' was the reply, 'and there are thousands of other citizens who feel the same way.' 'Well,' the Governor rejoined, 'I don't.' The witness was probably right about the number of citizens who felt the way he did about it. There is no prejudice more persistent than that against the taking of fingerprints

save as a method of criminal identification. But it is an utterly unreasoning prejudice. Why is it more degrading to press one's thumb on a piece of paper than to sign one's name to it? Hundreds of thousands of soldiers in the A E F had their fingerprints taken without dishonor. Nobody can apply for a job in the Federal civil service today—an honorable fellowship—without submitting to the fingerprint test.

"An up State judge warned the Governor that 'a majority of up-State citizens' refused to obey the present law requiring fingerprints

as a condition of pistol permits. If that is so, they are the victims of superstition, and need the 'schooling' the witness sarcastically suggested. In the old days even kings had no objection to having their fingerprints taken. They used them for seals. That the prints have since come into almost universal use as a means of identifying criminals only goes to show to how much wider use they could appropriately be put in ordinary civil life. A signature can be forged, but not a fingerprint. Even a man who cannot write need never lack identification so long as he has a thumb or two. Already baby footprints are recorded in hospitals throughout the land. The day will come when fingerprinting will be considered as much a matter of course as having one's photograph taken."

The *New York Herald Tribune* of April 7 contained the following item on the demand for fingerprinting in New York City:

"Since the kidnaping of Charles A. Lindbergh, Jr., many parents have applied to the New York Police Department to have their children fingerprinted, it was revealed yesterday by Commissioner Edward P. Mulrooney. The requests were granted in every instance, and all prints were turned over to the parents. Most of the requests came from the better residential sections of Manhattan.

"Although the Police Department is not prepared to handle the task, Commissioner Mulrooney believes some system of universal fingerprinting would be of benefit to persons of all ages. It would serve as positive means of identification under all circumstances."

THE GINSENG MARKET

The effects of international trade ramify to the remotest sections of the United States, as is shown by the following editorial in the *New York Sun* of March 26:

"Compton, an Ozark hill town of northern Arkansas, is about as far from Shanghai as it is possible for a place to be and it might be supposed that in interests its forty-four inhabitants had nothing in common with Shanghai's thousands or China's millions. In that estimate, however, the world failed to take into consideration the influence of world commerce. The New York market did not watch more closely the course of the present trouble in the Far East than did this small town in the Ozark hills. The reason is evident. Compton is the seat, the center, of the production in America of the Chinese sacred medicinal plant ginseng. It sends to China a ginseng which the natives say comes near to comparing favorably with the original Korean product, and in this it had a monopoly. The market, which had been good for more than a quarter of a century, went "all to the hound dogs" when the Japanese and the Chinese began fighting in Manchuria.

From \$50 or \$40 a packet the sacred root dropped to less than a dollar, and a dull market at that price. Wall Street could not voice a louder complaint than did Compton.

"The Korean supply had been falling off for years and the Chinese Emperor had ordered a complete discontinuance of the cultivation and sale until the soil had recovered its natural strength and productivity. Much of the American offering was pronounced lacking in the desired medicinal properties, and eventually about the only rival which the Ozarks had in production was the ginseng found in the hills of eastern Kentucky, a region similar in soil qualities, moisture and sunshine to the northern Arkansas hills.

"Compton has not lost hope; it is passing through its dull period cheerily, inspired by the faith that when the Far East war is over its ginseng will find a new and better market. Commerce has a long arm and distance seems to count little in its calculation. Somehow it has the capacity for carrying the best that the maker can produce to the market where it has the best sale."





BOOKS RECEIVED



Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits, or in the interests of our readers.

- CLINICAL ATLAS OF BLOOD DISEASES** By A. PINEY, M.D., M.R.C.P. and STANLEY WYARD, M.D., M.R.C.P. Second edition. Octavo of 105 pages, illustrated. Philadelphia, P. Blakiston's Son & Co. Inc., 1932. Cloth, \$4.00.
- MAN AND MICROBES** By STANHOPE BAYNE-JONES, M.D. 12mo of 128 pages, illustrated. Baltimore, The Williams & Wilkins Company, 1932. Cloth, \$1.00 (A Century of Progress Series).
- APPLIED PHARMACOLOGY** By A. J. CLARK, M.C., M.D. Fourth edition. Octavo of 590 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc., 1932. Cloth, \$4.00.
- BIOCHEMISTRY IN INTERNAL MEDICINE** By MAY TRUMPER, Ph.D. and ABRAHAM CANTROW, M.D. Octavo of 454 pages, illustrated. Philadelphia, W. B. Saunders Company, 1932. Cloth, \$5.50.
- MANUAL OF BACTERIOLOGY** By ROBERT MUIR, M.A., M.D. and the late JAMES RITCHIE, M.D. Ninth edition revised by CARL H. BROWNING, M.D., D.P.H., and THOMAS J. MACFARLANE, M.D., D.P.H. 12mo of 866 pages, illustrated. New York, Oxford University Press, 1932. Cloth, \$4.75 (Oxford Medical Publications).
- A TEXT BOOK OF PSYCHIATRY FOR STUDENTS AND PRACTITIONERS** By D. K. HENDERSON, M.D., F.R.P.S. and R. D. GILLESPIE, M.D., M.R.C.P. Third edition. Octavo of 595 pages. New York, Oxford University Press, 1932. Cloth, \$4.50 (Oxford Medical Publications).
- A SURVEY OF THE MEDICAL FACILITIES OF THE STATE OF VERMONT** By ALTON PEEBLES, Ph.D. Octavo of 321 pages. Chicago, The University of Chicago Press [c. 1932]. Paper, \$1.50 (Publications of the Committee on the Costs of Medical Care No. 13).
- MIDWIVES, CHIROPODISTS, AND OPTOMETRISTS Their Place in Medical Care** By LOUIS S. REED, Ph.D. Octavo of 70 pages. Chicago, The University of Chicago Press [c. 1932]. Paper, \$1.00 (Publications of the Committee on the Costs of Medical Care No. 15).
- SURGICAL CLINICS OF NORTH AMERICA** Vol. 12, No. 2, April, 1932 (New York Number). Published every other month by the W. B. Saunders Company. Philadelphia and London. Per Clinic Year (6 issues). Cloth, \$16.00 net, paper, \$12.00 net.
- TEXT-BOOK OF MASSAGE AND REMEDIAL GYMNASTICS** By L. L. DESPARD. Third edition. Quarto of 474 pages, illustrated. New York, Oxford University Press, 1932. Cloth, \$6.00 (Oxford Medical Publications).
- DISEASES OF THE KIDNEY** By W. GIRLING BALL, F.R.C.S. and GOSFREY EVANS, M.D., F.R.C.P. Octavo of 424 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc., 1932. Cloth, \$7.50.
- RECENT ADVANCES IN BACTERIOLOGY AND THE STUDY OF THE INFECTIONS** By J. HENRY DIBLE, M.B., F.R.C.P. Second Edition. Octavo of 476 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc., 1932. Cloth, \$3.50.
- HANDBOOK OF TROPICAL FEVERS** By N. P. JEWELL, M.D., D.P.H. and W. H. KAUNTZ, M.D., D.P.H. Octavo of 485 pages, illustrated. New York, William Wood & Company, 1932. Cloth, \$6.00.
- MENTAL NURSING (SIMPLIFIED)** By O. P. NAPIER PEARNS, M.R.C.S., L.R.C.P. 16mo of 304 pages, illustrated. New York, William Wood & Company, 1932. Cloth, \$2.00.
- WHIFFLER AND JACK'S HANDBOOK OF MEDICINE** Ninth edition revised by JOHN HENDERSON, M.D., F.R.F.P.S. 12mo of 654 pages, illustrated. New York, William Wood & Company, 1932. Flexible cloth, \$4.00.
- PSYCHOLOGY IN GENERAL NURSING** By ISABEL G. H. WILSON, M.D., D.P.M. 12mo of 216 pages. New York, Longmans Green & Co., London, Edward Arnold & Co., 1931. Cloth, \$1.60.
- MODERN GENERAL ANESTHESIA A Practical Handbook** By JAMES G. POE, M.D. Second edition. Octavo of 231 pages, illustrated. Philadelphia, F. A. Davis Company, 1932. Cloth, \$2.50.
- PATHOLOGY FOR NURSES** By EUGENE C. PIETTE, M.D. Octavo of 251 pages, illustrated. Philadelphia, F. A. Davis Company, 1932. Cloth, \$1.75.
- THE WAY OF HEALTH INSURANCE** By A. M. SIMONS and NATHAN SINAI. Octavo of 215 pages. Chicago, The University of Chicago Press (c. 1932). Cloth, \$2.00 (Publications of the Committee on the Study of Dental Practice of the American Dental Association No. 6).
- THE RHEUMATIC INFECTION IN CHILDHOOD** By LEONARD FINDLAY, M.D., D.Sc. Octavo of 187 pages, illustrated. New York, William Wood & Company, 1932. Cloth, \$3.50.
- PHYSIOTHERAPY ITS PRINCIPLES AND PRACTICE** By F. HOWARD HUMPHRIES, M.D., F.R.C.P. and RALPH E. STUART-WEBB, M.B., B.S. Octavo of 399 pages, illustrated. New York, The Macmillan Company, 1932. Cloth, \$4.50.
- A TEXT-BOOK OF X-RAY THERAPEUTICS** By ROBERT KNOX, M.D., C.M. Fourth edition completed and edited by WALTER M. LEVITT. Quarto of 250 pages, illustrated. New York, The Macmillan Company, 1932. Cloth, \$7.00 (The Edinburgh Medical Series).
- INTRACRANIAL TUMOURS Notes Upon a Series of Two Thousand Verified Cases with Surgical-Mortality Percentages Pertaining Thereto** By HARVEY CUSHING. Quarto of 150 pages, illustrated. Springfield, Charles C. Thomas, 1932. Cloth, \$5.00.
- METHODS AND PROBLEMS OF MEDICAL EDUCATION (Twentieth Series)** Quarto of 250 pages, illustrated. New York, The Rockefeller Foundation, 1932.
- MICROSCOPIC SLIDE PRECIPITATION TESTS FOR THE DIAGNOSIS AND EXCLUSION OF SYPHILIS** By B. S. KLINE, A.B., M.D. Octavo of 99 pages, illustrated. Baltimore, The Williams & Wilkins Company, 1932. Cloth, \$2.50.

BOOK REVIEWS

EMERGENCY SURGERY. By JOHN WILLIAM SLUSS, A.M., M.D., and JOHN WALTER MARTIN, M.D., F.A.C.S. Assisted by DAVID HART SLUSS, M.D., F.A.C.S., and CAMILIUS BOWEN DEMOTTE, B.D., M.D. Fifth edition. 12mo of 879 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Flexible cloth, \$5.00.

In these pages we have a broad and fairly lucid attempt to describe under the heading of Emergency Surgery the more urgent of the surgical procedures.

The authors have assembled in readable form a mass of material which, for many physicians, may not otherwise be readily available.

While we cannot agree that the outline has been strictly limited to Emergency Surgery, the inclusions are conceded as perhaps necessary to the development of the entire theme. In the chapter on Anesthesia the reference to Ether as being the safest emergency anesthetic is the statement of greatest value. The section on Spinal Anesthesia may well have been limited to the final paragraph.

As stated in the preface the volume should be of most value to the physician doing occasional surgery of the emergency type. This value is attested by the issue of a Fifth edition in a book of convenient size and printed in very legible type.

STANLEY B. THOMAS.

ILLUSTRATED PRIMER ON FRACTURES. Prepared by the Cooperative Committee on Fractures. Under Auspices of Section on Surgery, General and Abdominal and Section on Orthopedic Surgery in cooperation with Department of Scientific Exhibit of the American Medical Association. Second edition, revised and re-edited. Quarto of 63 pages, illustrated. Chicago, American Medical Association, 1931. Cloth, \$1.00.

This booklet is, as its name implies, a Primer on fractures, and furnishes in a brief and concise manner a wealth of material, and the collective thoughts of the best and most experienced minds on that subject.

Unfortunately, its brevity limits its description to a degree that makes it inadequate for the successful treatment of any fracture. It deserves especial favorable commendation on its advice on immediate splinting traction when necessary, and on the repeated urgings of X-Rays, Antero-posterior and lateral views, especially after reduction and other emergency measures advocated.

The use of the slow or medium setting plaster of paris as advocated, is of no advantage and may allow the displacement of the reduced fracture before it is fully hardened.

As a means of warning against the pitfalls in the treatment of this very important branch of surgery, it is invaluable.

As a guide to the proper treatment of fractures it lacks the most necessary detail and one would be obliged to obtain that information from a standard text book on the subject, or better still, through proper hospital or other training.

One cannot fail to note with favor the sound advice given on the reduction and immobilization of various types of fractures, as well as on the advantage of early active motion of the injured limb, especially when the fractures are at or near a joint.

The text within these covers is freely illustrated by a number of drawings and diagrams, which are very simple and self-explanatory.

Anyone treating fractures, cannot upon thorough digestion of the contents of this book, no matter what the

amount of his previous experience had been, fails to gain some additional concrete knowledge to his present foundation.

N. H. RACHLIN.

TABLES OF FOOD VALUES. By ALICE V. BRADLEY, B.S. Quarto of 128 pages. Peoria, Ill., The Manual Arts Press, [c.1931]. Cloth, \$2.00.

Miss Bradley presents a very valuable compilation of foods and their values. It is divided into two parts. Part 1 contains tables showing the food value of ordinary servings of commonly used foods. In addition to the carbohydrate, protein, fat and caloric values of foods, there are listed Ca, P and Fe content, vitamin value, value as source of bulk and the acid or base reaction of the ash. In the second part the same properties are classified and calculated on a percentage basis in 100 gram portions.

It is a valuable ready reference for anyone interested in the nutritional value of foods.

WILLIAM S. COLLENS.

THE INBORN FACTORS IN DISEASE: An Essay. By ARCHIBALD E. GARROD, K.C.M.G., D.M. 12mo of 160 pages. Oxford, Clarendon Press, 1931. Cloth, \$2.75.

It was known as early as the beginning of the Christian era that some individuals are more liable to disease than others and that diseases have peculiar familial and hereditary characters. In the prologue the author presents an interesting history of the writings on diathesis. The book is divided into two parts: first on the basic principles of predisposition to disease and second, on the types of predisposition. Prof. Garrod supports Aristotle's definition of health as being "an inborn capacity to easy resistance to those unhealthy influences that may ordinarily arise," and disease "a lack of the capacity." Thus the author elaborates on these inborn capacities as being or varying qualitative differences. For example the tubercle bacillus on invading the human organism will manifest varying types of clinical syndromes depending upon the individual resistance or vulnerability of the individual. While in one case its presence is recognized by invasion of the lungs, in another it will invade the meninges. Again some infants will develop scurvy on diets which others can take with impunity. There are interesting chapters on the chemical basis of individuality, and the inheritance of morbid liabilities. In the second part of the book the author discusses the kinds of predispositions and takes up systematically the role of structure in disease and tissue defects. He cites examples of the inherited character of these rarer abiotrophies such as myositis ossificans, or the syndrome of blue sclera and brittle bones as of mesodermal defects. Ectodermal defects are illustrated by absence of teeth or absence of sweat glands. The brittleness of red blood cells occurring in hemolytic jaundice seems to be another manifestation of an inborn tissue defect. And so occur the chemical defects which are manifested by variations in resistance to infection, errors in metabolism such as oochronosis, cystinuria, biliary calculus formation, osteoarthritis and finally chemical defects as exist in the immunological diseases such as the allergies.

The author has written a beautiful and stimulating essay and has expressed in fine literary style the philosophic conclusions of many years of study of the nature of disease. The reader is forced to agree while reading this interesting book that the Mendelian law of recessives and dominants plays an enormous part in the natural history of conditions which we call diseased states.

WILLIAM S. COLLENS.

DIAGNOSIS IN JOINT DISEASE A Clinical and Pathological Study of Arthritis By NATHANIEL ALLISON M.D., F.A.C.S., and RALPH GHORNEY, M.D. Quarto of 196 pages, illustrated. New York William Wood and Company, 1931. Cloth \$11.00

This treatise is a Clinical and Pathological study of arthritis from the Orthopedic Service of the Massachusetts General Hospital and the Harvard Medical School assisted by the DeLamar Mobile Research Fund. The period of the study was the years 1924 to 1930. The number of cases studied were 289.

The great object in the study was more definitely to determine a true diagnosis of each case by covering all possible findings, to weigh each finding as to its relation with the disease and so come to an intelligent solution of the problem. Furthermore a very definite thought in the work is an attempt at simplification of the nomenclature.

One who reviews this book is tempted to give his own working classification of arthritis but such a display would only confuse the attempt of the authors. Like most classifications the authors go very well on the bacterial side but confusion occurs when they come to the arthritis of truly unknown etiology when they must swing from that which causes the condition to the result.

The book closes with a large number of case histories that are exceedingly interesting and instructive. The illustrations and make up of the book are most excellent. J. A. C. R.

MEDICAL ELECTRICITY FOR STUDENTS By A. R. I. BROWNE. Third edition. 12mo of 245 pages illustrated. New York Oxford University Press [c1931]. Cloth \$4.00 (Oxford Medical Publications).

In this excellent book the author presents a most concise and yet inclusive exposition of the basic principles of medical electricity. The volume is divided into three parts devoted respectively to electricity and magnetism, medical apparatus and electrical treatment. There are interesting chapters covering the basic elements of electro physics as well as the more technical descriptions of apparatus and treatment. The book is well written in a most fascinating and interesting manner. It is clearly printed and illustrated and can be highly recommended to the practitioner as well as to the student of physical therapy. JEROME WEISS

MODERN MEDICAL TREATMENT By C. BELLINGHAM SMITH M.D. FRCP, and ANTHONY FILLING M.D., FRCP. Two volumes. Octavo of 1406 pages illustrated. New York, William Wood and Company, 1931. Cloth \$12.00

These two volumes on Modern Medical Treatment are carefully written, accurate, concise and present the subject in a comprehensive manner. The more usual conditions of disease of the various systems are clearly given and differential diagnoses are stated with especial emphasis on pathological conditions of the nervous system and the digestive system given in the greatest detail. A study of this work will well repay one and give a clear idea as to treatment as followed out by the British. This work is printed in Great Britain is excellently presented and a work of which the publishers may feel well satisfied. HENRY M. MOSES

APPROVED LABORATORY TECHNIC Clinical Pathological, Bacteriological, Serological, Biochemical, Histological. Prepared under the Auspices of the American Society of Clinical Pathologists by JOHN A. KOHLER M.D., DR. P. H. and FRED. BOERNER V.M.D. Assisted by C. ZENT GARNER A. B. M.D. Octavo of 663 pages illustrated. New York and London, D. Appleton and Company, 1931. Cloth, \$7.50

The Approved Laboratory Technique comprises a well assorted and large number of procedures, which practically cover the whole field of clinical and experimental laboratory work. The authors deserve particular praise for the clarity of their description and lucidity with which the subject is presented.

It does not detract essentially from the value of this book that the authors failed to give sufficiently detailed instructions in some points. Thus no mention is made of the fact that the determination of blood in the feces is of no value unless the patient has been on an appropriate diet for a number of days. Another instance of this kind is the omission of a catalysing agent (palladium) the presence of which is necessary if anaerobic cultures are to be made in a hydrogen medium according to Smilie.

In the discussion of vaccines it is said that bacillus proteus does not lend itself for the purpose of vaccine preparation. Yet to quote the recently appeared British system of bacteriology, bacillus proteus vaccines have been of service in the treatment of various conditions.

It is regrettable that in the discussion of sedimentation tests the Westergren method is omitted which is quite popular in many institutions in this country and probably the most widely used method abroad. We cannot fail to draw the attention to the discussion of the pregnancy tests in this book. The test given as Aschheim Zondek test differs from the one described by Zondek in his last few communications. This book advises to inject five mice once with different amounts of urine, whereas the real Aschheim Zondek test requires repeated injections of the same amount into all five animals. We wonder if following the instructions given in this book would not prove to be misleading.

It is somewhat surprising to note that the important chapter on complement fixation tests goes under the name of Kolmer's test for complement fixation. As a matter of fact Kolmer's test is a modification of Wassermann's reaction and of the test devised by Bordet and Gengou for complement fixation in general. Wassermann's name which is attached to the complement fixation test for syphilis all over the world does not once appear in these pages with the exception of the index where the reader is referred to Kolmer's test. We are sure most readers would be inclined to appreciate Kolmer's valuable work much more if due credit would be given to the real originators of the procedure.

As a whole the book seems to be a valuable aid in the performance of the daily laboratory routine.

M. A. GOLDBIEHER

CHILD HEALTH AND THE COMMUNITY An Interpretation of Cooperative Effort in Public Health By COURTNEY DINWIDDIE. Octavo of 80 pages illustrated. New York The Commonwealth Fund 1931. Cloth \$1.00

This is a publication of the Commonwealth Fund child health program. There were four communities of a population of 100,000 to 120,000 each selected from various sections of the country and in each a child health program was instituted by the Child Health Demonstration Committee administrators of the Commonwealth Fund for this work. Maternal and child health services were set up. The relation of the physician and general public to these services is taken up. There is an appendix which takes up some of the technical work in more detail and a complete bibliography.

The work shows how a small city or rural county may set up a well rounded community health service program and include the expense as part of its yearly budget. From the standpoint of the physician a plea is made for greater training in the medical schools in the field of preventive medicine and in public health.

STANLEY S. LAMM

OUR NEIGHBORS

DISTRIBUTION OF PHYSICIANS IN INDIANA

The leading article in the April issue of the Journal of the Indiana State Medical Association is on the subject "The distribution of physicians in Indiana," by Dr. Thurman B. Rice, of Indianapolis, Associate Professor of Bacteriology and Public Health in the Medical School of the University of Indiana. The article is intensely practical and readable and will have a strong appeal to every physician who is interested in Medical Economics.

Dr. Rice had in view an immediate object which he stated as follows:

medical service. In particular it has been intended to help the graduates of Indiana University School of Medicine in the momentous decision which faces every graduate. The study is one of several that are being made concerning matters pertaining to the distribution of disease in Indiana. Economic, sociological, political, racial, and every other sort of relation that might be of medical interest are being represented in form similar to the figures herein represented.

"Indiana is a particularly favorable state for such a study for several reasons. 1. It is a perfectly balanced state as a result of the fact that its only really large city is in the exact geographical center of the state, and its cities of secondary size are distributed evenly about the periphery. 2. It has no large foreign problem. 3. It has no large negro problem. 4. It has good vital statistics, having been in the United States Registration Area for Deaths since 1900. 5. It is at the center of population of the United States. 6. It is a state that is well known for the reason that it is crossed by nearly all travelers who go between the East and the West or Middle West. 7. It is the smallest state (in area) west of the Allegheny Mountains and so can be studied easily by one who is located centrally. 8. It is perhaps the best example of an 'average' state.

"This paper is offered in the hope that it may serve to stimulate other similar studies. We have no doubt that many of the same relations that are found to exist in Indiana have their counterparts in other states."

The essential element in the article is a series of twenty-one maps on the following subjects which are indicated by shadings:

Map 1. Population per physician in the United States by States.

Map 2. Wealth per capita, by States.

Map 3. Population per physician in practice in Indiana.

Map 4. Average age of physicians in actual practice.

Map 5. Medical supply and demand.

Map 6. The distribution of urban and rural population.

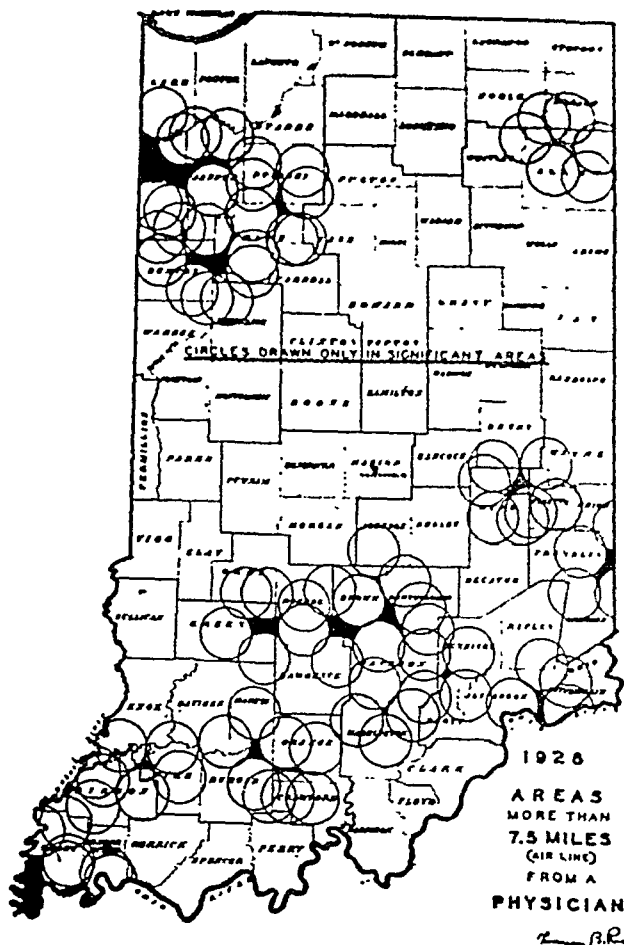
Map 7. Loss in population since the last census.

Map 8. Gain in population since last census.

Map 9. Assessed wealth per capita of the population.

Map 10. Assessed wealth of the county per physician.

(Continued on page 634—adv. xii)



Distribution of physicians in Indiana. The black sections indicate those areas which are more than seven and one half miles from a doctor.

"The present study was begun with the intention of making available information concerning the distribution of physicians and other facilities which may be of interest to the members of the profession, to young graduates seeking locations, and to communities which may be in need of

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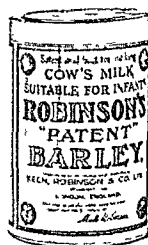
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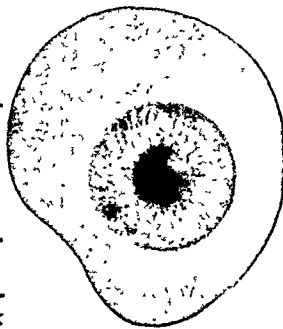
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(Continued from page 632)

Map 11. Roads—All types.

Map 12. Improved roads.

Map 13. Distribution of General Hospitals.

Map 14. Special hospitals.

Map 15. State hospitals.

Map 16. Sanatoria for the treatment of tuberculosis.

Map 17. Map showing membership in local medical association.

Map 18. Distance to nearest physician.

Map 19. Deaths of physicians.

Map 20. Locations of physicians who have been licensed, 1921-30.

Map 21. Original homes of medical students who graduated, 1921-30.

Commenting on Map No. 3, Dr. Rice says:

"Map 3 is of interest particularly to one who is familiar with the state of Indiana. In every county (with the exception of Lake in the extreme northwestern corner next to Chicago) with a large urban population there are relatively many physicians. Lake county has a large foreign population and has been growing exceedingly rapidly. It has not as yet reached a state of equilibrium. Strictly rural communities have relatively few physicians."

The condition in Lake County, Indiana, is paralleled by that in Queens County, a borough of Greater New York, with a population of 1,079,000, an increase of 130 per cent in ten years. The physicians number 938, or one in each 1,140 of population. This is practically the same proportion that it was in 1925.

Dr. Rice writes:

"Map 5 is probably the most useful of the maps. In this we have made the attempt to arrive at a coefficient which would express the three factors which determine the supply of and demand for physicians if other conditions were the same:

"1. Population—the more people the more physicians will be needed. 2. The number of physicians in actual practice. 3. The life expectancy of a physician of the average for a given county as shown in Map 4. We have divided the population by the product of the number of physicians in practice times the average life expectancy and have obtained an abstract number which averages 38.9 for the entire state and as low as 20 for Marion county and as high as 250 for Brown county. Since many doctors retire years before they die it would have been better if we could have used the average expectancy in practice but there are no sources for such figures.

"Counties with high coefficients (shaded heavily) are evidently more in need of physicians than those with low (light shading). A young

(Continued on page 635—Adv. xiii)

(Continued from page 634—Adv. vii)

man seeking a place to practice would seek one of the darker counties provided economic conditions, roads, and general culture were such as would make such counties attractive. It is evident that the counties with cities are relatively well supplied or even over-supplied.

"Map 10 shows the total wealth of the county divided by the number of physicians. In some communities the physicians can draw on more than two and one-half millions while in others he would be in contact with less than one million dollars worth of property. By comparison with Map 9 we see that physicians tend to be more numerous where there is money.

"Map 17 gives the number of physicians in the county (denominator of the fraction), the number who belong to the local medical society (numerator of the fraction) and the percentage of all who belong."

The distance that a patient would have to go to secure a doctor is frequently discussed in New York State. Discussing this point, Dr. Rice says:

"Much has been said about the supposed fact that many communities cannot get a doctor because of distance. This is hardly true of Indiana. Map 18, page 632, was made by drawing a circle representing 7.5 miles about each town that had a doctor. Those places more than 7.5 miles are shown shaded black. All of the larger black spots are settled sparsely. With good roads, automobiles and telephones to hasten the service it seems as if there is nothing to worry about in Indiana on this score. An attempt to make a map showing telephones was made, but it was found that practically every community in the state was within a mile or two of a phone and so the map did not seem very significant."

Dr. Rice enumerates the following conclusions:

"The following conclusions seem rather apparent:

"1. The distribution of physicians is influenced by the distribution of wealth.

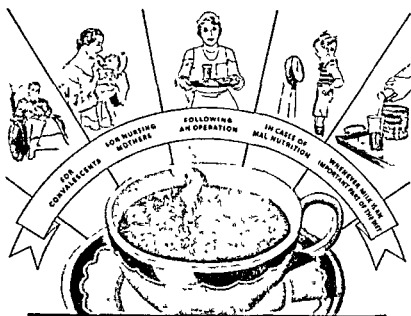
"2. The younger physicians are going to the cities rather than to the rural districts.

"3. Few communities in Indiana are now in great need of physicians.

"4. At present rates—if they should continue—many counties in southern Indiana will in ten or fifteen years be dangerously in need of physicians.

"5. Modern industrial centers are producing few physicians but are attracting many; rural and small town districts are producing many physicians but cannot hold them after they have graduated.

"6. Matters pertaining to the distribution of physicians are capable of being analyzed and it is not unlikely that unequal distribution can be corrected in large measure by the publication of data such as the above."



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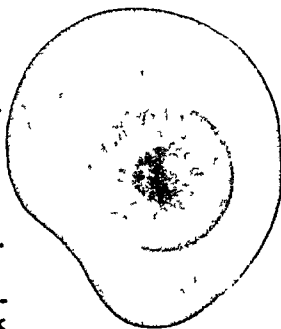
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(Continued on page 635—Adv. aiii)

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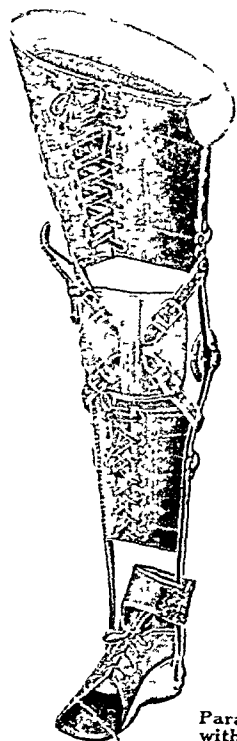
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SURVEY OF MEDICAL AGENCIES IN MICHIGAN

This Journal of December 1, 1931, page 1480, printed an abstract of a report of the action of the House of Delegates of the Michigan State Medical Society on September 22, 1931, that a committee study the lay health agencies of Michigan and report at a special meeting of the House of Delegates early in the year 1932. The meeting was held on January 22, and is reported in the March issue of the Journal of the Michigan State Medical Society. The Committee made a report of forty-five pages, but it was presented at an executive session and was not printed, even in abstract or summary, in the Journal. The Secretary stated that the Committee had not started its investigations, but it evidently had made extensive plans to study the thirty or more health organizations of the State. The statement was also made that the cost of the investigation would apparently be \$25,000, and that a large part of the money had been already promised, evidently from non-medical sources.

The tangible action of the House of Delegates was to vote to instruct the Committee to continue its investigations and report at the regular annual meeting of the House of Delegates in September.

The Committee on the Survey of Medical Agencies made the following recommendations which were adopted:

"1. That any physician becomes ineligible for membership or continuance of his membership if he associates himself with any group, clinic or hospital that provides medical care to an individual who is financially able to assume reasonable charges for his medical care and where such groups, clinics or hospitals do not permit its medical staff to determine the individual's eligibility for free service.

"2. That this House of Delegates transmit to the University Regents and to the Administration Committee of the University Medical School and Hospital its disapproval of any attempt or activity that has for its purpose the taking over, by medical faculty or staff members, the administration of any clinic or hospital in the State. That we protest the use of the University Hospital for the care of patients beyond the number required for teaching purposes.

"3. That each county society appoint a Public Relations Committee for the study, solution and adjustment of local problems in the distribution of medical service.

"4. That legal proceedings be instituted against corporations now practicing corporate medicine in an endeavor to terminate corporate practice."

COMMITTEE ON PUBLIC RELATIONS IN PENNSYLVANIA

The editorial department of the April number of the *Pennsylvania Medical Journal* contains the following letter, a copy of which was sent to the secretaries of the county societies of the State

"The Committee on Public Relations of your State Medical Society, at its organization meeting, December 8, decided that a proper knowledge of medical history is essential if a clearer understanding of the many-sided problem involved in the prevention and treatment of sickness is to be developed between the organized medical profession and the people of Pennsylvania

"We are publishing, therefore, for the benefit of the officers and members of your Society, an outline which includes a number of practical suggestions for not only the nucleus of a library on medical history, but also a series of proposed programs for meetings of your county society concerning possible scientific medical subjects and the history of the development of such subjects. These outlines, it is believed, will be found sufficiently elastic to meet the needs and the conditions of the individual societies, whether large or small"

The outline of study printed in the *Journal* was revised by Dr J D Heard, of Pittsburgh, who says in the introduction

"It is suggested that four papers be assigned to each meeting. The papers presented are of two types—(a) biographical, (b) scientific. (a) Biographical papers should be devoted to a discussion of the lives of men who have made great contributions to medicine. The lives and work of these men should be considered in relation with their background, namely of the general state of society and the degree of medical knowledge possessed by the profession at the time in which their work was done

"(b) The topics of the scientific papers should be suggested by the contributions of the men who are being considered biographically but should present the modern aspect of the subject discussed

"In preparing a program for a single meeting it would probably be advisable to include biographies of two men who had worked in a like field but at periods somewhat widely separated as to time. Examples of this method will be found in the accompanying outline. A variant which might increase the interest of the individual meeting would be to divide the program between a so-called fundamental and clinical branch. Thus, 'Vesalius' and 'The Treatment of Empyema' might be combined with papers on 'Laënnec' and 'Bronchiectasis' "

The outlines of study are presented on the following topics

1 Value of medical history, (a) Hippocrates,

(Continued on page 640—142 1 111)

THOUGHTS

ON THE PRESCRIBING OF DIGITALIS NO 2

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*Clendening, Modern Methods of Treatment ' page 114

(Continued from page 639—Adv. xvii)

(b) The supernatural in medicine, ancient and modern.

"2. Anatomy, (a) Vesalius, (b) Trichinosis.

"3. Physiology, (a) Galen and Harvey, (b) Congestive heart failure.

"4. Morbid Anatomy, (a) Morgagni and Virchow, (b) Leukemia.

"5. Bacteriology, (a) Pasteur and Koch, (b) Hydrophobia.

"6. Internal Medicine, (a) Laënnec and Osler, (b) Blood platelets.

"7. Surgery, (a) Pare and Lister, (b) Flies, or local sepsis.

"8. Neurology, (a) Charcot or Mitchell, (b) Nerve injuries.

"9. Obstetrics, (a) Simpson and Semmelweis, (b) Anesthesia or sepsis.

"10. Gynecology, (a) Sims and McDowell, (b) Ovariectomy."

An extensive list of reference books completes the report.

CORONERS' CASES IN MAINE

The leading editorial in the January issue of the *Maine Medical Journal* discusses the need of administrative machinery for determining the cases of death in what are called "Coroners' Cases" in New York, and says:

"The laws of Maine governing the disposition of dead bodies and procedure in the matter of investigation, cause and manner of death are perhaps adequate; certainly they are better than those that obtain in many modern states both in this and other lands. Our practice under the law falls far short of guaranteeing that degree of protection to society which a modern state should have.

"If it is of importance to determine the exact cause of death in the case of persons found dead in order to determine the manner of death, whether suicidal or accidental, criminal or otherwise, or the result of foul play, no effort should be spared to answer this question i.e., exact cause of death in the most authoritative way.

"Here lies the weakness of our procedure. The doctor must answer this question, but the average doctor is not, and never will be, qualified to solve the problem when the solution must so often depend upon the findings of a complete autopsy checked by the pathologist, toxicologist, chemist and other specialists. The sole source of authoritative opinion and decisions, including reliable interpretations of autopsy findings, today is the well-equipped pathological department of the modern hospital.

(Continued on page 641—Adv. xix)

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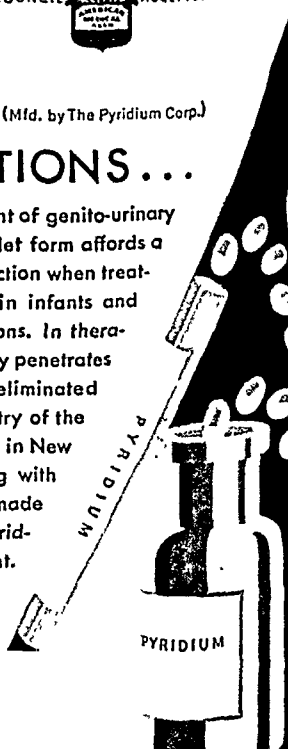
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(Continued from page 640—Adv. xvi)

"The first and most important step to improve the situation in Maine is to recognize this undoubted fact. In Portland, Lewiston some encouragement and support from the profession and the State Health and Welfare and Bangor are general hospitals, which, with Department, might so develop their already efficient pathological departments as to soon bring about this first important step at a miniature as centers where all autopsies and special examinations involving medico-legal questions might be performed. Proper cooperative effort of the medical and legal professions and the Department of Health and Welfare could mean of cost, for no new agencies are needed to effect some such arrangement.

"We feel confident that the medical profession of Maine might be of far greater service to the state and to the legal profession in solving some of the questions which arise when a dead body is found."

MALPRACTICE DEFENSE IN MICHIGAN

The April issue of the Journal of the Michigan State Medical Society discusses malpractice defense, as follows:

"Last year was one of the severest in the history of the Michigan State Medical Society in the cost of medical defense. Nothing but a full paid-up membership in County and State Society will enable the State Medical Society to meet the exigencies of such a situation should it prevail during 1932. For the monthly expense of defending malpractice cases during 1931, see page 160, February Journal of the Michigan State Medical Society.

"If fire insurance premiums were permitted to lapse even a day, the policyholder would be a heavy loser in the event of a conflagration. A malpractice suit may eventuate in greater loss than that occasioned by a fire.

"Hitherto, the State Medical Society has carried many delinquent members. It is no longer able to do so. As a result a member's name on the list of delinquents will mean that he forfeits the right to protection if threatened with a suit for malpractice.

"Membership in county and state medical society and American Medical Association is as much a necessity to the practicing physician as an automobile and office equipment. It should be looked upon as important a 'fixed expense' as either of the necessities mentioned. Prudence demands that it be so considered. No one should deny himself the benefit of such protection from the day he begins practice until that time when age or other factors compel him to retire. Even if one must resign from organizations, fraternal or social, do so, but maintain a live connection with the county medical society."

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Grille and Hôpital which are imported by these Agents but these are not sent here in as large quantities as the "Vichy Célestins." This Agency also imports the Vichy Salts and Vichy Pastilles which are called Products of Vichy-Etat because they are made from the Salts extracted from the waters of these government-owned Springs. The Exhibit at booth No. 8—Annual Meeting, Buffalo—will consist of these goods and of photographs of the scientifically equipped therapeutic establishments at Vichy to which the Medical Profession of the United States annually sends many patients for the treatment of diseases of the stomach, liver, etc.—See page x—Adv.

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See page xiv.—Adv.

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SOCIAL AND ECONOMIC PROBLEMS FACING THE MEDICAL PROFESSION*

By NATHAN B. VAN ETEN, M.D., NEW YORK, N. Y.

THE five year study of the Committee on the Costs of Medical Care has resulted in the collection of authoritative data concerning the health of the people of the United States, their social attitude toward medical service—their ability to pay for medical service—environmental and industrial conditions contributing to illness—and the extent of illness through every life period from birth to burial.

The committee has eagerly sought the truth—making every effort to lay aside prejudice, preconceived ideas and premature conclusions until the real facts could be carefully and honestly weighed and their implications interpreted.

It is remarkable that no one of this large committee of fifty mature people has attempted to dominate the thought of the committee or tried to prove a theory—or tried to set up an ideal.

Viewing the problem from many angles the committee has tried to verify and appraise the enormous amount of factual data collected by the research staff—and nearing the end of the committee's life—has not yet decided upon a concrete plan or specific recommendations.

The science of medicine has developed so much more rapidly than the art and the application of medicine and the struggle of the medical profession to keep up with modern scientific thought is so absorbing that the business of medicine has lagged behind and an impression has been created that physicians are indifferent to the economic problems which surround them.

It is true that reactionaries have dug their heels deeply into the soil of tradition and have resisted modern change with every conservative argument with an intense desire to preserve the sanctity of the guild and the continuance of individualism—and that there are those who cannot be aroused to interest themselves in legislative activity either in the interest of

the public health or the protection of themselves against the inroads of cults and sub-standard practitioners—but it is also quite evident that there is an active nation-wide desire for our final report with the hope that it will contain or inspire some new program of medical service.

Physicians practicing in the last half of the 19th Century were still real individualists holding outstanding leadership in their communities—highly respected—consultants on every problem of family life—receiving small fees or no fees or fees in kind, such as chickens, eggs or potatoes—and suffering little competition from specialists. They gave much less thought to the economics of medicine than to intensive interest in rendering the best possible service to the sick.

The code of ethics concerning professional relations with homeopaths—eclectics and physio-medicalists caused sharp division between old code men and new code men but there was very little then of the wide spread of education by the cults and organized groups of irregulars, which has recently grown so rapidly.

Charlatanism and quackery have walked step by step with the development of medical service through the ages, but organized group infringements upon the medical field have assumed hitherto unknown proportions during the last thirty years.

The changing order has been slowly gaining momentum during these years attaining such speed that we now are fearful lest the whole social machine may jump the track.

Whither medicine no one really knows—but it promises to become less individualistic and possibly increasingly dominated by governmental influence. We have 145,000 physicians in the United States, most of whom are educationally well qualified, 100,000 of them members of the American Medical Association. Opposed to them are 36,000 other individuals of lesser education, who hold themselves out and loudly

* Read at a special meeting of the New York Academy of Medicine on March 9, 1932.

advertise themselves as competent to minister to the sick.

7,600 Osteopaths who take \$42,000,000 annually for their services.

16,000 Chiropractors who take \$63,000,000.

2,500 Naturopaths and the like who get \$10,000,000 and 10,000 Christian Scientists and other religious healers who take another \$10,000,000. A total of \$125,000,000—for irregular practitioners—all of whom have grown up in the last 30 years, and all flourishing because a gullible public has been attracted by the advertising of their panaceas—and because they were offering something which the medical profession not only would not lay claim to but also was too indifferent even to protest against.

There is justification for claiming that the medical profession has some responsibility for the growth of these groups because it paid too little attention to massage—too little attention to mental ills and neglected psychotherapy—but I believe that the success of all of these movements to enter the practice of medicine by back doors and short cuts may be measured by the quality and quantity of their publicity.

Most of the commercial advertising is faulty through misrepresentation and through placing therapeutics ahead of diagnosis—while on the other hand some of it also has indirect value.

The nation has become introspective through the widespread story of halitosis. Amos and Andy have been a wonderful asset to the dentist—and the advertising of the Life Extension Institute is helping those practicing physicians who have been wise enough to make thorough physical examinations of their own patients.

While the conservative ethics and traditions of our profession are timidly restraining greatly needed educational group advertising by honest and conscientious physicians—at the same time a great tidal wave of health education is now sweeping the country, a review of which should reveal to the medical profession a great opportunity to broadcast the real values of scientific knowledge for the benefit of our people.

The Twentieth Century is staging a most remarkable development of public consciousness of the vital importance of individual and community health.

The dramatic accomplishments in sanitation and disease prevention of Gorgas at Panama—of Reed and Carroll in Yellow Fever—of Biggs in Tuberculosis and Park in Diphtheria have stimulated socially minded people to attempt practical application of the discoveries and demonstrations of these devoted scientists.

The dictum that "Public Health is Purchasable" and that "Any community may within certain limits determine its death rate" has through continued reiteration been accepted

not only as basic fact but also as an ultimate goal.

The medical profession cherishes the ideal of lower mortality and lower morbidity as its highest possible accomplishment.

The new group of four thousand young practitioners coming annually into the field of medicine, possessing an average required educational equipment unequaled in any other profession—brings fresh enthusiasm to this task.

Factfinding committees composed of physicians, educators and public-health workers, philanthropists, governmental leaders, publicists, industrialists, religious organizations, clubs which meet at luncheon—Red Cross Workers, National—State—County and Local Tuberculosis and Public Health Associations—the cancer group—the cardiac group—the Physical Education group, are all seeking basic facts and practical methods for the promotion of happiness and prosperity through public health.

The avocational interest of all of these groups engaged in Public Health activities is of incalculable value—but would be multiplied if there were no embarrassments engendered by rivalry over prestige. No solicitation stimulated by sentimental devotion to special problems—no surprise programs announced without the knowledge of all co-workers and their agreement as to principle and general plan—no invasion without consent of the professional field of those whose vocations might be disturbed—no division caused by creed or class—no duplication of effort or over-lapping of functions.

While unofficial agencies must labor within prescribed legal limits, and no measures should be employed which would dampen the God-given enthusiasm of the volunteer, some co-ordinating machinery should be erected which would develop the highest possible type of teamwork among us all and under central direction eliminate friction and waste.

For all of our troubles general education seems to be the most promising remedy.

If public health is purchasable—every taxpayer should be educated as to its economy—its needs and its profit to the community.

If we are to have lessened loss to industry through sickness—both employer and employee must be educated in the economics of disease prevention.

If we are to have healthier family life we must teach the dangers of contact with communicable disease. We must teach pre-natal-intra-natal and post-natal care and the careful conservation of the health of that most important individual the mother of the family.

If we are to continue our successful work

in Tuberculosis we not only must employ case-finding agencies to discover incipients and refer them to physicians—but also to follow up contacts in the family with education in better living conditions and personal care.

If we are to reduce cancer mortality we must teach all people the necessity of early examination by competent physicians.

If we are to diminish the loss to society through crippled hearts and other organic dysfunctions we must advocate annual birthday physical examinations and we must impress upon all physicians the importance of doing this work thoroughly.

Specialization has apparently overgrown reasonable bounds because of too many recruits with too little background of fundamental medical knowledge and too little real education in their limited fields.

It is my personal belief that the multiplication of specialists has been a potent cause of breaking down the bonds of confidential responsibility between patient and physician and whatever truth there may be in alleged instances of medical services at exorbitant cost—is safely chargeable to pseudo-specialists of low character or low scientific attainments—or both.

Much could be done to correct this situation by careful selection of medical students for character qualification as well as for basic educational attainment and also by curricular changes which would emphasize the importance of the development of clinicians.

Special certification should be required for those who would practice specialties to be given only after a legally required period in general service.

Physicians are the servants of the sick and the sick must be guaranteed good servants. Physicians are the poorly paid servants of the sick. Their sick employers are traditionally improvident—taking no account of tomorrow's need through accident, or infection, or family increase, or the decadence of age. The state requires a most expensive educational equipment for the privilege of serving the sick but in no way protects that educated servant.

The municipality offers elaborate hospitality to the sick free or at less than maintenance costs but makes no provision for remuneration of the medical servant.

The sick employer, with no thought of paying, quite consciously demands that his medical servant maintain an expensive front, keep an office well equipped with such machinery as is maintained in large institutions.

The romance of medicine has developed a body of traditional idealism that continues to influence physicians to live improvidently with an unparalleled selflessness that spells economic incompetence.

Because we have always done so is no satisfactory reason for continuing to carry the financial burden of the unbudgeted sick.

We must realize that the business of medicine must be modernized to support the life of the science of medicine and that if physicians would be leaders in medical care they must know the real conditions that surround it. We must be alive to all of the facts concerning sickness in the United States if we shall be able to give the best service to the sick with a proper appreciation of its value and a sane demand for appropriate remuneration.

Industry is attempting to reduce waste through sickness by trying experiments that range all the way from emergency dressing stations to full-time care of the worker and his family. As many as 2,000,000 people in this country receive all or part of their medical service through so-called industrial medical service.

Among many experiments in medical service are one hundred and fifty private group clinics—located mostly in the Middle West and employing an average of twelve physicians in each clinic.

The sharing of facilities for diagnosis and therapy and the grouping of physicians' offices lowers the overhead—eliminates waste of time used in traveling from one specialist to another—and permits lower charges to the patient who receives one bill for medical services.

Fifty-five of these clinics have been described and analyzed with fine clarity in a hundred-page publication by C. Rufus Rorem, Ph.D., C.P.A., and may be profitably studied by all physicians.

A lay manager usually conducts all of the financial matters and the physicians are on yearly salaries. The average net income of 301 doctors in 27 clinics was \$9,747.00 in 1929.

Besides the financial advantage to the physicians of the clinic who have partnership relations—constant consultation contact seems to promote a desire to practice good medicine which is highly appreciated by the patient.

The question may be raised—is the patient better served by the group than by the individual?

Does the divided responsibility of the group satisfactorily replace the confidential interest of the personal physician?

The patient usually starts with an internist or with a physician personally known to him and is then referred to specialists and finally returns to the first physician who analyzes all of the findings and then if necessary refers him to the appropriate physician or surgeon.

If the confidential man to man interest is not possible it is believed that the consultation

value of the group is sufficient compensation for it.

So long as the group clinic avoids the temptations of cheap contract practices, such as are described by Dr. R. G. Leland in the March 5th number of the *Journal of the American Medical Association*—they may be conducted on a high moral and scientific plane and may furnish inspiration for many groupings of physicians especially if integrated by general practitioners.

The "Costs of Medical Care" is a title which immediately stimulates a defensive reaction in the minds of physicians who visualize a reproach upon the honor of the profession and fear an attack upon their incomes.

The "High Costs of Medical Care" as many quote it, carries inferential insult to the man who knows from his personal experience that most of his colleagues like himself give away much of their time to free or inadequately paid service to the indigent—to the hand-to-mouth citizen and to the family of moderate means.

The physician who dissects his gross income and realizes that thirty-six to forty-eight cents of every dollar that he collects goes for overhead—may well believe in the high cost of the medical service which he is giving and that the high cost must be credited to the donor and not to the recipient of medical service.

17 cents out of every dollar for office expense.
10 cents for automobile maintenance and equipment.
6 cents for drugs and supplies.
3 cents for assistants.
8 cents for nurses and office help.
4 cents for miscellaneous expenses.

The fact that, of the ninety billions of our total national income in 1929, only three billion four hundred thousand dollars went to pay the health bill—that physicians got less than one third of that—and that in that same year one billion eight hundred million dollars was spent for tobacco alone is comparative evidence that our people are not in any manner rating health above luxury.

The facts disclosed by the committee's research showing—that every man, woman, and child in the United States averages a loss of seven days a year because of sickness, much of which is preventable—that one hundred and twenty thousand infants under one year of age die every year from theoretically preventable diseases—that each year thirty thousand young men and women between the ages of twenty-five and twenty-nine die from entirely preventable causes—that three hundred thousand births or fifteen per cent of the entire number of births last year were attended by fifty thou-

sand midwives, most of them untrained—ignorant—superstitious and dirty—that eighty-eight thousand three hundred and fifty-two people died from tuberculosis, and sixteen thousand one hundred and eighty-eight from syphilis in 1929, many of these deaths preventable by early detection and adequate care—that seven thousand deaths from diphtheria occurred last year, all preventable—that there were five thousand seven hundred deaths from typhoid fever, most of them preventable, thousands of cases of smallpox, with one hundred and fifty-one deaths—all preventable—four thousand deaths from malaria—all preventable, and when we discover that only twenty-two per cent of our children have been vaccinated against smallpox—and add to this the unfortunate waste of five hundred million dollars for patent medicines and self-medication—with one hundred twenty-five millions for Osteopaths, Chiropractors, Christian Science and other healers—and when we realize that none of this is due to deficiency of medical technology but from deficiencies in economic organization—then we are forced to admit the inadequacy of medical care and that the lack of medical care is costly indeed.

The general practitioner in the country is a real individualist—he has everything to do and on the whole does it well through the necessity of highly developing and actively using his five senses.

But the general practitioner in the city without hospital connection is seriously handicapped unless he makes a specialist of himself by excluding the types of work which demand expensive appliances and concentrates his study upon pure internal medicine calling upon specializing colleagues for needed help—integrating them into group service of his patients by the slender ties of consultation or by going into the physical grouping of a professional—building and sharing the overhead of office and laboratory expenses.

It seems inevitable that organized medicine will attempt to improve the income position of physicians who fall below the levels of professional dignity by attempting re-distribution or by limiting the new entrants into medical practice—or by setting up health districts surrounding new small general hospitals or existing hospitals where all of the reputable physicians in the district might be able to attend their own patients or at least to enjoy the use of hospital facilities.

It would be interesting to study plans to furnish adequate medical service to a county unit—which should include intensive preventive measures—by health education carried to every family—by complete physical examination and immunization of every pre-school

child—by the discovery and protection of every contact with communicable disease—by the institution of general periodic health examinations and by the free use of hospital facilities by every physician.

Although the insurance principle may be invoked to provide payment for medical service, the most immediate prospect seems to be the evolution of workmen's compensation laws now operating in 46 states. It seems to promise an ever-widening prospect for the inclusion of all occupational diseases—and other non-occupational diseases occurring during employment, and also the extension of medical care to the dependents of employees—through insurance provisions.

It seems unlikely that any considerable number of our people will budget sickness through the medium of voluntary insurance or through any other voluntary system. Nor is it likely that any of the present European schemes of compulsory health insurance will find nationwide endorsement. But it is evident that close scrutiny must be given to all legislative proposals and that county, state and national medical organizations must be aroused not merely to correct exploitation of physicians, but to develop constructive medical statesmanship.

I have not the slightest desire to prescribe a formula, but I believe that the average net incomes of physicians and the general satisfaction of the people of this country would be greatly improved by close organization and intensive development of all health elements under active medical leadership—with constant unremitting publicity of the real facts, accomplishments and aspirations of modern medicine.

The Committee on the Costs of Medical Care has no panacea for the economic wastes of sickness—but it is to be hoped that its collective data will of themselves compel solutions which will promote sound advances in intelligent service to all classes of people and maintain high moral and material standards for the medical profession.

The Committee will hold an advisory conference in Washington in June with experts in group thinking—in education and in public health. It will hold a two-day discussion of the final report and the analyses of the collected data. After this has been done, the report will be finished and presented to the country at the end of November, 1932—and the committee will have finished an unprecedented piece of research work into the health of the nation.

A STUDY IN FAMILIAL ACHYLIA GASTRICA, WITH COLLATERAL OBSERVATIONS ON ITS RELATIONS TO GASTRIC CANCER AND PERNICIOUS ANEMIA*

By MEYER GOLOB, M.D., NEW YORK, N. Y.

THIS study in familial achylia comprises a group of two brothers, a sister, and a half-brother born of a different mother. Both the sister and half-brother died of gastric cancer, the former at the age of 40 and the latter at 31. In both cases, the stomach contents revealed all the stigmata of achylia. The other two brothers are living. It is interesting to note that there was another sister in the family who died of diabetes mellitus at 40, and yet another sister, still alive, having the same disease.

I have delayed the publication of these cases in the hope of obtaining fuller histories of the other members of the family, but my efforts having failed in this respect, it seems to me advisable to put on record what data I have, making them available to other clinicians who may introspect this phase of achylia gastrica when occasion offers.

In presenting these cases, I will touch only upon their outstanding features for our discussion.

Case I. (♂) Male, age 31. The history of the presenting symptomatology was short and referable mainly to the digestive apparatus. Prior thereto, the patient had not suffered from stomach disorders and enjoyed good health generally. The physical findings were essentially negative. There was a roentgen filling defect of a part of the pars media and entire pars pylorica, but no corresponding palpable mass. The pylorus was gaping, as was evidenced by immediate gastric emptying. The blood Wassermann was negative. The stomach chemistry revealed a definite achylia.

Dr. Howard Lilienthal, who operated on the patient, reported that examination under anesthesia failed to disclose any mass or abdominal resistance, but this may have been due to the sthenic build of the patient, wherein the stomach is generally high in position, and therefore not readily accessible to palpation.

The operative findings were: "The whole posterior wall of the stomach formed one stiff mass of carcinoma. A nodule removed from the omentum showed a metastatic colloid car-

* Read before the Eastern Medical Society, October 9, 1931.

cinoma." The patient died several months later.

Case II. Female, aged 40, multipara. The presenting symptomatology was of three months' duration, and emphasized mainly a disordered digestive apparatus, weight loss and asthenia.

The physical examination evidenced the loss of weight, and revealed a frank mass in the upper left abdominal quadrant, irregular in outline and tender to touch. The stomach chemistry showed a definite achylia with a positive Wolff-Junghans test. The roentgen findings were: a minus filling defect in the prepyloric region, absence of peristalsis over the defect, pyloric patency, rigidity, distortion of the rugæ, and contraction in the size of the stomach. Dr. A. A. Berg did a total gastrectomy and esophago-duodenostomy. The patient died ten days later.

One may note here the striking similarity between the two cases, which differed only in the post-operative duration of life because of the conservative surgery in the first case and the heroic surgery in the second.

Case III. Male, aged 40, under observation since 1923. The presenting symptomatology was of 12 years' duration, mainly of an intestinal disorder, consisting of attacks of diarrhea alternating with constipation. The diarrheal evacuations were often accompanied by blood and mucus. The stomach chemistry established a gastrogenous etiology for his diarrhea, for repeated tests showed a definite achylia. Blood Wassermann was negative. Roentgenologic findings of the gastroenteric tract were essentially negative.

Continuous HCl administration and proper diet constitute a preventive therapy of this patient's intestinal dysfunction. His weight has increased from 120 to 140 pounds and there is evident a general constitutional expression of health.

Case IV. Male, aged 47. This case presented a very short history of the onset of symptoms, which were in the main a fatigue saturation syndrome, digestive aberration, anorexia and loss in weight. The physical findings were essentially negative, except for weight loss. The stomach analysis, on repeated tests, disclosed a definite anacidity. The roentgen investigation of the gastroenteric tract revealed no evidence of a lesion.

HCl therapy brought an arrest of symptoms and a clinical amelioration.

Discussion

In addition to their familial aspects, the cases under review demonstrate the value of a routine examination of the gastric chemistry

on a par with other secretions and excretions of the body economy. The cases of the two brothers who are living and well are fine examples of the value of preventive therapy; in sharp contrast to those of the two who died, give us a vivid suggestion of an ominous relationship between a chronic achylia and a gastric cancer.

The fact that achylia has been found consistent with good health does not preclude recourse to rational preventive medicine. In the absence of symptoms in a patient having an achlorhydria must be taken, at best, to imply the functioning of a defensive compensatory mechanism, maintained provisionally by the auxiliary organs of digestion—pancreas, succus entericus and bile.

The effect of such auxiliary activity, if prolonged, may be visualized from the following table of sequences:

- Irritability, exogenous, etiology.
- Hyperfunction.
- Chronic Gastritis.
- Hypofunction.
- Achlorhydria.
- Compensatory mechanism in action.
- No symptomatology.
- Fatigue, exhaustion of defense mechanism.
- Stormy symptomatology.

We can see here what achylia, undiscovered, may do to a patient, and what preventive therapy may do for him. It is logical to expect that overstimulation of the compensatory mechanism will lead to its exhaustion. Fatigue is responsive to rest, hyperfunction may be abated, but degeneration of the gastric mucosa is irrevocable.

To prevent fatigue of the accessory organs of digestion, HCl is the therapy of import, for HCl is nature's method of defense, designed to prevent micro-organisms in the mouth and throat from passing into the intestines without being digested by the gastric juice. Whereas the stomach and upper small intestine are, in normal individuals, practically free from pathogenic micro-organisms in cases of gastric anacidity, infective bacteria from above, and ascension of disease bacteria from below render the gastro duodenal flora similar to those found in the lower ileum or colon. Their loci of infection, while centering mainly about the points of lesser resistance, are largely fortuitous. The attack in one case may be in the nerve tissue, in another, in the homopoietic organs, and still another the attack is entirely local. Thus, we may have from a common source, a nerve lesion, a blood disturbance, or gastritis and its sequelæ. Opportune administration of HCl may serve to check this bacterial activity and, at the same time, afford

needed rest to an overworked compensatory mechanism, but undue delay may bring complete bankruptcy, where no remedy may avail. It is, therefore, prudent to regard every person having an achylia as potentially a case of a graver malady.

An editor in the *Journal of the Am Med Assn*² states that "specimens that are removed for examination are likely to show quite wide variations in acidity, ranging from almost complete absence of free HCl to a content approaching 0.4 to 0.5 per cent."

This wide variability as well as the occasional finding of an almost total absence of "free" HCl, may be entirely consistent with good health, yet there have been those who saw in this paradox good reason for belittling the diagnostic efficacy of gastric analysis. But that is because they have been unmindful of the physiological fundamentals in normal digestion that engender such fluctuations in acid content. I refer to such buffer agents concerned in lowering the acid values, as food-stuffs, alkaline saliva, mucus, regurgitated bile, and the combining effect of proteins on HCl output.

This phenomenon of the "self regulation" of gastric juice has been definitely observed by medical authorities, notably by Boldyreff³ and by McCann⁴ of the Mayo Clinic. Their interesting explanations, however, are beyond the scope of this discussion.

It is not the occasional lack, but the persistent lack of acidity upon which we postulate our findings of achylia. It is when we have found the absence of free HCl to be characteristic, that we begin to look for its actual causes and its possible consequences. We then endeavor to establish the type of the achylia, and are minded in our search, of gastric cancer, pernicious anemia, gastric syphilis, tuberculosis. An array of laboratory activities will begin and a process of elimination will detect the offending agent. There will be a roentgen investigation to rule out gastric malignancy, a blood cytology to detect pernicious anemia, a chest roentgenoscopy to introspect the lungs, a serologic study to eliminate spirocheta pallida.

In short, a persistent achylia must be regarded as a warning signal to watch out for danger ahead! If there be no other symptoms, the achylia is a disease, the treatment is preventive; as an element of a syndrome, the achylia assumes an added importance as a symptom of a more formidable disease than achylia and the treatment must be curative.

Many observers have noted the affinity between achylia and other graver diseases. McLester⁵ speaks of a "symptom complex that is exhibited with striking uniformity by an

apparently heterogeneous group of diseases" and that "achlorhydria is the one salient feature in the symptom complex and signalizes the group" and that "in pernicious anemia it is by long odds the most characteristic as well as the earliest symptom." Eusterman found that "about 85% of gastric syphilis is associated with achlorhydria." Douglass Vanderhoof⁶ discussing the "etiologic relation of achylia to combined spinal sclerosis with no evidence of pernicious anemia," states that "HCl therapy brought remarkable results." It is hard to associate combined spinal sclerosis with achylia, but digression from one's own field of specialty often leads to the right path of therapy. Vanderhoof found that one third of the patients having combined spinal sclerosis have also pernicious anemia. Evidently the failure to note this association is due to the fact that this disease has been investigated by neurologists, while the spinal changes in pernicious anemia have been studied by clinicians. Thus, we may see that the single finding of achylia, categorically well oriented, does not permit the wary physician to think of but one malady.

Because of this broad kinship between achylia and other diseases, differential tests designed to determine whether its etiology is benign or malignant, or whether the acid secreting glands are alive or dead, assume a great importance from a diagnostic viewpoint. For this purpose, the injection of histamine has been found very effective, for it is a very powerful stimulant of HCl and the failure of this secretion to augment in response, is indicative of glandular atrophy or destruction—the probabilities favoring an organic lesion. The Wolff-Junghans test for dissolved albumen in the stomach contents have likewise been found positive in a goodly number of cases of gastric carcinoma. Another satisfactory device is available in the Rehffuss test by fractional analysis, which experience has demonstrated to be conclusively effective in establishing evidence of anacidity. Especially is this test (Rehffuss) convincing when reinforced with the histamine and the Wolff-Junghans test. The protein curve in benign achylia remains low and follows closely the acid curve, whereas, in malignant achylia the protein curve diverges quickly from the acid curve, signifying considerable albumen.

The consensus of opinion is, that practically all cases of pernicious anemia are accompanied by achlorhydria. Gmker asserts that the criteria upon which a true achlorhydria in pernicious anemia may be based are: 1 A non-protean behavior of the stomach chemistry. 2 Uninfluenced by remissions of the disease. 3 Constancy in anacidity contrasting with

ascendency in hemoglobin. Of course, formes frustes cases of pernicious anemia without achlorhydria also occur. Just as atypical is a case of pernicious anemia without cytologic evidence of the anemia but with dominating manifestations of cord degeneration-neurotoxin in activity with hemolytic toxin in abeyance. True achlorhydria in its relation to gastric cancer is not a constant association. My private records show that out of thirty-eight cases of gastric cancer, thirty-six had malignant achylia and two had free hydrochloric acid. Of these, one had free acid 20, total 40, occult blood 4 plus; the other had free acid 51, total 78, occult blood 4 plus. Both had unusually long histories. An autopsy in the first case disclosed a carcinoma at the base of the ulcer penetrating and involving the pancreas, with metastasis of the liver, spleen and mesentery. In the second case, the operation disclosed an extensive involvement of the pylorus and prepylorus region, with a pathological diagnosis of "adenocarcinoma of the stomach." Both cases illustrate the engrafting of malignancy upon the base of a gastric ulcer, thereby accounting for the apparent paradox of carcinoma in the presence of hyperchlorhydria.

It is worthy of mention that both pernicious anemia and cancer of the stomach have, in addition to achylia, another common symptom in atrophic glossitis. This condition may well be regarded as the mirror of the stomach in these maladies. It is an early symptom of pernicious anemia, and as it forms part and parcel of general gastro-intestinal atrophy, it is also indicative of gastric achylia. Thus the glazed tongue furnishes sharp differentiation between these maladies and the chronic dyspeptic conditions characterized by a heavily coated tongue or even an excessive number of papillæ with an abundance of HCl output by the gastric mucosa.

It has been questioned by Conner⁸ whether achylia precedes pernicious anemia or both conditions develop simultaneously. I am of the opinion that the achylia comes first, and, generally, by a substantial period of time. Conner writes that one patient in the Mayo Clinic had manifested symptoms of achlorhydria for twelve years, and one for eighteen years, before the symptoms of pernicious anemia developed.

It is most probable that achylia precedes cancer of the stomach, but not by such length of time as in the case of pernicious anemia. That irritation is the preceding state in malignancy may not be disputed. Tissue reposes until disturbed. To quote Bloodgood⁹ "Cancer never begins in a healthy spot." Mayo, Wm. J.¹⁰ maintained that "No one has yet seen cancer of the skin or mucous membrane of the

body which was not preceded by some form of irritation. Investigation of the body always reveals some condition preceding cancer." A stomach contracting 2,000 times in 24 hours without HCl to cope with the food intake furnishes, indeed, an unhealthy milieu for unruly cells to thrive. Surely it is rational thinking that achylia may be a precursor of malignancy.

There is a striking analogy between achylia in pernicious anemia and achylia in gastric cancer.

1. Anemia without achylia is not pernicious anemia. In carcinoma, achylia is the rule, but the converse also occurs, as when a cancer is grafted upon the base of an ulcer, however, even to this exception an exception may be cited, for a gastric ulcer might lead to a gastritis and the gastritis might induce an achylia, so that we would then have roentgenographic evidence of an ulcer and histopathology of malignancy with achylia. To quote Cheney: "To conclude, because free HCl is found, that the condition cannot be cancer of the stomach and to consider achlorhydria essential to the diagnosis is therefore a fatal error."

2. Achylia may precede pernicious anemia for many years, and is conducive to the anemia through a toxemia reaching the homopoietic organs.

Achylia may precede gastric cancer for many years, and is conducive to the cancer through establishing a locus minoris resistentiae.

3. Atrophic glossitis is often an early sign in pernicious anemia.

In gastric cancer, it is part of the gastric atrophy.

4. Histories showing familial achylia have developed pernicious anemia.

Histories showing familial achylia have also developed cancer of the stomach.

5. HCl is the ideal therapy in pernicious anemia.

In gastric cancer it is of secondary importance. Again, in cases, of apparently benign achylia, it is ideal.

There occurs to me a simple comparison which aptly illustrates the essential relationship between achylia and both pernicious anemia and gastric cancer. We are all familiar with the common practice of getting coal to burn by first building a wood fire, and starting the wood fire by igniting paper, which in turn is lighted with a match. It is the burning of each material that raises the temperature of the next until it, in turn, catches fire and burns. Here too, there is a start in one form or another, each condition inducing the next, until something catches fire and there is definite basic destruction.

Ewing¹¹ is of the opinion that heredity can-

not too indifferently be dismissed when considering the etiology of cancer. Napoleon's family is often cited in this connection. His father, mother, and two sisters are said to have died of gastric cancer, although Sir Bukley Moynihan is quoted as saying that Napoleon, himself, did not die of this disease. My own cases, reviewed at the beginning of this paper, are pertinent in this respect. I believe that a similar generalization may be made with regard to the hereditary aspect of achlorhydria. Rehfuss draws attention to some interesting family associations pointed out by Albu and notes that there were seven cases of achylia among twenty-four individuals descending from fourteen patients subject to pernicious anemia. McLester qualifies hereditary influences in his statement that "There are achlorhydria families in which some of the members, though handicapped by this defect, remain well, and others develop pernicious anemia. My own experience is in accord with this view. Just as, several members of one family may happen to have phthisical susceptibility, likewise several members in a family happen to have achylia, and both tendencies characterize themselves by a chronic gastritis and recurrent gastric upsets, thusly furthering the effect of a basic etiology of the glandular parynchema.

A case I recall is of interest because of the step down picture from a mere low normal secretion to subacidity, achlorhydria and achylia in a male patient whose father died of a parenteral condition, his stomach revealing an achylia many months before his death. One may certainly view this kinship with interest and hardly question, under such circumstances, the advisability of preventive acid therapy.

Conclusions

1. The cases reported in this paper illustrate the practical application of preventive therapy; they, undoubtedly, suggest that cancer respects no age, and the physician relying upon a "cancer age" indulges in a false sense of security.
2. The search for the etiology of a true achylia often leads to the diagnosis of a grave malady. It serves both as a danger signal and a path finder. Achylia is not merely a symptom of a disease, but either an anatomical part of a disease complex or a precursor of an oncoming malady.
3. The timely administration of HCl may check bacterial activity, and prevent the breakdown of the compensatory activities of the

auxiliary gastric mechanism. It is remarkably effective in gastrogenous diarrhea, pernicious anemia, combined spinal sclerosis and is the sine qua non in the therapy of benign achylia.

4. Pernicious anemia must be both preceded and accompanied by achylia, which may be regarded as one of its etiologic factors, thru its hemolytic toxin on the homopoietic organs, and neurotoxin on spinal cord structures.

5. Achylia is a potential forerunner of gastric cancer, laying a fertile soil for malignant implantation through irritation and lowered resistance.

6. Complete anacidity and a short history are strongly indicative of carcinoma; add to it the triad of anorexia, weight loss and progressive asthenia, and the diagnosis is certain. X-ray is only to tell us the extent of the region involved.

7. On the other hand, a long history of digestive aberration with even a hyperacidity does not preclude malignancy, but if there is the same triad syndrome, a diagnosis of cancer should stand until eliminated.

8. The symptoms of gastric cancer as detected by the conventional mechanical methods of examination, are no longer symptoms but complications of the malady. Hence, awaiting the presence of these symptoms must give way to the detection of their approach.

9. The harder it is to recognize gastric carcinoma the better the prognosis.

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MANAGEMENT OF THE OFFICE DIABETIC *

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THE purpose of this paper is to demonstrate that any physician, wherever situated, can manage the average diabetic patient. The services of the specialist indeed are necessary in the management of unusual or complicated cases, and his advice is invaluable in the treatment of diabetic coma. But the family physician, by virtue of his intimate contact with the patient and knowledge of his domestic and personal environment, should be the one to accept the responsibility for the day by day conduct of the chronic diabetic.

The reason this has not been done heretofore is that the average physician regards diabetes as a complicated and mysterious disease, the treatment of which requires special training and elaborate apparatus. This is not so. I have a patient, a farmer, living in the country, whose wife carries out his treatment, including the giving of insulin, as well as it could be done in a hospital. There are scores of farmers, school teachers, stenographers, and even children who, thanks to Dr. Joslin's pioneer work, are successfully managing their own cases because they cannot afford the constant care of a specialist, and their own physician will not accept the responsibility of treating them.

Indeed, the treatment of this disease fits particularly well into the work of a busy practitioner, because, when properly conducted, the patient does the routine work, and the physician acts only in the capacity of a consultant at semi-weekly, weekly, or monthly intervals, depending upon the severity of the case. These patients require supervision, and the family physician should be the one to supply it. When complications arise, he can call in the specialist, but he himself is the first line of defense.

Diagnosis

The diagnosis of diabetes is easier than that of tuberculosis. The typical case is an obese, middle-aged person who begins to lose weight in spite of an increase of appetite and an extraordinary thirst—for water! As a consequence of the increased water intake, he passes large quantities of urine. This has a high specific gravity and gives a positive test for sugar—to be exact, glucose. A blood sugar determination taken before breakfast will be well over 125 mg. per 100 c.c. of blood. A mild case will give a reading of 150 to 200 mg. A moderately severe case will be 400 to 500 mg., and severe cases will show readings up to 1000 or more. Severe or acute diabetics will show changes in the CO_2 -combining

power, with increase in the cholesterol and acetone bodies in the blood. But since we are considering only the chronic diabetic, these will not be discussed here.

The point is that the diagnosis of the case depends upon the performance of two tests—namely, examination of the urine and blood for glucose. The urinalysis can be done in the office in five minutes with a simple apparatus. This apparatus consists of a medicine dropper, a test tube, a tin cup, a bottle of Benedict's qualitative solution, and boiling water. The test is made as follows:

Place in the test tube one teaspoonful of Benedict's qualitative solution. Add 10 drops of the urine to be tested. Shake the tube to mix the contents thoroughly and place in a cup of boiling water for five minutes. The water must be boiling throughout the test. At the end of five minutes, shake the tube again and note if the color has changed. At the beginning of the test the color is a clear blue. If it remains clear and blue there is no sugar in the urine. If sugar is present, it becomes cloudy and green. Larger amounts of sugar cause it to turn yellow, brown, or red.

The collection of a specimen of blood for a glucose test requires a 20 c.c. Luer syringe, a sterile needle, and a bottle containing a few grains of sodium citrate powder—the amount one can pick up on the point of a penknife. Ten c.c. of blood is collected from a vein in the arm, as for a Wassermann. It is then transferred to the bottle and shaken gently to mix with the sodium citrate. If the specimen of blood is to be sent by mail 2 drops of 40 per cent formaldehyde should be added. This will prevent the fermentation and consequent destruction of the sugar. If the blood is to be tested within two or three hours, this need not be done. Send this specimen to the most conveniently situated biological laboratory—usually in the nearest hospital—and a report can be obtained on the same day. *If there is sugar in the urine, and the blood sugar is well over 125 mg. per 100 c.c. of blood, the blood having been taken before breakfast, the patient may be regarded as diabetic and treated accordingly.*

The physician should be equipped also to test the urine for acetone. While the diagnosis of diabetes does not depend upon the finding of acetone in the urine, its presence indicates a faulty metabolism of fats which should be corrected before leading to more serious complications. The test is done as follows:

Place in a test tube 1 teaspoonful of the urine to be tested. Add 2 drops of glacial acetic acid. Add 3 drops of freshly prepared aqueous solu-

* Read before the Bergen County Medical Society, at Englewood, N. J., on December 8, 1931.

tion of sodium nitro-prusside. Shake well to mix. Layer over 28 per cent ammonium hydroxide. Let stand 5 minutes. If acetone is present a purple ring will form at the junction of the ammonium hydroxide and the urine.

Education of the Patient

Once the diagnosis of diabetes is made, the education of the patient in the management of his own case is the first step in treatment. He must be taught that the criteria for success in treatment are:

1. A sugar-free urine.
2. A normal blood sugar.
3. A weight 10 per cent below the average for age and height.

If these conditions are fulfilled the patient is being adequately treated.

Each patient or some member of his family should be taught to do three things:

1. Test the urine for sugar.
2. Calculate his diet.
3. Give himself insulin.

This can be done anywhere, and the equipment required is simple: A urine-testing outfit as outlined above, a 500 gm. food scale, a table of food values, and an insulin syringe with insulin. With a very little patience, this training is not so formidable a task as it might appear to be. By actually performing a sugar test before a patient he can learn to do it in five minutes. All except the mildest cases are placed on weighed diets from the first. This often necessitates a struggle, but the effort expended will be repaid many times in the increased interest and co-operation of the patient.

A patient's routine should be about as follows:

1. He tests his urine for sugar before breakfast and one hour after each meal, and records the results in a notebook kept for the purpose. The results of the test are recorded as blue, green, yellow, or orange. This gives a roughly quantitative record of the amount of sugar in the urine, and is a reliable index of the amount of insulin required, as well as what time of day it is most needed.
2. He weighs and calculates his diet until he has become familiar with the prescribed amounts of each article of diet. He is then allowed to dine at a restaurant where he has to estimate the quantity of food, after which he does a urine test to see how close he came to his allowance. This can become a fascinating game.
3. He gives himself insulin as prescribed by his physician. After following the effects of insulin on his tests, he is allowed to increase or decrease the insulin one or two units a dose as indicated by his tests.
4. He visits the office anywhere from twice a

week to once a month depending upon the severity of his case. All patients should be seen once a month. On each visit the patient should bring a specimen of urine—usually the first in the morning—to be tested for sugar and acetone. He should bring the notebook in which is recorded each day's diet, the results of the four daily urine tests, and the insulin dosage. The patient's weight is taken and recorded on the chart to compare with his theoretical normal, and instructions given as to diet and insulin. A blood sugar determination should be done every week until the patient is stabilized as to diet, weight, and insulin, then once a month. A well-trained patient not on insulin need not submit to a blood test oftener than once in two or three months.

Principles of Treatment

Before discussing diet in detail, let us review briefly some of the principles of diet in relation to diabetes.

Every patient knows that the diabetic is unable to metabolize the normal amount of carbohydrate food. What is not so generally known is that there is also something wrong with his metabolism of fat,—indeed, it is his inability to handle fat that is the cause of acidosis and diabetic coma. And there is some evidence that the breakdown in fat metabolism is the more important of the two. The history of the treatment of diabetes since the introduction of insulin has been a tendency to give more and more carbohydrate and less and less fat, until some very good clinicians allow as much as 300 gm. or more of carbohydrate per 24 hours. This large allowance of carbohydrate is, of course, possible only with the use of insulin.

The principle upon which both the prevention and treatment of diabetes is based is to keep the patient slightly undernourished, usually a weight of 10 per cent below the normal for age, height, and sex. The only successful treatment of diabetes before the "insulin era" was one which, by some means or other, accomplished this end. The emaciated patient and children were not very successfully treated at that time.

But now all that is changed. Insulin enables us to build up the emaciated patient to the proper weight, and keep him there. Children can now eat the food necessary to maintain weight and promote growth; and even the fat patient can reduce more quickly and safely. Insulin enables him without the development of acidosis to metabolize his body fat as he draws on it to provide calories not supplied by his diet.

The three elements of food to be considered are carbohydrate, protein and fat. The necessary vitamins, of course, must be supplied to diabetic patients as well as to normal persons.

The chief carbohydrates are sugar and starch. Sugar and candy are concentrated carbohydrates, and should be avoided by diabetics; this also in-

cludes cookies and cakes, or anything made with sugar. The most common starch food is flour. Bread and cereals in general are 60 per cent carbohydrate. Potatoes, rice and bananas are 20 per cent carbohydrate. Bread should not be eaten until the urine is sugar-free, and then only as prescribed by the physician. I do not prescribe diabetic breads as a routine. They are usually 30 per cent carbohydrate, except Lister and soy bean bread, which are high in protein—and potatoes, which are 20 per cent carbohydrate, are safer and cheaper. Most of the vegetables are from 5 to 15 per cent carbohydrate.

The principal protein foods are meat, fish, fowl, eggs, cheese and milk.

Fat is supplied by butter, cream, lard, olive oil, the fat of meat, and nuts.

The fat patient can usually be rendered sugar-free on an under-nutrition diet alone without insulin. Any reducing diet should be as low as possible in fat. In the very process of reducing, the patient is using his body fat, and the addition of too much exogenous fat will produce acidosis. If this occurs, it can be checked by the use of insulin.

With malnourished individuals and children, however, insulin should be used from the start. They need to build up strength and promote growth. Therefore adequate diets should be prescribed at once and enough insulin given to handle them. Adults require not more than 30 calories per kilo of body weight. Children require from 40 to 50 calories per kilo body weight. Adults require from $\frac{3}{4}$ of a gram to 1 gram of protein per kilo body weight. Children require from 3 to 4 gm. of protein per kilo body weight.

The protein requirements of both adults and children must be met, but not exceeded. The caloric requirement of the diet varies with individuals, but must be sufficient to maintain the patient at 10 per cent below the average in weight. The weight of the patient is a better guide in calculating the caloric requirements than too fastidious a calculation of the theoretical caloric needs. In any event, after the protein requirements are met, the caloric content of the diet can be obtained by giving enough carbohydrate and fat to meet it,—*always* giving less fat than carbohydrate. This is quite contrary to the accepted practice a few years ago, but is now almost universally followed. Nowadays every diabetic about his usual daily life should be taking at least 100 gm. of carbohydrate daily. None of my patients is taking more than 200 gm. and the average is about 140 gm.

Diet

The most confusing aspect of the treatment of diabetes is the management of the diet. This I have tried to simplify by adopting for my patients, both in the hospital and in the office, only three kinds of diet. They are

1. The estimated diet, for mild cases.
2. The calculated diet, for moderately severe and severe cases.
3. The fluid diet, a temporary one to be used during acute illnesses or infections.

The first and third are extremely simple, both for the physician to order and for the patient to carry out. The second diet is the easiest of all to order; indeed it is nothing but a prescription of three figures. The filling of this prescription is of necessity the work of the patient, and in doing this he receives a training which will be of lifelong benefit to him, and which is often life-saving.

1. *The Estimated Diet.* This is for the mild diabetic who is not taking insulin. It consists of a small list of foods which are to be avoided. These are sweets, starches, butter, oil, or fat, and anything made with flour. This leaves him on a diet consisting mostly of vegetables, meat, eggs, milk in moderate amounts, cheese and all but the particularly sweet fruits, such as bananas, prunes, raisins, etc. He is, of course, instructed to eat moderately even of the foods allowed. If vegetables are restricted to the 5% variety and fruit limited to grapefruit and oranges, the patient would have difficulty in eating more than 100 gm. of carbohydrate daily—the normal being 400 gm. Of course broth and tea or coffee without cream or sugar are allowed in unlimited amounts. Water drinking should be encouraged. A mild diabetic on this diet for a few days or a week will become sugar-free. Bread is then allowed in increasing amounts up to a reasonable number of slices a day, one at each meal. Sweets should be avoided permanently, even by the mild diabetic. An occasional use of them will only perpetuate the taste, and sooner or later they will get him into trouble. It is well to maintain a moderate restriction of fats and to guard constantly against overweight.

2. *The Calculated Diet.* This requires the use of a 500 gm. food scale and a table showing the carbohydrate, protein and fat content of foods. A number of these tables exist. One of the most comprehensive can be obtained from the U. S. Department of Agriculture by writing for Bulletin No. 28. Most of my patients are brought up on Joslin's "Manual of Diabetes" which contains a practicable table of food values. Any authoritative table of analyses will answer the purpose.

The diet is prescribed by the physician, giving the number of grams of carbohydrate, protein, and fat allowed for the 24 hours; then the patient goes home and figures it out for himself. This has the obvious advantage of relieving the physician of the complexities of the mathematics involved. As a profession we are notorious for our deficiencies in this branch of science, and I personally find that my patients, or some member

of their family, are much more proficient in this phase of the routine than I am.

An average diet, and a good one to start on, would be C 140, P 70, F 50, a total of 1290 calories for the day's allowance. If sugar appears in the urine on one of the four daily tests, 5 units of insulin can be given before the corresponding meal on the following day, and increased or decreased as indicated. At first the patient should be seen daily and the insulin changed by order of the physician. In the course of three or four days on this diet the insulin dosage necessary to maintain a sugar-free urine can be determined. When once stabilized, the patient himself can vary his insulin two units a dose up or down as indicated by his four daily urinalyses. A moderately severe diabetic on this diet would probably need about 10 units before breakfast, 5 before luncheon, and 8 before dinner, written 10-5-8. On subsequent visits the diet prescription can be varied,—by the physician only,—depending upon the patient's weight in reference to his theoretical normal. *The patient's weight is the best guide to his caloric requirements, and his four daily urine tests are the best guide to his insulin requirements.*

To simplify the routine of ordering, I have confined the variety of "prescriptions" for the calculated diet in hospital work to the five following, which are ordered by number only:

I.	C 130	P 65	F 30	Calories	1050
II.	C 140	P 70	F 50	"	1290
III.	C 150	P 75	F 110	"	1890
IV.	C 170	P 85	F 125	"	2145
V.	C 200	P 90	F 125	"	2510

Of course in private practice the jump from C 130 to C 200 may be made by any number of easier stages. In hospital work, however, definite orders are necessary to avoid confusion.

A sample of the above diet, Number II, would be as follows:

No.	Grams	Food	Carbohydrate	Protein	Fat
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Breakfast					
100		Prunes	19.0	1.0	
147		Oatmeal	11.8	2.9	1.4
4 oz.		Milk	5.6	3.2	4.4
2		Eggs		14.0	11.0
20		Bread	10.6	1.8	.2
Total			47.0	22.0	17.0

No.	Grams	Food	Carbohydrate	Protein	Fat
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Dinner					
60		Roast beef		14.4	6.0
103		Potato	21.6	3.1	
150		String beans	10.5	3.0	
30		Lettuce	.9	.3	
50		Tomato	2.0	.5	
12		Butter			10.2
130		Pineapple	13.0		
Total			48.0	21.3	16.2

No.	Grams	Food	Carbohydrate	Protein	Fat
Luncheon					
1 egg		Omelette		7.0	5.5
3 oz.		Milk	4.2	2.4	3.3
9		Butter			7.6
20		Bread	10.6	1.8	.2
124		Peas	21.2	8.7	
150		Cauliflower	7.5	3.0	
50		Lettuce	1.5	.5	
		Coffee jello		2.5	
Total			45.0	25.9	16.6
Total for day			140.0	70.1	49.8

Once the patient has acquired facility in calculating his diet, twenty minutes is all the time required to outline his meals for the day. While accuracy is essential in calculating a diet, it must be remembered that the figures given are approximate only, and a variation of a gram or two in each column for the day's amount is not important.

3. The Fluid Diet. This diet consists of buttermilk and orange juice, and has facetiously been dubbed by some of my associates as the "B & O" diet. The two fluids are given in six ounce amounts alternately every two hours for 14 out of the 24 hours. They are supplemented by tea, coffee, broth and water so that the patient receives a glass of fluid every hour, during the daytime. It is not given at night. It is ordered as follows:

7 A.M.	Orange juice,	6 ounces
9 A.M.	Buttermilk,	" "
11 A.M.	Orange juice,	" "
1 P.M.	Buttermilk,	" "
3 P.M.	Orange juice,	" "
5 P.M.	Buttermilk,	" "
7 P.M.	Orange juice,	" "
9 P.M.	Buttermilk,	" "

The food value of this diet is C122 P21 F7, calories 635.

If the patient dislikes buttermilk, skimmed milk is given instead.

Being relatively high in carbohydrate and low in fat, it is an ideal diet for combating acidosis. During acute illness of any kind with fever, or for surgical emergencies, this diet is now ordered routinely on my service at St. Luke's Hospital.

During febrile disturbances the glucose tolerance varies so greatly from hour to hour that the usual a. c. administration of insulin is impracticable. Consequently when it becomes necessary to order the "B & O" diet, the urine is tested with Benedict's qualitative solution every two or three hours, and insulin is given according to Dr. Joslin's "color formula" as follows:

If the test is orange, give 15 units of insulin
 If the test is yellow, give 10 units of insulin
 If the test is green, give 5 units of insulin
 If the test is blue, give 4 oz. of orange juice.

This is absolutely a fool-proof formula, and can be followed literally without danger to the patient.

Insulin

Of the patients in the clinic, 30% are using insulin; the amount varies from 5 to 60 units a day; the number of doses varies from 1 to 4 a day. The insulin is usually given about 20 minutes before the meal; in some instances as long as 2 hours before. If 1 dose is necessary, it is given before breakfast; if 2 doses, before breakfast and dinner; 3 doses, before breakfast, lunch, and dinner; 4 doses, before the three meals, and, a small dose, from 3 to 5 units, is given at bedtime. When cutting down on the number of injections per day, this order is reversed.

I am often asked how to determine the quantity of insulin required in each individual new cases. There is no infallible rule. Any patient showing sugar in the urine can start with 5 units of insulin before breakfast. If sugar appears in the urine after the other meals, he can take 5-5-5; i.e., 5 units before each meal, running the dosage up or down until the necessary quantity is being given. By varying the dosage according to tests of the 4 daily single specimens, an equilibrium is soon reached. Keeping the urine sugar-free appears to improve the patient's tolerance. After a week of sugar-free urine, therefore, the diet can gradually be increased or the insulin decreased. With a thin person the former procedure would be adopted, and with a fat person the latter.

A certain quantity of insulin given 3 or 4 times a day is more effective than the same amount given only once or twice a day, with less risk of an insulin reaction. A patient was referred to me recently who was taking 80 units of insulin daily—40 B—40 D on a carbohydrate allowance of 170 gm.,—a severe diabetic. He frequently suffered from insulin reaction, and showed sugar in his urine on one or more of his 4 daily tests. By redistributing the insulin so that he was taking a dose before each meal and 3 units at bedtime (11 P.M.) he became sugar-free on all his tests and had no more insulin reactions—and this was accomplished on 60 units per day, as contrasted with the 80 units he was previously taking, with no change in his diet.

Insulin reactions are comparatively infrequent in adults. In children they are common. Every child taking insulin of 10 units or more a dose should carry 2 lumps of sugar or an orange to be used in such emergencies. If insulin is taken at all it must be used daily. Patients who test their urine 4 times daily, and vary their insulin accord-

ingly, rarely suffer from insulin reactions. At the most, insulin reactions are disagreeable rather than dangerous.

If it becomes necessary to give more than 10 units of insulin a day, it should be given in 2 doses, if more than 20 units, in 3 doses, and if more than 30 units, a small dose should be given at bedtime.

Liver has recently been added to the diabetic diet. It is apparently an insulin saver; $\frac{1}{2}$ pound of liver a day will take the place of from 5 to 10 units of insulin. I have a private patient who has been taking liver for 3 months with gratifying results. With no other change in diet he has been able to reduce his daily insulin from 10 units t. i. d. to 5 units once a day, without showing sugar in the urine and with no elevation of the blood sugar. Whether or not this marked improvement can be attributed entirely to liver, I do not know, but it certainly has helped. After 3 weeks of the liver diet the patient balked, but since giving him before 2 of his daily meals a well seasoned broth prepared from fresh liver, he has taken it willingly and has thrived on it. The broth is prepared by macerating $\frac{1}{2}$ pound of liver (it can be put through a meat chopper,) and steeping it for an hour in warm water. The pulp is then squeezed into the water and broth set aside in the icebox to be served as required. The preparation is not boiled, as boiling destroys the insulin-saving principle.

Another insulin saver is exercise. A good vigorous walk will use up a considerable quantity of sugar and allow the insulin to be decreased accordingly. Two walks of half an hour each are better than one walk of an hour. Patients are encouraged to experiment with exercise as they do with food and insulin to determine their tolerance. Unusually prolonged or vigorous exercise in a diabetic using insulin will produce insulin reactions unless the insulin is reduced from the usual amount. In a diabetic, exercise is a drug second in potency only to insulin and food.

General Hygiene

Finally, infection of any kind is dangerous in a diabetic. The first breakdown in sugar tolerance is often initiated by an infection. Infection causes a mild case to become severe, and is frequently fatal to a severe case. Therefore, care should be taken to remove all obvious foci of infection. The teeth should be x-rayed, and those teeth showing apical abscesses should be removed. Infected tonsils should be removed. The sinuses, the gall bladder, the prostate, and the Fallopian tubes should be investigated as possible foci of infection.

Particular care should be directed to the lower extremities. Arteriosclerosis is more marked in diabetics than in others, and occurs earlier in life. Hence abrasions and injuries to the feet are

slower to heal. If neglected, gangrene may intervene. Bathing of the feet in hot water is beneficial to the circulation. Daily evacuation of the bowels should become a fixed habit. An adequate amount of sleep should be obtained, and every effort made to avoid situations causing chronic worry, anxiety, or apprehension.

Summary

1 Need of supervision of the chronic diabetic by the family physician is pointed out

2 Ease of diagnosis is stressed and a list of the necessary apparatus is given

3 A plan of education of the patient is outlined

4 Principles of treatment are briefly discussed

5 Three practical diets are outlined in detail

6 The use of insulin, liver and exercise is explained

7 A few remarks are made on general hygiene in relation to diabetes

SUB-ACUTE BACTERIAL ENDOCARDITIS*

By NORMAN STRAUSS, MD, NEW YORK, N Y

History The clinical entity of Sub-Acute Bacterial Endocarditis, is apparently a rather recent and new disease. This impression is obtained from reading available literature. Sir William Osler,¹ in 1908 before the association of British physicians, presented ten cases, which he termed chronic infectious endocarditis, and stated at that time, that in his previous reports, in his Goulstonian lectures in 1885, he had not seen any cases which correspond to these present ten cases. In 1909, Sir Thomas Hordes² presented a series of 151 cases of infectious endocarditis, at the St Bartholomew Hospital, including 21 cases which would fall into the group of sub-acute. In 1910,^{3,4} Emanuel Libman presented his group of 43 cases. A point worthy of note is that we, up to the present date, have not been able to add anything new to the description or treatment, as outlined by these men in their original articles.

Definition It is of importance at this time, to define sub-acute bacterial endocarditis, and to differentiate it from similar endocardial infections. By sub-acute bacterial endocarditis, we mean a case of sub-acute infection, superimposed upon a previously damaged heart valve, characterized by symptoms and signs of a low-grade toxemia, and embolic phenomena. This group of cases, must be differentiated from rheumatic endocarditis and acute terminal bacterial endocarditis.

Pathology A fundamental understanding of the pathological background of this disease, will enable us to understand the clinical progress more clearly. The endocardial inflammatory process of rheumatism produces a thrombus, which is characterized by the exudation of red blood cells, white blood cells, fibrin, and blood platelets. This thrombus undergoes

subsequent organization, producing a typical wart.

The subsequent contraction of these warts, results in scar formation with a resulting stenosis and insufficiency of the valve leaflets. With a superimposed bacterial infection of these warts, another acute exudate is thrown out this time containing bacteria and due to the diminished blood supply caused by previous rheumatic damage, these new vegetations become very loosely organized, and as the blood rushes past the loosely organized vegetations, embolic phenomena are produced.

Etiology Sub-acute bacterial endocarditis is always superimposed upon a previously damaged heart valve. This heart valve may have been damaged by congenital mal-formation (particularly a bicuspid aortic) or by rheumatism. All observers agree, however, that we must have some evidence of a previously damaged valve, before we find a sub-acute bacterial infection superimposed. The age most prone to be hit by this disease, is from about 10 to 35 years of age, and the liability to this infection, varies inversely as the age. Statistics⁵ show that the number of cases under twenty years of age, are twice as many as those over 20. The sexes are affected about equally, 60% being males and 40% being females. The time which elapses between rheumatism and the onset of sub-acute bacterial endocarditis, varies from a few months to several years, and in that time interval, the patient may enjoy excellent health. Just what starts sub-acute bacterial endocarditis, one cannot say, because we frequently see cases who give no history of added infection. The insidiousness of its onset brings up an important point for discussion. The point in question being, "is sub-acute bacterial endocarditis, a part and parcel of a rheumatic infection in a more advanced stage, or are rheumatism and sub-acute bacterial en-

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docarditis two distinct diseases?" While histopathological and bacteriological evidence points towards two distinct diseases, still the clinical course from onset to termination, is more suggestive of one disease, chiefly related to the point of infection and resistance.

Symptoms: As has been just mentioned, the onset of this disease is very insidious and difficult to determine. Symptoms can best be described under two main headings as suggested by Bierring.⁷

1. Toxic: The onset of the toxic symptoms is characterized by—1-lassitude, 2-vague pains, 3-loss of appetite, 4-chills, 5-vertigo, 6-headache, 7-cough, 8-sweats.

As can be readily seen, these symptoms assimilate any form of mild low-grade chronic sepsis, as: tuberculosis, typhoid and malaria. As the disease progresses, low-grade sepsis produces:—a-fever, b-loss of weight, c-splenic enlargement, d-secondary anemia.

(a) Fever: The fever is variable, intermittent, low-grade, varying between 99 and 101. Temperature, however, may be absent for a period of time. During the embolic stage, the temperature may shoot way up, hitting 104 or 105.

(b) Loss of weight: Loss of weight is generally slow but progressive.

(c) Splenic enlargement: Splenic enlargement is rather an early finding and is unquestionably due to an acute cloudy swelling and splenic tumor, as found in any chronic sepsis.

(d) Secondary anemia: Secondary anemia is slow but progressive. But even with a profound anemia, we find no tendency towards a pernicious anemia type. There is a progressive fall in both hemoglobin and red cell count. The white blood cells may increase to 12 or 14,000, producing a leucocytosis and polynucleosis. However, a leucopenia with a mononucleosis, is not an uncommon finding. The anemia produces a characteristic pallor and pigmentation to the skin, giving the patient a very tired look or café au lait color.

2. Embolic: The outstanding point of the embolic phenomena, is that there is no tendency to pus formation, despite the fact that the emboli are bacterial containing.

(a) Petechiæ: Petechiæ may be found in the conjunctiva, in the mucous membrane of the mouth, soft palate and pharynx, under the tongue or in the skin, particularly on the anterior chest and abdomen. Petechiæ occurs in about 80% of cases. They are usually discretely distributed and become more extensive towards the end of the disease. They are small pinkish reddish areas, which do not disappear on pressure, and can, therefore, be differentiated from small skin hemangiomas.

They last for a few days and then begin to fade, leaving a yellowish brown stain.

(b) Osler's nodes: These are hard, firm, very tender and painful nodes, which occur on the pads of the fingertips, hands and toes. They are due to emboli in the skin. Although these nodes are called Osler's nodes, they were originally described as stated by Dr. Osler, by Dr. Mullen.

(c) Splenic infarction: Infarction to the spleen, produces sharp pain in the left upper quadrant, a rise in temperature and an enlargement of the spleen. Repeated splenic infarctions are not uncommon.

(d) Pulmonary infarctions: Infarction of the lung produces sudden pain in the chest, cough, bloody sputum, and elevation in temperature.

(e) Mesenteric infarction: Infarcts to the mesentery produce sudden abdominal pain, generalized tenderness and rigidity, and intestinal bleeding.

(f) Cerebral infarction: Infarcts to the brain, produce local neurological symptoms, as: paralysis, aphasia, etc., depending upon the cerebral artery involved.

(g) Kidney: Infarcts to the kidney are of particular importance, because they are frequently quite small but numerous, thus producing a focal glomerular nephritis, as originally described by Loehlein⁸ in 1910, and subsequently more extensively studied and described by George Baehr⁹⁻¹⁰ of Mt. Sinai, in 1912. Fishberg¹¹ offers the following pathological description: "The kidneys are normal in size, or more often somewhat enlarged. The capsule usually strips readily from the smooth surface. The most characteristic feature, though not invariably found, is the presence of small, usually irregular hemorrhages. . . . Large and small infarcts are common resulting from the occlusion of large vessels by emboli, from the endo-cardial vegetations. Microscopically, characteristic glomerular lesions are found. . . .

"The process starts with swelling and granular change of the walls of one or more capillary loops, situated in any part of the tuft. This progresses until there is a homogeneous mass, which stains deeply with eosin, and contains nuclei in various stages of disintegration. The lesion is thus a typical coagulation necrosis. Very striking, is the paucity of the cellular reaction around the lesion, though there may be a few leucocytes or slight proliferation of fixed cells, adjacent to the necrotic area. . . .

"Scarred lesions are usually also to be found, and in the healed cases, may be the only ones present. Healing of the lesions is marked by connective tissue replacement of the necrotic

area. The resulting scar, which ultimately becomes hyaline, is sharply demarcated from the rest of the glomerulus, and merges with the interstitial connective tissue outside of the capsule. . . .

"The tubules often show well-marked, fatty changes, collapse and atrophy of the epithelium. . . .

"That the atrophy is ever permanent enough to lead to a notable degree of contraction of the kidney, has not so far as I am aware, been demonstrated."

Renal infarction is characterized by the finding of red blood cells in the urine.

Heart: Strange as it may seem, the cardiac symptoms are conspicuous by their absence, and are of little importance. The original murmurs produced by rheumatic endocarditis, are altered little, if any. The heart rate is usually increased and may become very rapid during the elevation in temperature. An interesting finding, though difficult to explain, is the fact that cardiac arrhythmia is rather rare in these cases in the bacterial stage in contradistinction to the fact that rheumatic endocarditis show auricular fibrillation early in the disease. There are no characteristic electro-cardiographic findings. Cardiac decompensation is uncommon during the bacterial invasion. Sub-sternal tenderness is a rather persistent and prominent finding.

Blood cultures: Positive blood cultures are found in about 90 to 95% of the cases. The causative organism most frequently being the streptococcus viridans as shown by Libman. There are times in the course of the disease, however, when the blood is free of any invading organism. This period, which may last for several months, is known as the "bacteria free stage."

Prognosis: With all the above-mentioned symptoms, the patient does not appear to be very ill, and has a commendable sense of well-being. The prognosis, however, is very grave,

even though the disease at the out-set may appear to be very innocent. Libman reports four recoveries in a series of 300 cases studied. Sir Thomas Hordes reported the same number of recoveries in his series. These patients die of exhaustion as a result of the progressive anemia, or as a result of an embolus to one of the vital centers.

Treatment: Various forms of treatments have been tried, such as: autogenous vaccines, immune sera, intravenous dyes, and various arsenical preparations, none of which, however, have produced any spectacular results. Transfusions seem to buck up the patient for a very short time, and have proven of little value as a curative measure. Large doses of sodium salicylate seem to render the patient comfortable at least for a short time. The advent of bacteriophage is promising, but as yet has produced no brilliant results.

Prevention: In view of the fact that any known form of treatment is of no avail, our only ray of hope and only golden beam of sunshine, lies not in the cure of sub-acute bacterial endocarditis, but rather in its prevention.

Realizing the relationship of focal infection to rheumatic heart disease, a plea for the removal of infected foci, in an effort to prevent rheumatism, is hereby whole-heartedly entered.

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THE DIAGNOSIS AND MANAGEMENT OF HEMOPHILIA IN CHILDHOOD

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HEMOPHILIA, a clinical chimera for many a bleeding problem, is too rare a condition to cover for so many hemorrhagic disturbances, is too hereditary a disease to include so many mature bleeders, is too well-defined a disease entity to become a haphazard label of hemorrhagic confusion. A solitary hemorrhage for the first time requires that every local cause be excluded before a diagnosis of hemophilia is ventured. Profuse hemorrhage at birth¹ is due to melena, infection, or trauma in origin unless inheritance makes hemophilia a consideration. A prolonged clotting time alone is never pathognomic of hemophilia. Such common correlations with hemophilia have confused literature to such an extent that Bulloch and Fildes² of the London Eugenic Laboratory have only been able to authenticate 44 hemophilic families out of 273 reported in a century of literature!

Hemophilia is of primary concern to the pediatrician because it first becomes manifest at about the first year of life and continues throughout childhood. Curiously enough all the trauma incident to birth never precipitate the onset of hemophilic hemorrhage from any part of the newborn's body. The dangers from bleeding begin with either artificial trauma incident to development, or with sudden surgical interference. But these dangers wane with the years until early manhood since the child's body is evidently able to correct the hereditary defect in the course of growth and development. Nevertheless one-half of hemophilic children die before acquiring immunity from this chronic infirmity because of inadequate medical supervision.

In our study of hemorrhagic diseases³ we have been concerned with hemophilia for the formulation of the criteria necessary for diagnosis, for the quantitative determination of the clotting substances involved in blood coagulation, for the determination of the nature of the clotting defect, for the interpretation of the mechanism of hemophilia and finally for the development of a practical mode of management of the hemophilic child. Hemophilia is a well-defined disease and so precludes any possibility of pseudo-hemophilias. The criteria both necessary and sufficient for the diagnosis of hemophilia may be summarized as follows:

- (1) Hereditary in origin—family history.
- (2) Limited to males—infancy to early manhood.
- (3) Tendency to repeated bleeding—spontaneous or traumatic.
- (4) Prolonged clotting time—normal bleeding time.

(5) Blood clotting function deficient—platelets defective.

1. *Hereditary Nature of Hemophilia:* One of the most remarkable features of the disease is that it runs in families, an observation recorded amongst the earliest writers on hemophilia. Though the ancients knew of the disease, its first mention was in 1519 by Albucasis, the great surgeon of the Moorish period, who described boys dying from uncontrollable bleeding. Classical cases were later described by Consbruch (1793) and Rave (1796). It was not considered as a distinct disease entity however until 1803 when Dr. John C. Otto, a physician of Philadelphia,⁴ published "an account of an hemorrhagic disposition existing in certain families." Otto stated that "males are only affected and all are liable to it. Though females are free they are capable of transmitting it to their children." Nasse⁵ in 1820 made the first careful study of the pedigrees of hemophilics and formulated the universally accepted generalization that males alone are bleeders, the disease being transmitted by apparently normal females through their marriage with normal males.

Subsequent experience led Grandider to state that it was the most heritable of hereditary diseases. The disease is transmitted to males from generation to generation through the female. It is a recessive sex character linked to a single male chromosome. It may be dormant for many generations only to reappear in some remote male descendant. Its incidence follows the laws of Mendelian inheritance. The female conductor transmits the condition to about 2/3 of her offspring and the rest are not conductors. In many families the ancestral taint has been present for over a century. Each of these families usually has a number of bleeders to characterize the transmission of the disease. (See chart.)

X and x are sex chromosomes. X = normal, x = hemophilic carrier. A normal X is dominant to the hemophilic x whose presence is thus concealed when combined with a normal X. The female possesses two sex chromosomes, one inherited from either parent while the male possesses but one derived from his mother.

Mating 1. A hemophilic will not have children with hemophilia provided he marries a normal woman. Sons of a hemophilic are normal and cannot transmit hemophilia. Daughters of a hemophilic will be normal but will all transmit hemophilia to half their sons.

Mating 2. A woman carrier of hemophilia married to a normal man will transmit the defect to half their daughters and to half their sons as hemophilia. The other children are normal.

MATING	PARENTS		OFFSPRING	
	Male	Female	Male	Female
1.....	x hemophilic	XX normal	X normal	Xx carrier
2.....	X normal	Xx carrier	X normal x hemophilic	XX normal Xx carrier
3.....	x hemophilic	Xx carrier	X normal x hemophilic	Xx carrier xx hemophilic

Mating 3. Theoretically it is possible for a girl to show hemophilia provided her father was a hemophilic and her mother a carrier. This is made impossible of realization because the presence of a double quantity of the defect acts as a lethal factor inhibiting the development of the embryo.⁶

Normal males of a hemophilic family may marry but all daughters of hemophilic males are carriers and should not reproduce. Even in a hemophilic family with some normal females marriage should be prevented because it is impossible to predict which are carriers and which are free from the defect until they reproduce.

2. Hemophilia Confined to Males. The immunity of the female sex from hemophilia has been observed since the first published case by Connsbruch in 1793. Many have since repudiated this view and asserted that females may show the less pronounced forms of hemophilia. A pointed argument advanced from analogy to other sex limited diseases—color blindness and pseudo-hypertrophic muscular palsy—considered confined to the male sex, is the occurrence of undoubted cases in females. Bulloch and Fildes' critical study of the hemophilic families of the last century reveals no abnormality beyond what might be observed in any collection of females taken at random. Bucura⁷ showed conclusively that all alleged hemophiliacs amongst females reported in the literature did not fulfill the necessary and sufficient criteria for the diagnosis of the disease.

No convincing evidence has therefore appeared which ever justifies the diagnosis of hemophilia in the female or the transmission of the disease by a male. Immerman's contention that the question of hemophilia in the female awaits some method of diagnosis which does not depend on outward symptoms may be dismissed for biochemical examination of the blood clotting components were found normal in mothers of our hemophilic male patients. The absence of typical hemophilia in the female has been explained by Little and Gibbons⁸ from an analysis of cases filed in the Eugenic Records Bureau that a sex-linked lethal factor eliminates the affected females. Kubanyi⁹ observed that in families of hemophiliacs the males whose group corresponded

to the mother were afflicted while those of a different group escaped hemophilia. Group IV appeared the most prevalent for severe hemophiliacs.

3. Hemophilic Tendency to Bleeding. Physical integrity disturbed by trauma passes unnoticed in a normal child but manifests itself by hemorrhage with no tendency to stop in the usual manner in a hemophilic. A significant feature of the disease is not so much the occurrence of bleeding or the rapidity of blood flow but rather the duration of the bleeding. It persists for hours and often for days and weeks as a slow trickling or oozing away from the surface in spite of treatment and may be even exsanguinating. Spontaneous arrest of the bleeding occurs after the patient has been reduced to a state of anemia.

The hemorrhage may be external or internal. The blood may issue from any area of the broken skin or be suffused beneath it, constituting the typical bruise, echymosis or hematoma. The blood may also escape into internal cavities or be lost to the body by way of excreta. There is great variation in the ease with which different hemophiliacs may bleed as well as in the same hemophilic at different times and the severity of the hemorrhage may depend somewhat upon the point which has been traumatized. Mucous and serous membranes are relatively low in substances which promote coagulation as compared with the skin. This accounts for the short bleeding time from a pin prick or a clean incision through the skin in contrast to the profuse bleeding which may follow lacerations of mucous membranes.

Hemophilia becomes manifest by hemorrhage from the nose and gums more commonly than from any other mucous membranes and particularly into the joints. *Epistaxis* is of common occurrence in bleeders and even if alarming does not alone justify the diagnosis of hemophilia. Hemorrhage from the *mouth* following the eruption of the milk teeth frequently heralds the onset of the disease. The umbilicus at birth is rarely a site of hemorrhage in hemophilia. The large number of umbilical hemorrhages quoted in the literature as hemophilia are either infectious, luetic, or hemorrhagic disease of the newborn. Articular effusions constitute one of the most typical features of the disease, the knee and elbow joints being most commonly affected.

Freund¹⁰ showed that bleeding occurs first in free joint spaces, later in synovial tissues where hematoma form and finally in subperiosteum and bonemarrow. The accumulated blood remains at great tension in the joint. And once a hemorrhage has occurred in a joint the result is a *locus minoris resistentiae* with chronic susceptibility to recurrence.

Hemophilic bleeding is in the majority of cases definitely traced to trauma. Various attempts have been made to draw a sharp line of demarcation between these two types of hemophilics or even to attribute the spontaneous hemorrhages to small traumata which have escaped attention. In my experience hemorrhages occurring in the hemophilic child are precipitated either by trauma or by infection. I believe that the so-called type of spontaneous bleeding in hemophilics is due to the presence of some intercurrent infection in the body. Our experimental evidence indicates that the presence of infection markedly disturbs the clotting mechanism in the direction of bleeding in hemophilics.

The first manifestations of hemophilia are seen in 70% of the cases before the second year. The trauma incident to birth is not productive of hemorrhage in a hemophilic because of the presence of the mother's thrombocytes and the female sex hormone in the blood of the newborn. It is not until external and artificial trauma is induced in the form of ritual circumcision, division of frenum liguae, piercing ears or ragged severance of an ill-tied cord that the onset of hemophilia is heralded. Otherwise the first year of life is usually free from hemophilic warning. But with the beginnings of walking do hematomas suggest the hemophilic state. Nevertheless in the milder cases first bleeding occurs with surgical interference—tooth extraction, tonsillectomy, myringotomy, etc. The liability to hemorrhage is always *chronic*. There is a progressive decrease however in the number and degree of the hemorrhages occurring so that by maturity the individual is usually free from his infirmity. Schloessmann¹¹ observed hemophilia to manifest itself characteristically different in each of the family groups studied. Each of the 24 families with bleeders amongst the 1600 members showed definite types of bleeding, sites of origin, intensity and periodicity to be characteristic of each family.

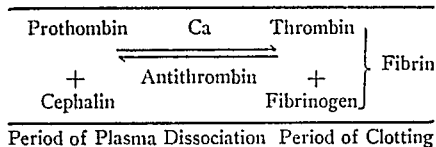
4. *Prolonged Clotting Time of Hemophilic Blood.* The earliest attempts to interpret the nature of hemophilia were to subject the bodies to post-mortem examination. Nothing of fundamental importance was revealed by these studies of the vascular system. Pathologists have noted however for some time that the shed blood did

not clot or did so only imperfectly after an abnormally long interval. But it was not until Wright¹² devised his instrument for measuring the time taken during coagulation that the question was placed on a firmer basis. He noted a constant increase in the clotting time of hemophilics as compared with normal blood. Difference of opinion arose. Sahli¹³ demonstrated that blood by venapuncture alone unaltered by tissue products gives constant values and even then the clotting time is indicative only in the inter-hemorrhagic period and not during or immediately after a severe hemorrhage.

The bleeding time in hemophilia is normal. This means that the time of duration of a hemorrhage which follows the puncture of the ear is within three minutes. This may appear paradoxical for hemophilia is characterized by bleeding. But, a simple pin prick does not bleed abnormally so that one may safely puncture a vein, finger or ear for purposes of examination. Mucous membranes have a relatively low content of tissue clotting substances, so that slight trauma of mucosae of joints is often followed by distressing hemorrhage. Fine skin punctures make for the development of sufficient tissue clotting substances sufficient to coalesce the blood platelets. They form platelet thrombi and thus arrest the bleeding. But scratches usually cover too large a skin area to enable the arrest of bleeding. The distinctiveness of the normal bleeding time according to Duke *in* hemophilia is an established fact, although it does not pertain to the bleeding tendency in active hemophilia.

5. *Blood Clotting Function Deficient in Hemophilia.* Normal blood is endowed with the protective power of resolving itself into a solid felted mass, the clot, effectually sealing up an inflicted wound and thus preventing a fatal issue. This biochemical property whereby a change in the environment of intravascular blood results *immediately* in a gel constitutes a physiological integrity of the living being. Hemophilic blood differs from normal blood in that it is the least sensitive to extravascular changes and gels rather *slowly*. Hemophilic blood looks like normal blood and is like it in composition but it functions differently, the basis for which is independent of all other tissue functions of the body. The mechanism of hemophilia involves an alteration in the blood clotting function evaluated in terms of the clotting substances contained in blood.

Blood coagulation is clinically the conversion of dissolved fibrinogen by thrombin into insoluble stringy fibrin. This constitutes the clotting phase which is *normal* in hemophilia. But the preliminary period during which thrombin is formed is greatly *delayed* in hemophilia:



The first biochemical study was made by Sahli¹⁴ who found a decrease in cephalin both in the wounded tissues of the bleeders and in the formed elements of their blood. This observation was confirmed by Emile-Weil¹⁵ who showed that blood obtained by venapuncture from hemophiles remained fluid for several hours whereas that obtained by finger puncture clots more rapidly. This role of tissue products was further demonstrated by Morawitz¹⁶ who accelerated the clotting of hemophilic blood by addition of tissue extracts. Comparative tests with tissue extracts obtained from hemophilic and normal persons have shown according to Addis¹⁷ and Minot and Lee¹⁸ that the deficiency is in the formed elements of the blood rather than in body tissues of hemophiles.

Quantitative determination of the other substances necessary for blood coagulation have yielded variable results in hemophiles. Klinger¹⁹ found fibrinogen unaltered in quantity or in quality. Wohlisch²⁰ showed that the thrombin concentration is normal in hemophiles. Nolf¹² determined the blood calcium concentration in hemophiles and found it consistently normal. Repeated findings of normal concentration in those substances actively involved in the clotting mechanism have led to the inevitable conclusion that the defect in hemophilic blood is delay in the conversion of prothrombin into thrombin. All contemporary research has been mainly directed in elucidating the cause of this delay. Sahli²² demonstrated that the retarded clotting process was due to deficiency of thrombokinase. Feissly²³ found that the inhibitor substance, antithrombin, prevented thrombin formation. Howell²⁴ actually observed inadequacy in prothrombin.

The platelets of hemophilic blood have been found to be more stable than those of normal blood by Howell and Cekada²⁵. This slowness of platelet disintegration accounts for the delayed clotting in hemophilia. We have observed that the unwashed platelets obtained from hemophilic children were strikingly resistant to disintegration by contact with wet surfaces in comparison with those of normal children. Pickering²⁶ however found that addition of saponin (1:10,000) to hemophilic blood completely disintegrates the platelets but the blood nevertheless remained unclotted for thirty minutes. Blood platelets of hemophiles washed with isotonic saline disintegrate more rapidly than the unwashed platelets. This indicates that they are protected colloidal by plasma, the difficulty therefore being due to a

markedly stable blood plasma. We have attempted to correlate these findings in the present blood studies so that they may be utilized as additional diagnostic means in hemophilic problems.

Differential Diagnosis of Hemophilia. The question of hemophilia usually arises in a case of immoderate and uncontrollable hemorrhage or in a case of swelling of a joint. Every type of hemorrhage particularly epistaxis, hematoma and hematemeses must be examined for local causes and excluded before hemophilia is at all considered. These forms of bleeding are so common that it is easy to construct a pedigree showing an inherited hemorrhagic tendency and such families are extremely common in literature.

Demonstration of inheritance is essential for the support of the diagnosis of hemophilia without considering it to have arisen *de novo* in a particular case. The instances of probably hemophilia without demonstrated inheritance are comparatively few and would undoubtedly be still fewer if physicians had sufficient time, interest or perseverance to investigate beneath what might be immediately apparent on the surface.

It is further essential to establish that the patient has been more or less *subject to hemorrhages from various parts of the body*. No solitary hemorrhage, however, inexplicable should ever be regarded as hemophilia. It is necessary to show repeated attacks of bleeding from infancy. Diagnosis therefore depends on the family history, the occurrence of repeated bleeding, protracted and from several sites, joint manifestations and prolonged clotting time. Mild cases are rare and are not suspected until some accident or operation takes place.

In infants when as yet there has been no opportunity to observe a chronicity in the disease, diagnosis may be made by the very *low index of blood clotting function*. Umbilical bleeding unless at birth and in the presence of inheritance should receive no hemophilic consideration. In infants within the first week of life hemorrhagic disease of the newborn occurs. It is never familial and develops only in the first days of life when the hemophilic infant seldom bleeds. Hemorrhagic disease of the newborn occurs in either sex but never in hemophilia.

Hemophilia must be sharply differentiated from chronic purpura hemorrhagic which occurs in either sex and is neither congenital nor familial. In hemophilia the *physiologically defective* platelets are present in normal or increased numbers, the bleeding time is normal, the firm clot retracts but the clotting time is greatly prolonged. In purpura hemorrhagica the number of platelets *physiologically normal* is much decreased, the bleeding time is prolonged, the clot is non-retractile and soft and the clotting time is normal. Spontaneous bleeding and purpuric skin

lesions are evidence of purpura hemorrhagica and not of hemophilia.

Prolonged clotting is not pathognomic of hemophilia but occurs also in sepsis, jaundice, polycythemia and nephritis although not as marked as in hemophilia. Scurvy would hardly be mistaken for hemophilia. The blood is always found to be normal in scurvy, familial epistaxis, hereditary hemoptysis and hereditary hematuria.

Results.

The index of blood clotting function in hemophilia. The paucity of actual knowledge about hemophilia has led Immerman to come to the conclusion that the standstill is due to the fact that further discussion of the condition is without

profit until some method of diagnosis is devised that does not depend on outward symptoms. This we have found in the development of the methods for the determination of the blood clotting constituents, the data for which are given in Table I for true hemophilia.

The results show that hemophilic blood has a *prothrombin* concentration which is less than 1/3 of the normal content. This relatively low prothrombin content is compensated by a correspondingly high *antithrombin* concentration which is always more than three times the normal concentration. The *platelets* of the hemophilic blood are always normal in concentration and increased in number in hemophilia with joint manifestations. But the *platelet disintegration* value is always

TABLE I
THE CONCENTRATION OF CLOTTING COMPONENTS AND THE INDEX OF BLOOD CLOTTING FUNCTION IN HEREDITARY HEMOPHILIA

Case	Age, Years	Date	Pro-thrombin	Fibrinogen	Anti-thrombin	Platelets	Platelet Disintegration	Index
C.M.	2	11 11 30	0.12	0.46	5.7	305,000	30%	0.009
C.B.	4	3 5 28	0.33	0.64	4.1	370,000	32%	0.05
P.G.	5	5 9 30	0.22	0.64	3.6	360,000	34%	0.036
D.B.	6	3 5 28	0.13	0.56	6.8	300,000	10%	0.003
D.A.	7	4 19 29	0.22	0.64	5.0	300,000	....	0.02
C.M.	10	8 8 30	0.11	1.04	6.5	700,000	37%	0.017
J.R.	20	2 13 31	0.11	0.54	6.2	200,000	30%	0.01
E.S.	30	9 12 29	0.21	0.54	6.2	230,000	12%	0.02
NORMAL.	.....	.....	1.0	0.5	1.0	250,000	50%	0.5

TABLE II
THE EFFECT OF TRANSFUSIONS ON THE BLOOD CLOTTING FUNCTION IN HEMOPHILIA

Case	Date	Pro-thrombin	Fibrinogen	Anti-thrombin	Platelets	Platelet Disintegration	Index	
E.S.	9/12	0.21	0.54	6.2	230,000	12	0.02	Transfusion
	9/13	0.5	0.54	2.5	190,000	16	0.11	
	9/14	0.4	0.64	3.0	220,000	13	0.08	
	9/16	0.4	0.74	3.0	240,000	20	0.10	Transfusion
	9/17	0.3	0.79	3.7	190,000	16	0.07	Transfusion
	9/18	0.5	0.89	2.5	190,000	21	0.16	
	9/19	0.5	0.94	2.5	205,000	22	0.19	
J.R.	4/ 8	0.20	0.64	3.75	0.03	Transfusion
	4/11	0.20	0.64	3.75	.....	..	0.03
	4/13	0.22	0.64	3.75	.....	..	0.03
	4/17	0.22	0.64	3.5	.....	..	0.03
	4/23	0.25	0.54	3.5	.....	..	0.03
	5/ 1	0.25	0.44	3.2	0.04	Transfusion
	5/12	0.29	0.54	3.2	.....	..	0.04
	5/14	0.29	0.54	3.2	.....	..	0.04
	5/21	0.25	0.54	3.5	.....	..	0.04
C.M.	8/ 8	0.11	1.04	6.5	700,000	37	0.017	Transfusion
	8/11	0.31	1.3	3.5	685,000	37	0.11	
	9/ 9	0.16	0.74	5.0	825,000	37	0.024	

less than 33% in comparison with normal blood which is greater than 50% at the end of an hour from the time blood is obtained from the vein.

The index of clotting function constitutes the ratio of the concentration of the substances tending to clot over those tending to favor bleeding. Hemophilic blood is always characterized by a *clotting index* which is less than 1/10 of the normal or less than 0.05 in comparison with the normal of 0.5. Any blood whose index is less than 0.05 may be characterized as hemophilic as a laboratory diagnosis independent of the other criteria necessary for the diagnosis of hemophilia. No other hemorrhagic disease has thus far evinced a blood clotting index as low as that which characterizes hemophilia. The value of resorting to this laboratory procedure for the diagnosis of hemophilia is unparalleled by any other procedure because it is one *absolute criterion* for unmistakable diagnosis. We have been able by this means to rule out the presence of hemophilia in females of bleeder families or even in mothers of hemophilic boys. We have further been enabled to test the relative merits of therapeutic procedures advanced for hemophilia.

The differentiation of hemophiliacs from non-hemophiliacs by the index of blood clotting function. Bleeders of all kinds have come under our observation with the tentative diagnosis of hemophilia. A careful study of each case as indicated in this paper correlated with the determination of the blood clotting constituents has reduced the number to the few reported. The other cases have been liberated from the dread of the hemophilic label and particularly from the restrictions consequent upon the disease. These children have all shown a clotting index well within the normal range and have responded to nutritional therapy to the extent of alleviating the bleeding tendency and thus enabling them to undergo required operative procedures without surgical hesitation or needless parental fear.

The effect of transfusion in hemophilia. Whole blood injected intravenously from a donor of the same group is at present most effective in arresting bleeding. According to the data in Table II the index of blood clotting function is increased many fold following transfusion but blood determinations made daily have shown that this increase in clotting constituents lasts for only 48 hours. Repeated transfusions are necessary for the maintenance of a higher level of clotting function. No change in the clotting index has been observed in hemophiliacs with joint manifestations. All other bleeding occurring in the course of active hemophilia is very definitely benefited by transfusion.

The universal protection of the female from the bleeding deficiency that characterizes the male hemophilic has led several workers to utilize women donors. We have been unable to draw any

definite conclusions with regard to this procedure. We have however attempted to inject ovarian extract and preparations of the female sex hormone without observing any change in the concentration of the blood clotting constituents. The daily injection of these substances has not altered the index of blood clotting function in the least. While we believe that the introduction of blood not only contributes actual clotting substances to hemophilic blood to accelerate coagulation it also adds a hormone sex-linked in nature which may catalyze the synthesis of clotting compounds. We have adduced proof of this substance in the hemophilic.

The effect of diet in hemophilia. We have in a previous communication presented evidence that the dietary affects the level of blood clotting function. We have observed that the high protein diet increases the concentration of clotting substance in potential hemorrhagic disease, less so in frank hemorrhagic disease and not at all in hemophilia. The protein substances ingested in the daily dietary are utilized by the liver for the synthesis of the substances necessary for the blood coagulation. The innate deficiency in hemophilia is not in the availability of these substances but rather in the mechanism which converts these substances into the active clotting compounds. This constitutes a deficiency in the *primary stage of the clotting mechanism*. We have further observed that the conversion of protein substances is not catalyzed by the ingestion of any of the vitamins now known.

Treatment of Hemophilia.

Severe bleeding may be arrested most satisfactorily by *transfused blood* from a donor of the same blood group. It serves the dual purpose of replacing lost blood and of increasing the rate of blood coagulation. Whole blood controls the symptoms of hemophilia for a week. The degree of improvement depends upon the amount of blood given. Even small amounts (15-30 cc.) of transfused blood arrest hemophilia hemorrhages. Feissly²⁷ has shown that the retarded rate of transformation of prothrombin into active thrombin is brought to the normal rate within 30 minutes of the intravenous injection of blood. While the improvement is only temporary, lasting for two or three days it may be of sufficient duration to permit of surgical intervention.

Serum injected in a hemophilic is not very effective in controlling hemorrhage. But *fresh serum* from man, horse, or rabbit injected intravenously (15 cc.) or subcutaneously (30 cc.) brings the clotting mechanism to normal within 48 hours and maintains it at normal for a week. Weil²⁸ introduced the injection of fresh serum in the treatment of hemophilia. Nolf observed it to stimulate the formation of thrombocytes. We have found further that the injection of all other

sera proved ineffective. Sodium citrate injected intravenously or intramuscularly produces a transitory diminution in the clotting time but this is followed by marked prolongation of the bleeding time due to the destruction of platelets by sodium citrate.

Protein sensitization checks mild bleeding according to Vines²⁹. The non-sensitive patient is given 3 cc. horse serum subcutaneously. After 10 days he will usually be sensitive and should then receive about 0.2 cc. of the same serum intradermally. As the skin reaction becomes positive the coagulation time of the peripheral blood falls and if bleeding is in progress it will probably stop. The effect may last for weeks. The skin reaction does not desensitize the patient so that he is constantly ready to react to other intradermal injections of protein given to check further bleeding.

Locally the most effective coagulant in hemophilic bleeding is *fresh human blood* soaked in cotton wool applied after the removal of useless clots. Diokorides in the first century A. D. arrested bleeding with fresh bird's blood applied locally. When fresh normal blood is not available fresh human serum, tissue-juice extracts or fresh meat juice applied locally is also effective.

Cephalin checks bleeding when applied locally but has no effect when given by mouth or in subcutaneous or intramuscular injections. Neither have other coagulants now available any effect for the arrest of bleeding in hemophilia.

At best the disease is very refractory to treatment. Local applications are usually inefficacious in severe bleeding. Transfusion improves the coagulability of the blood only for a few days and even then it has little or no effect on effusions of blood into the joints. Various attempts have therefore been made recently to maintain a normal clotting mechanism by dietary measures. Though we have developed dieto-therapy in hemorrhagic disease,³⁰ we have found our so-called "clotting diet" ineffective in hemophilia.

Lopez³¹ observed that great improvement follows the use of diets rich in vitamins. Therefore Bayo³² gave a diet rich in vitamins and $\text{Ca}_3(\text{PO}_4)_2$ to a "hemophilic" boy of 12 years. His blood calcium arose from 5.7 mg% to 11.4 mg%. This low calcium bleeding condition was not hereditary hemophilia but hemophilia calcapriva (Wright). The calcium content of hemophilic blood is normal. Nevertheless, Llopez, a pharmacist of Madrid, patented "vitamin" tablets supposedly consisting of vitamin A, B, C and D as well as calcium phosphate and lactose as "specific" therapy for hemophilia. I have been unable to confirm this specificity or any benefit from this therapy in hemophilia. Nickau³³

describes clinical improvement in two hemophilic patients following administration of this Spanish preparation. The results are not convincing, for more than two hours were required for the blood to coagulate after treatment for six months.

The prevention of hemophilia is a problem of eugenics. The course of the disease cannot be fundamentally altered. Every effort should be made to guard the hemophilic child from traumatism. This limitation of bodily motion should be compensated by daily massage of extremities. The improved muscle tone thus becomes an effective barrier to vascular injury. The diet should be rich in visceral protein to make available the clotting substances for the blood and maintain optimum blood regeneration in case of hemorrhage. The child's blood group should be determined and a suitable donor kept available for *emergency transfusion*. In case of hemorrhage the child should be put at absolute rest and given morphine or its derivatives, if necessary. Tissue-juice extracts should be applied locally and transfusion given when the loss of blood becomes marked. This is to be repeated the third day to arrest hemorrhage and induce healing more rapidly. The hemophilic child may undergo surgical operation without hemorrhaging provided a large blood transfusion is given beforehand.

Conclusions.

(1). The criteria necessary and sufficient for the diagnosis of hemophilia have been formulated on the basis of experimental and clinical studies.

(2). Quantitative determinations of the constituents involved in blood coagulation show the hemophilic deficiency to be in the primary stage of the blood clotting mechanism.

(3). Hemophilic blood shows a strikingly low prothrombin content compensated by a correspondingly high antithrombin content. The platelets are normal in number but are physiologically defective having a slow rate of disintegration.

(4). Hemophilic blood is characterized by a blood clotting index which is less than 1/10th of the normal. The index constitutes the ratio of the concentration of the substances tending to clot over those tending to favor bleeding. Accordingly the normal index of clotting function is 0.5 whereas the hemophilic clotting index is less than 0.05. The very low index of blood clotting function is absolutely diagnostic of hemophilia.

(5). The index of blood clotting function is increased many fold after transfusion but the improved clotting lasts for only 48 hours. Transfusion does not alter the clotting function of blood in hemophiles with joint manifestations.

(6). Dietary protein, lipids, vitamins or minerals do not alter the deficient clotting function in hemophilia.

(7). Hemophiles show the absence of the fe-

male sex hormone in their tissues Ovarian therapy, Theelin, etc produce no change in the hemophilic clotting mechanism

(8) Serum injected and applied locally is not effective in controlling hemorrhage in hemophilia unless it be fresh and rich in thrombin But non-hemophilic bleeders respond rapidly to any serum and to dietotherapy

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PRACTICAL POINTS ON THE MICROSCOPIC GRADING OF CARCINOMA*

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IT is well known that pathologists for a long time have appreciated, in a general way, the possibility of detecting the varying clinical malignancy of carcinoma by microscopic examination However, it is only in recent years, through careful study of carcinomatous cells, that concrete knowledge of practical therapeutic and prognostic value to victims of carcinoma has been obtained

Older clinicians and surgeons fully appreciated the fact that different types of carcinoma varied in clinical malignancy, for example, melanotic carcinoma was known to be more malignant than basal cell carcinoma They were also fully aware that carcinomas of the same type, in different situations, differed in clinical malignancy, thus, the average squamous cell carcinoma of the uterine cervix was known to be more malignant than the same type when situated on the lip However, when it came to carcinomas of the same type, in the same situation, there was no general appreciation of variation in clinical malignancy, a carcinoma of the lip was considered a carcinoma of the lip and a carcinoma of the stomach a car-

cinoma of the stomach, and nothing more Experienced physicians, however, had observed that papillary, polypoid, or elevated carcinomas were less malignant than those that were flat or infiltrating This observation was fully appreciated by the late Dr W W Mayo when he said, "A cancer that comes to you is less malignant than one that goes away from you"

It is generally held that carcinoma of youthful persons is more malignant than that of aged persons As a whole, this appears to be true However, when it comes to comparing the grade of malignancy of carcinoma of youthful persons with that of middle aged persons, I am of the opinion that there is practically no difference If a man, twenty five years of age, becomes a victim of a rapidly growing carcinoma of the lip, with fatal termination in a short time, the rapidity of growth and fatal result are usually attributed to the youth of the patient, on the other hand, if a man of fifty years is the victim of the same kind of rapidly growing neoplasm, in the same situation, and there is a fatal termination in short order, no explanation relative to age is forthcoming The difference in malignancy of the same type of carcinoma in different situations is often

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FIGURE 1

Epidermoid carcinoma of the skin, grade 1, in which the cells for the most part have differentiated to the point that reproduction has been reduced to a minimum with only slight evidence of formation of pearly bodies.



FIGURE 2

Adenocarcinoma, grade 1, in an adenoma of the rectum. This is an example of a short range dedifferentiation and differentiation in a glandular neoplasm, similar to that seen in basal cell carcinoma of the skin.



FIGURE 3

Epidermoid carcinoma of the skin, grade 2, in which cells are undergoing keratinization without the formation of pearly bodies.



FIGURE 4

Adenocarcinoma of the breast, grade 2. The nuclei are small, regular and hyperchromatic; acini are not as clearly defined as in figure 2.



FIGURE 5

Epidermoid carcinoma of a submaxillary lymph node, grade 3, secondary to carcinoma of the lip. There are pale, oval nuclei with prominent nucleoli in spindle-shaped cells.

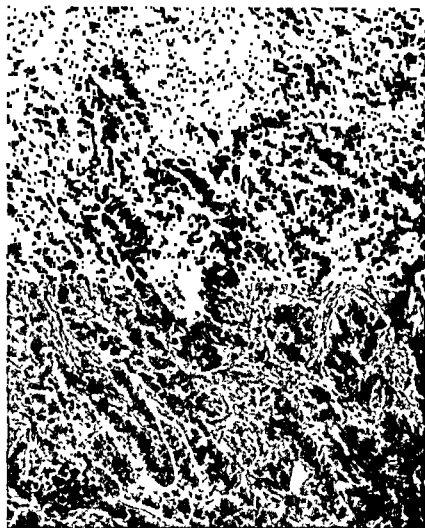


FIGURE 6

Adenocarcinoma of the rectum, grade 3, in which the acini are ill-defined, the nuclei irregular, and large in proportion to the cytoplasm.

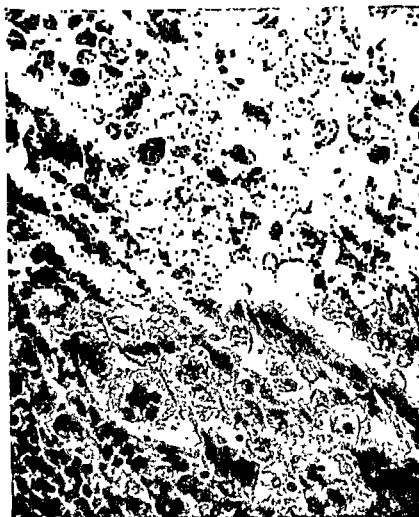


FIGURE 7

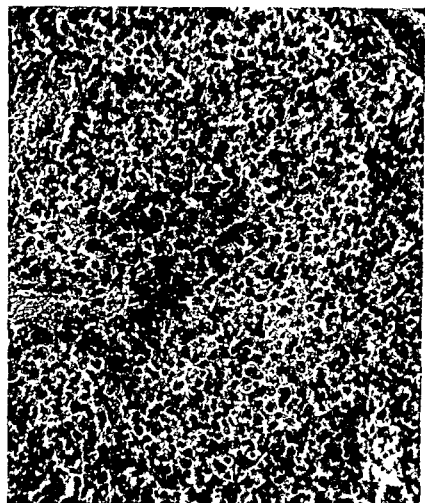


FIGURE 8

explained by a difference in blood and lymph supply. As far as my experience goes, this explanation is inadequate. The high average of malignancy of squamous cell carcinoma of the tonsil, nasopharynx, posterior half of the tongue, esophagus, vagina, and uterine cervix, as compared to the lower average of malignancy of the same type of carcinoma of the anterior half of the tongue, buccal surface of the cheeks, lips, skin, penis, and labia, most certainly cannot be explained by a difference in blood and lymph supply. Neither will this explain the difference between the high average malignancy of adenocarcinoma of the breast and stomach on the one hand, and the lower average malignancy of adenocarcinoma of the large intestine and body of the uterus on the other hand, nor the high average malignancy of melanotic carcinoma of the skin, and the lower average malignancy of basal cell carcinoma of the same tissue.

In prognosis of malignant tumors in general, it goes without saying that well informed physicians take into consideration a number of factors; however, I do not hesitate to state that the grade of malignancy is by far the most important one. As a rule, the grades of malignancy of carcinomatous neoplasms are in direct proportion to their proliferative, infiltrative, metastasizing and death-dealing capacities. The chief difference in the malignancy of different tumors, or tumors of the same type, depends on their cellular activity. If the cells of a carcinoma are active, as a rule, its clinical malignancy is in keeping with this faculty.

In the early part of the last decade of the nineteenth century, Hansemann presented a clear conception of the cytogenesis of carcinoma. He showed that through a process of dedifferentiation, or what he termed "anaplasia" (backward formation), epithelial cells could undergo malignant transformation. In other words, the functioning quality of the cell is sacrificed or decreased, whereas the reproductive or proliferative quality is increased. At the inception of some carcinomas, the basal cell type for example, dedifferentiation of the cells is only slight; hence, these cells would have to differentiate only to a slight extent before they reached a state that compared favorably with the normal basal cells. A similar condition prevails in adenocarcinomas graded 1 that originate in adenomas. Such carcinomas are of a low average of malignancy. On the other hand, the cells of a carcinoma that arises from cells which have undergone marked dedifferentiation, would have to differentiate to a great extent before they reached a biologic state of development comparable to that of normal cells. The cells of such a carcinoma are highly malignant, and are well exemplified by those of nonmelanotic melanoepithelioma. Carcinomatous cells of a given neoplasm usually remain about the same throughout the course of the disease. Sometimes they increase in activity; then again, they

may decrease in this respect. Since the grading of carcinoma is based on the fundamental principle of cellular differentiation, it is very important for the microscopist, especially in examination of early lesions, fully to appreciate the extent to which the carcinomatous cells are deviated from the normal, or in other words, the extent of dedifferentiation or anaplasia.

A completely differentiated cell of an epidermoid carcinoma is one in which the entire cytoplasm is keratinohyalinized, or keratinized, and the nucleoplasm has become eccentric and degenerated. Such cells may be arranged in a discrete manner but are usually conglomerated in the form of pearly bodies. I believe one can say that they have reached a state of absolute differentiation, in other words, have arrived at a point where they can neither dedifferentiate nor reproduce; Hansemann would say that they have gone to their physiologic death. At this point, it might be well to call attention to the fact that keratin forms the basis of all horny tissue, such as the stratum corneum of the epidermis, finger nails, toenails, hoofs, horns, hair, feathers, scales of fish, and so forth.

In a partially differentiated cell of an epidermoid carcinoma, the cytoplasm is not completely keratinohyalinized or keratinized. The cytoplasm is usually disproportionately large in volume in comparison with the nucleoplasm, which often appears actually to have decreased, so that it is not more voluminous than the nucleolus observed in some cells of the same type of carcinoma. In this cell, the nucleoplasm usually appears as a small, spheroidal or oval mass, situated about the center of the cytoplasm, and it does not show evidence of encroachment and degeneration. Such a cell has differentiated to the point that its reproductive capacity is reduced to a minimum. The production of melanin in melanocarcinoma is evidence of differentiation, just as is the production of keratin in epidermoid carcinoma.

The range of dedifferentiation and differentiation in basal cell carcinoma is usually slight. The cells of a basal cell carcinoma not infrequently partially or completely differentiate toward the epidermoid type, as manifested by keratinization and formation of pearly bodies. Conversely, they may partially differentiate in a glandular direction; however, for the most part they retain the characteristics of basal cells.

The partially differentiated cell of an adenocarcinoma has a spheroidal, oval or spindle-shaped nucleus, usually situated at the base of a columnar or cuboidal cell, and as in the epidermoid carcinoma it is relatively small in comparison to the cytoplasm. The cytoplasm of such a cell may or may not contain a secretory product. If the cell has reached a state of complete differentiation, the nucleoplasm not infrequently will have disappeared, as seen in mucoid adenocarcinoma.

In contrast to partially and completely differen-

tiated cells, it is also necessary, for the accurate grading of carcinoma and other malignant neoplasms, that the microscopist be familiar with cells that are in a partially or completely undifferentiated state. These cells vary in their degree of undifferentiation depending on the extent of differentiation. Cells in a state of mitosis or amitosis may be said to be in a state of partial or complete undifferentiation. Since irregular or atypical mitosis, in which the chromatin is arranged in a multipolar manner, that is in "Y," star, and cross formations, and so forth, is usually associated with carcinomas and other neoplasms of a high degree of malignancy, it is safe to infer that these forms represent a state of extreme undifferentiation. Cells with large spheroidal, or irregular nuclei, with or without prominent nucleoli, in which the cytoplasm is decreased and the nucleoplasm increased in volume, are familiar examples of undifferentiated forms. The nuclei of undifferentiated cells frequently have marked avidity for the basic dyes.

It is the aim of the microscopist, in the grading of carcinoma and of other malignant neoplasms, to estimate the proportion of cells that are partially or completely differentiated on the one hand, and those that are more or less undifferentiated on the other. The results are expressed in numerals from 1 to 4, as follows: A carcinoma graded 1 is one in which the proportion of differentiated cells ranges from almost 100 down to 75 per cent, that of the undifferentiated cells from practically 0 up to 25 per cent; in a carcinoma graded 2, the proportion of differentiated cells ranges from 75 down to 50 per cent, that of undifferentiated cells from 25 up to 50 per cent; in a carcinoma graded 3, the proportion of differentiated cells ranges from 50 down to 25 per cent, that of the undifferentiated cells from 50 up to 75 per cent, and in a carcinoma graded 4, the propor-

tion of differentiated cells is from 25 per cent to practically 0, that of the undifferentiated cells from 75 up to 100 per cent.

At this point I should like to state that as a rule there is practically the same grade of malignancy throughout a carcinoma. It is rather difficult to define the border between two grades, and if one is in doubt as to whether a carcinoma is of a lower or a higher grade, it is best to put it in the latter. It is not the rule to find characteristics of a low grade 1 carcinoma in one part of a growth, and characteristics of a high grade 2 carcinoma in another part; it is equally unlikely that the grade will be 1 in one part and 3 in another. Frater found practically no exceptions to the rule in carcinoma of the urinary bladder. Certain adenocarcinomas have been exceptions, but the percentage is so small that its influence is practically negligible.

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REPORT OF A CASE OF BACTERAEMIA CAUSED BY THE MICROCOCCUS CATARRHALIS FOLLOWING TONSILLECTOMY AND ACUTE POLYARTHRITIS, WITH RECOVERY

BY STEPHEN H. CURTIS, M.D., TROY, N. Y.

From the Leonard Hospital Laboratory

THE *Micrococcus Catarrhalis* is found frequently in the throat and nasopharynx and being morphologically similar to the meningococcus, it is necessary to differentiate. It may inhabit the tonsillar cripts and give no rise to symptoms. It is not ordinarily considered very pathogenic but under certain circumstances it may become so. It has been found by many observers in the sputum and tissues of cases of bronchitis, pneumonia, whooping cough and other affections of the respiratory tract. It has often been reported in association with the influenza bacillus. It has been found in cases of epidemics simulating influenza and in multiple abscesses by Jordan¹ and reported found in infectious dermatitis by Lyon and Wherry.² It grows readily in ordinary nutrient media. Its occurrence in the blood stream giving rise to septicæmia is not common, hence it was thought advisable to report the following case.

This case was seen in April, 1928, a male 48 years of age, physician. He was unable to leave the bed. The temperature was 103, pulse 110, respirations 28. The elbow joints, knees and ankles were markedly swollen and painful. The joints of the fingers and hands were also involved but to a lesser degree. A history was obtained of the onset about three months previously of some joint involvement which had progressed to a point where the patient sought medical advice. Up to this time there had been very little, if any, rise in temperature. Finally a tonsillectomy was performed. Two days later the temperature rose, the arthritis became worse. Three weeks later the patient was first seen by us.

Physical Examination. The physical examination revealed a patient in great pain and prostration. The throat was inflamed and painful. As stated above, there was an acute inflammatory involvement of many joints. The lungs were negative. The heart rate was 110, the rhythm was regular. The first sound was short and rather indistinct. There was a soft systolic murmur heard over the apex. No friction rub was noted. Several petechiæ were noted on the chest and abdomen. The liver and spleen did not appear enlarged. The abdominal contents were likewise not remarkable.

The prostate gland was enlarged but soft. Smears of the prostatic secretion showed an abundance of lecithin and were negative for gonococci. No lymph nodes were palpable. Neurological examination was negative.

Laboratory Findings. The blood count showed a hemoglobin of 60%, red blood count of 2,680,000 and a white count of 20,000. The differential white count revealed 90% of polymorphonuclears and 10% of lymphocytes and other cells. The Wassermann reaction was negative. The urine showed a trace of albumin and small amounts of cellular elements. A blood culture was made on nutrient dextrose broth and also on nutrient dextrose agar. A growth was obtained which proved to be a gram negative coccus. Subsequent transplants were made and the organism grew readily. It did not ferment any of the sugars. Agglutination tests were made with an antimeningococcus serum which were negative. Agglutination tests were then made with an antimicrococcus catarrhalis serum which produced a complete agglutination in 1-5000 dilution. A diagnosis was made of acute polyarthritis, acute endocarditis and bacteræmia of micrococcus catarrhalis origin. Incidentally, throat cultures also yielded the same organism.

Treatment. The patient was treated with intravenous injections of sodium iodide and small doses of neosalvarsan alternately. Salicylates and the cinchophenic acid preparations were administered by mouth. After a slow insidious course and an equally slow convalescence, the patient recovered. His heart condition is cleared up, he has some limitation of motion of the involved joints but no pain and he is again attending to his practice.

Conclusion. This case indicates that the micrococcus catarrhalis, while seemingly to possess little virulence, may do so under favorable circumstances. It further indicates that tonsillectomy performed in the presence of an acute inflammation may afford an avenue of entrance of the infecting organism into the blood stream.

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but in every instance referred it back to its committee for further study. The physicians of New York State realize that medical problems are to be approached by the case method, in which a full examination of the patient must precede diagnosis and treatment. The officers and committees will be busy if they do nothing more than study the problems assigned to them by the House of Delegates.

CHAS. GORDON HEYD, M.D., PRESIDENT



Dr. Chas. Gordon Heyd brings to the presidency of the Medical Society of the State of New York a broad experience not only in the practice of scientific healing, but also in the adjustment of the relations of the medical profession to other civic groups.

He is first of all a surgeon in active practice, familiar with both its operative and its teaching phases, and equally at home in the wards of a great hospital and his private office. His practice of surgery is the door through which he enters the field of administrative medicine as he seeks workable methods of solving the relations of the medical profession to those civic groups which supplement the work of the family doctor.

Dr. Heyd's influence as a medical teacher radiates from the New York Post-Graduate Medical School, in which he is Professor of Surgery.

His influence in the standardization of specialists is centered in the American College of Surgery, in which he is vice-president elect.

His services in the practice of civic medicine are evident in the Medical Society of the County of New York, in which he has passed through the chairs of office to become the President and then a Trustee.

Dr. Heyd's quickness of decision and devotion to duty are reflections of his army service in France with the A.E.F. as commanding officer of Mobile Hospital Number One. These characteristic qualities will assure him success as President of the Medical Society of the State of New York.

POLICIES FOR 1932

An inaugural statement by the President of the Medical Society of the State of New York

The world depression and the universal depreciation of social and financial values render it imperative for the Medical Society of the State of New York to consider seriously its program of activity, and to devise and formulate a constructive policy for the future.

Problems, State-wide and Local: There is a widespread tendency to believe that more and more centralization of medical authority should be placed with the officers of the Society. There is much to be said on centralization of authority, but on the other hand there are very serious difficulties to be encountered. A knowledge of the varying and diverse social, medical and financial conditions of the component medical societies demonstrates that no two counties present exactly the same type of problems. It is reasonable to suppose that in the matter of collecting doctors' fees, establishing a working schedule of fees in compensation cases, the interrelationship of private, semi-public and public hospital practice, there are present in the large urban sec-

tions problems that do not obtain in more rural districts. The State Society can most effectively promote the welfare of its membership by applying all of its energies to problems that are universal to its membership, such as legislative enactment and proposed laws, and other details of legislation that have to do with all types of medical practice. Malpractice insurance, indemnity insurance, and legal protection are purely universal functions of the State Society. The contact of the profession with the public, the social relations of medicine, and all those affairs that spring up between organized medicine on the one hand and society on the other, can be most effectively considered and action taken by committees of the State Society. It would seem, however, that the local component societies should have a larger measure of autonomy. They certainly have the ability to settle most of the problems that are peculiar to their population and geographical situation. For example, it would seem wise to leave the mat-

ter of financial agencies, collection bureaus, and professional economic services to be dealt with entirely by the local societies. It would seem unwise for the State Society to attempt to pass upon any general financial set-up that would be applicable to the State membership as a whole.

Economies in Administration It is incumbent upon the officers of the State Society to practice, preach, and exercise economy. The needless and repetitive expense of many meetings, at widely separated points, should be curtailed to the number necessary to accomplish their object without unduly spending the money of the Society. Functions that now reside in one, two, or more committees might after proper study be centralized in the hands of one committee or subdivision of a committee. In the revised Constitution and By-Laws the machinery has been set up for a referendum by mail, rather than by the costly and extraordinary sessions of the House of Delegates.

Medical Publicity: In the matter of publicity, conditions necessarily vary between more or less circumscribed small local societies and the societies of the five boroughs of New York. New York City with its tremendous broadcasting facilities presents constant opportunities for the profession to appear before the public and to undertake constructive and worth-while educational work. The proper allocation of time and selection of speakers, can be delegated to the Committees on Publicity of the local societies, who by experience and contacts have developed effective methods for medical publicity.

Medical Economics: The period that we are passing through is one in which every member of the community is bearing a share of the economic load. It would indeed be surprising if medicine did not participate in the economic depression. It would be found more surprising if medicine did not suffer more than some of the other professions. From time immemorial the remuneration of the doctor has been the last thought in the minds of the community, either collectively or individually. The present time is likely to produce a type of legislative mind that will want a law passed to provide for universal health insurance or State controlled medical service, or for an increasing intrusion of the State into medical practice. Therefore, it behooves the officers of the State Society and the chairmen of the various committees to be sensitive to any prospective legislative change that has for its object an increase in governmental paternalism. In order to be effectively prepared against such type of legislation it would seem wise for the State Society to engage in a very serious study with the idea of devising a plan capable of rendering a complete medical service to the community. The fundamental conception of such a plan would be that the professional side of the

service must remain in the hands of the organized medical profession. Furthermore, that all matters embracing the professional side of the practice of medicine which may arise in the future should be submitted to the organized profession for consideration and approval.

While we are laboring under economic disabilities at the present time, there is ample opportunity for the State Medical Society to plan a militant, progressive, forward-looking policy that will maintain the physician in his professional place, that shall remove from the practicing physician many of the handicaps that abound in the field of medicine today, and that will undertake definite measures for the control and coordination of the increasing clinic and institutional care of the sick. The Society should set up as part of its unalterable program the basic right of every physician to be remunerated for his time when he is employed in taking care of the indigent sick of the community. In short, the physician must be paid for his services at all times under similar conditions that obtain in other similar professions. The doctor is entitled to a monetary return for his labor that is fair and commensurate with his services, training, and experience. The fact that the practice of medicine is a profession does not mean that the doctor shall continue to work under a system that is ethically wrong and economically unsound. He must be paid for his services in order to function as a useful and contributing member of society.

The Medical Society of the State of New York should accept as a fundamental fact that all doctors working in dispensaries—public, private, or corporate—dealing with medical service, shall be paid a fair remuneration in keeping with their education, experience, and services.

Certification of Specialists: What is to be the policy of the State Society in regard to the certification of specialists? Should the Society seriously consider setting up standards and devising proper measures of control so that there may be an adequate evaluation of those claiming specialistic training, or those who set themselves forth, by inference or listing, as specialists? It would seem wise that the grading and certification should be done by organized medicine and not by the State. The State Society can bring to this problem adequate knowledge and organized control; and by reason of its experience, the machinery for doing the work.

There are many other matters of fundamental importance that are pressing for solution. Your newly installed officers enter upon their duties with a firm resolve to consider all of these matters dispassionately and fairly in an attempt to work out a plan and program that will be civically just, economically fair, and socially constructive.

CHARLES GORDON HEYD, M.D.

MEDICAL SOCIETY LECTURES TO STUDENTS

The Committee on Public Relations of the Medical Society of the State of New York has sponsored a series of lectures to the Fourth Year students of the medical schools of New York State. The subjects of the lectures are two-fold:

1. To bring the medical societies prominently to the attention of the medical students.

2. To inform the students of the responsibilities which will devolve upon them as community advisors in public health when they begin to practice their profession.

When the medical student graduates, the County Medical Society will become his medical school, his fraternity, and his business club.

The county society will offer him courses in the practice of administrative medicine, as the society exercises its prerogative of being the advisor to the community in all matters relating to public health.

The Society will offer him comradeship and the opportunity to associate with congenial friends who are bound together with ties of a common service to the community.

The Society will also inform him regarding medical economics so that he may discharge his medical obligations to the people, and the people or community may discharge their economic obligations to him, to their mutual satisfaction. Medical economics affect on the one hand the individual doctor and the medical profession, and on the other the individual that is sick and the community of which he is a part. The recognition and attempted solution of problems of medical economics are new activities, whose diagnosis and treatment belong to county medical societies. The recent graduate, untrained and inexperienced in these problems, but suddenly con-

fronted by them in his individual practice, is likely to meet them either with the cold methods of the business man, or else the impractical charity of the missionary who is dominated by an unreasoning pity for the unfortunate. The County Medical Society offers to the recent graduate the opportunity to orient himself in his economic relations to the people and to his medical brethren.

The Medical Society of the State of New York has recognized its obligation to those about to begin the practice of medicine, and has assigned one of its Past Presidents, Dr. William H. Ross, to address the senior classes in the nine medical schools of the State. The students have received the instruction with deep interest, and the Deans of the Schools have expressed their appreciation of the lectures.

The opportunity and obligation of medical societies to instruct medical students have been recognized and attempts to reach them have been made. The annual report of the President of the Illinois State Medical Society to the House of Delegates in 1930, abstracted in this Journal of September 1, 1930, page 1062, outlines the work of the State Society in organizing a medical student advisory committee for the purpose of arranging lectures to students and interns the subjects of organization, economics, and ethics.

The annual report of the Committee on Medical Economics of the Oklahoma State Medical Association, abstracted on page 705 of this Journal, refers to a course on Practical Economics given to the dentists of Oklahoma under the State Dental Society, and describes some investigations which led to the proposition that the State Medical Association shall institute such a course of lectures.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Air Massage: Physical therapy is older than medicine itself, but its practice as a specialty has been developed in recent years, after many procedures had been tried, and only those having a scientific basis survived. This Journal of June, 1907, contains a brief extract from a German journal describing what is called "Air Massage" as follows:

"R. Klapp produces the effects of massage without the necessity of touching the parts by directing strong currents of air on the skin. These strong currents produce hyperemia. To

produce a reaction of the hyperemia, which is produced by a cold stream of air, a short application of a hot stream is necessary. The treatment is useful in painful affections, such as recent fractures, in macerated conditions of the skin in the neighborhood of wounds. Infiltrated areas are caused to be absorbed more rapidly. Klapp uses an apparatus constructed by Eschbaum which is capable of producing as strong a current of air, either hot or cold, as is necessary.—*Münchener med. Wochenschrift*, 1907, No. 1."



MEDICAL PROGRESS



The Influence of Experimental Asphyxia Upon the Heart.—Experimental studies with reference to the mechanism of insufficiency of the right ventricle carried out by Ch. Laubry, J. Walser and L. Deglaude convinced these authors that mechanical factors, to which the classic doctrine has attributed this insufficiency play only a secondary role, the primary factor being myocardial hypotonia. Their method was to produce conditions of artificial respiration by opening the pleura in rabbits and hooking electrodes transversely into the muscular wall above and below the thoracic opening, under intraperitoneal anesthesia. They could thus control the respiratory movements, and interrupt them at will. They observed under asphyxia a marked dilatation of the heart, chiefly affecting the right ventricle, this always appeared at the same period of the experiment, and was accompanied by a cyanotic color in the cardiac muscle and a distention of the superficial venous network of the muscle, engorged with blood. There were also changes in the heart rhythm a retardation, followed by a phase of arrhythmia, and a progressive weakening of the ventricular contractions, which gradually became imperceptible while the auricles continued to beat. Leucocytes were markedly increased in number, and erythrocytes to a less degree. The electrocardiogram showed the following anomalies: (1) Increased amplitude of the R wave, sudden and transitory, which may be considered an exaltation of excitability, (2) Enlargement of Q R S, related on the one hand to cardiac dilatation, and on the other to troubles of electrical conductivity due to faulty nutrition of the myocardium, (3) prolongation of the P-R space, probably related to insufficient oxidation, the role of which is primordial in the muscular physiology, and (4) inversion of the T wave, showing the extension of the insufficient oxidation to the contractile process.

It seems probable that all these troubles were due to defective oxygenation of the myocardium, inducing a state of hypotonia. Applying this conclusion to human pathology, it is reasonable to conclude that grave cardiac attacks resulting in sudden death may in many instances be due to the same acute hypotonia and cardiac distention which have been observed during these experiments. It is also probable that transitory functional troubles provoked by an attack of asphyxia do not altogether regress, but leave the myocardium more vulnerable in their wake.—*Bulletin de l'Academie de Medecine*, March 8, 1932

The Practical Significance of Arterio-atony in the Development of Arteriosclerosis.—J. Plesch, writing in the *Deutsche medizinische Wochenschrift* of February 26, 1932, presents the view that arteriosclerosis is only one aspect of a constitutional systemic disease, which affects particularly the smooth musculature, and attacks simultaneously the entire vascular system, not merely certain parts of it. Local changes, to which medical science has given names (atheromatosis, hardening of the arteries, etc.) only serve to strengthen the overdilated wall at the points subjected to the greatest demands. Although deposition of calcium in the arterial wall is found at all ages in a surprisingly large number of subjects, this is not the essential thing in arteriosclerosis, but is a secondary phenomenon. The primary cause of the affection lies in the weakening of both the muscular and the elastic elements of the vessel walls. If the relaxed vessel cannot offer sufficient resistance to the blood pressure, it becomes stretched and dilated. At those places that are most exposed to the dynamic pressure changes appear, which in the last result only serve to increase the resistance of the vessel wall—a process which offers a defense against bursting and rupture. Calcification and hardening do not therefore constitute a disease, but a process of healing. Microscopic preparations show that even those parts of the arterial wall that are macroscopically unchanged are in reality pathologically changed, thus proving that the disease is not local but systemic. Every influence that tends to weaken the organism in such wise as to produce general atony is responsible also for the appearance of arterio-atony. Arteriosclerosis is not peculiarly an old age disease, it may appear in youth and later come to a standstill, or may rapidly produce very grave disturbances, ending in death, whereas calcification setting in in late years of life scarcely leads to serious consequences. Autopsies of strong young soldiers killed in the war revealed surprisingly many individuals with arteriosclerosis. On the basis of blood pressure curves, four types of vessels are recognizable: (1) the sound and tonic, (2) the completely atonic, (3) vessels that are atonic in places and rigid in others, (4) those that are tonic in places, and rigid in other places. When in artery ruptures, the tear scarcely ever occurs in the calcified spot but in the place of transition between rigidly calcified tissue and atonic tissue. Every arterial spasm must have been preceded by an overdilatation in a vascular region. Tortuosity of the temporal artery constitutes an in-

dex-of-arterio-atony. Atony of longitudinal elements has a more favorable prognosis than that of transverse elements. Treatment consists in regulation of blood pressure, reduction of blood mass (which is excessive), and in measures directed toward symptoms as they arise.

The Etiology of Acrodynia.—Although the cause of acrodynia is not definitely known, reports appearing in the literature indicate that the theory that it is a deficiency disease is rapidly becoming the prevailing opinion. Harold T. Nesbit describes a case which affords further support to this theory. The patient, a 17 months old girl, when first seen was in a condition of marked inanition. She had been treated by one physician for stomatitis because of ulcerations in the floor of her mouth, and by another for tetany. She presented the typical symptoms of acrodynia—edema and redness of the fingers and toes, and marked photophobia and conjunctivitis. A careful physical and laboratory examination excluded other diseases. A diet was prescribed consisting of milk, whole grain cereals, brewer's yeast, and vegetables. In addition ultraviolet radiation was given three times daily and cod liver oil. As the child refused all food except cereal, gruel, and milk, brewer's yeast and spintrate were added to these. Thus an ample supply of calories, vitamins, and minerals was provided without the use of gavage so frequently necessary in these cases. The response to this diet was striking. Within four days the skin manifestations had completely disappeared, the sweating had lessened, and the child began to have restful sleep for the first time in six weeks. During the second week the improvement was so marked that fruit juices, eggs, and simple desserts were added to the diet. Progress was so rapid that the child was permitted to leave the hospital in two weeks and went on to complete recovery. As cod liver oil and milk had previously occupied a place in the child's diet, ultraviolet light, brewer's yeast, spintrate or cereal, either one or all, must have been responsible for the result. Although the quartz light therapy undoubtedly reinforced the abundant vitamin D, it is plausible to believe that the other three elements, each containing vitamin B in large amounts, provided the rapid convalescence in this patient. As Zahorsky and McClendon have noted marked improvement by the addition of brewer's yeast to the diet, vitamin B deficiency should receive further consideration as an etiological factor in acrodynia.—*Archives of Pediatrics*, March, 1932, xlix, 3.

Immunotransfusion in Septic General Infections.—Long cases of severe septic generalized infection described by Knut Hallberg, cured by immunotransfusion at

the surgical clinic of Upsala, with encouraging results. This treatment, conceived by Wright in 1919, consists in combining blood transfusion with serum therapy, by inoculating the donor with staphylococcus vaccine in advance of making the transfusion. It appears that the method is not even yet so well known as it deserves to be. Two of the four patients in question had already been given ordinary blood transfusion, which proved valueless. All four were in very grave condition. A mixture of antitoxic scarlet fever serum and antistreptococcus serum in equal parts had no more effect than the mercurochrome and trypanflavine injections that were tried. Only when immunotransfusion was employed did the condition of the patients begin to improve. Autovaccines were prepared in all cases from the blood or from a metastatic focus, and were administered to the prospective donors in 3 successive doses of respectively 100, 200, and 400 million bacteria, with the exception of one case in which only one dose of 100 million was given. The transfusions were made 2 to 24 hours after the last injection had been given. In no case was any discomfort to the donor observed, and the treatment was successful in all cases. Two of these patients were men, and two were children, a girl of 10 and a boy of 3. A comparison of the deplorable condition of this boy on the morning before the transfusion and his improved condition only a few hours after the transfusion left no doubt as to the value of the treatment. Despite pyarthrosis in three joints the sepsis cleared up so rapidly that in three weeks his temperature was normal and he was discharged cured two weeks later. Donor and recipient should belong to the same blood group, as was the case in all these instances. A favorable sign observed in all the cases was that after the immunotransfusion the septic process became localized. The fall of temperature was by lysis. In addition to the immunotransfusion, one patient received injections of autovaccine, but in smaller dose than that given the donor. In urgent cases where there is no time to prepare an autovaccine, stock vaccines may be used.—*Acta Chirurgica Scandinavica*, March, 3, 1932.

Calcified Bursitis.—On the basis of a personal case, interesting from its unusual localization in the subtricipital region, and from its clear roentgenological image, Edouard Naz and Silvije Kadrnka discuss certain features of calcified bursitis. This bursolith, the size of a small egg, first observed on the occasion of a traumatism, appears to have been the result of the occupation of its bearer, a young girl who had for several years rung the bells of her village church. The subtricipital bursa is not preformed, like many bursae, but develops

in postnatal days, depending on the habitual use of the locomotor apparatus. In this location the bursa forms a sort of cushion between the humerus and the tendon of the triceps. In certain cases of bursitis inflammatory hyperplasia leads to a twofold process of proliferation and destruction, accompanied as here, by a deposit of calcareous salts in the necrosed parts (calcifications). Other parts, pedunculated and calcified, may become detached (crucious concretions) and become free within the interior of the bursa. When multiple concretions are present in a bursa they finally block its lumen, and it becomes transformed into a calcified mass. The radiological characters of these bursoliths vary according to the stage of calcification, and are closely allied to those of the anatomic variety of the bursa in question. The calcium salts are deposited irregularly in the walls of the capsule and in the fibrous furrows which traverse the structure. There may be only a slight cloudy contrast shadow, but at a more advanced stage veritable calcareous blocks are formed, which become detached and remain free within the bursa. At a still more advanced stage, scarcely any vital tissue remains, and there is no liquid content in the bursa. The radiologic image consists of multiple shadows closely imbricated with one another, and of varied size and form. They are separated by narrow, less opaque bands (noncalcified tissue) and form an image resembling a bunch of grapes. The degree of opacity is nearly that of the cortex of the bone. The localization and image in the authors' case impress the need of prudence in the diagnosis of affections of the elbow accompanied by ossifying or calcifying hyperplasia and especially in diagnosing chondromatosis of the capsule, a number of cases of which have been recently described without anatomic verification—*Lyon chirurgial*, January February, 1932.

Conditioned Reflexes and Habit Formation

—Starting with Pavlov's statement that habits are nothing more than a long chain of conditioned reflexes, W. Horsley Gantt shows how the teaching of conditioned reflexes for habit formation supports the rules for habit training formulated by William James. The first of these rules is "*We must make automatic and habitual, as early as possible as many useful acts as we can*." This means we must elaborate conditioned reflexes to the proper stimuli or situations (complex stimuli) and as early as possible, because young animals form them more easily than older, and the first reflexes are the strongest. James' second rule is "*Launch ourselves on as strong and decided initiative as possible*. Accumulate all the possible circumstances which will reinforce the right motives." Here emotion is brought into play, and a cer-

tain emotion is necessary for the elaboration of conditioned reflexes, a dog which is not hungry will not form a conditioned food reflex. The third rule laid down by James is: "*Never suffer an exception to occur until the new habit is securely rooted in your life*." The extinction of the conditioned reflex may easily occur when the conditioned stimulus is given too often without supporting it by the unconditioned. James' third rule of "*Keeping the faculty of effort alive in you by a little gratuitous exercise every day*" involves both the emotional state and the value of repetition in the elaboration of conditioned reflexes and in the prevention of their gradual spontaneous extinction. In addition to these maxims Gantt makes several direct applications from the study of conditioned reflexes to habit formation. After the first conditioned reflex in a certain center is elaborated it takes fewer trials for each succeeding one up to a certain point. This is a basic law of education. That extinction of the second conditioned reflex is much easier than of the first, and that when once it has been extinguished and restored it is never so stable as it was before extinction, has an enormous significance in the destruction of moral codes. It explains why a person unworthy in one thing is usually so in another, the chaos produced by revolutions and wars, the difficulty of bringing about permanent cures in drunkards, culprits, etc. How strong the old conditioned reflexes are and their spontaneous restoration after extinction, and how quickly recently elaborated conditioned reflexes disappear, is seen in the readiness with which habits cultivated late in life are abandoned. The fact that a delayed reflex is weaker than an immediate one explains the demoralizing effect of the action of procrastination. Many of our prejudices may find an explanation in the phenomena of conditioned inhibition. In closing, Gantt says that much caution and perseverance, and further study are necessary before we can use the conditioned reflex with confidence in the general explanation of psychobiologic reactions—*British Medical Journal*, March 19, 1932, 1, 3715.

Food Allergy in the Differential Diagnosis of Abdominal Symptoms—Albert H. Rowe presents an analysis of the records of 100 patients with gastrointestinal complaints, which shows that food allergy not infrequently causes distention, belching, pyrosis, epigastric heaviness and sour stomach. He finds that food allergy is a frequent cause of abdominal pain and soreness. The pain may be suggestive of appendiceal inflammation, of gall-bladder disease, or of peptic ulcer. The frequency of canker sores in food allergy suggests that similar lesions could readily occur

in the stomach or duodenum, and that the continued action of digestive ferments on such sores could produce peptic ulcer. Food allergy may cause pain in the upper left abdomen, due to colonic reactions, or in the lower abdomen, localized in the descending colon, the sigmoid or the small bowel. The spasm and mucus of mucous colitis can well be explained by food allergy. Angioneurotic edema may cause severe abdominal pain and signs of intestinal obstruction, as in cases previously reported by the author. Such lesions have been discovered at operation. The fact that the symptoms of food allergy frequently simulate acute or chronic abdominal lesions has led to many unnecessary operations in the past. Hence the necessity for the study of every patient with potential or active allergy in mind is paramount. Positive or negative evidence of such allergy should be included in the family and personal history of every patient. Because of the frequency of negative skin reactions in food allergy, the use of "elimination diets" for diagnosis has been found of increasing value. Many obscure symptoms have been found due to food allergy by means of these diagnostic diets.—*American Journal of the Medical Sciences*, April, 1932, clxxxiii, 4.

Tender Rib-Cartilage as a Sign of Cholecystitis.—In examining a case of cholecystitis some years ago, D. W. Carmalt-Jones says his finger-tips accidentally came into abrupt contact with the patient's rib-cartilage bounding the right hypochondrium. This produced sharp pain, and on closer examination a tender spot was found upon the eighth right costal cartilage, on its lower edge. Since then he has found this sign repeatedly in cases of cholecystitis, with or without gall-stones. The sign is sought for with the hand on the upper abdomen; the third finger-tip is brought into firm contact with the costal margin, inch by inch along its entire length from without inward, beginning on the left side, saying nothing and watching the patient's face. A single tender spot, indicated by the patient's expression, is found generally on the eighth rib edge, sometimes a little higher or lower, and just covered by the finger tips. Occasionally the skin of the whole eighth dorsal segment is hyperalgesic to pin-prick. The author believes this tender spot to be quite as dependable in the diagnosis of cholecystitis as is McBurney's point in appendicitis. The sign is not invariably present, and in some cases it comes and goes. No mention of this tenderness seems to have been made by writers on gall-bladder disease. After discussing the possible mechanism of the production of the tenderness, the author suggests that spasm of the sphincter of Oddi, which is believed to be controlled by the

sympathetic, may induce this tender spot on the body wall, and sometimes hyperalgesia of a whole segment in the area of corresponding somatic innervation. He believes that some of the cases showing this sign, and found negative at operation, may be due to intestinal allergy, a subject he plans to discuss in another paper.—*The Lancet*, March 19, 1932, ccxxii, 5664.

Orthostatic Albuminuria and Its Psychophysical Behavior.—By orthostatic albuminuria, says J. Schreiber, writing in the *Deutsche medizinische Wochenschrift* of February 19, 1932, is meant an excretion of albumin in the urine after the patient has been standing quietly. It has been generally held that this albuminuria is due to circulatory disturbances in the kidneys, which are in their turn attributable to cardiovascular, hemodynamic, vasomotor, neurostatic, or other mechanical influences. Thus Jehle attributes it to a thoraco-lumbar lordosis, which mechanically causes a change in the position of the diaphragm, which in its turn produces a kinking of the veins of the kidneys or of the vena cava. If this lordosis is the cause, it is evidently due to the fact that his test persons were examined not in orthostasis but in "hyperorthostasis," that is, in strict military position, which is a forced and unnatural posture. In such attitudes lordoses are commonly formed. If we compare the albuminuria of hyperorthostasis with that which occurs during simple orthostasis, we find the former runs a much briefer course, which rests on the fact that the boys can bear the extreme military position only 10 to 12 minutes, and the experiment has to be broken off then. In the absence of any other satisfactory cause for orthostatic albuminuria Schreiber addressed himself to the nervous or psychic side of the question. He attempted to influence the boys psychically, and then to watch the effect. This was a difficult thing to do, despite the long standing experience that fear and pleasure influence the circulation—its tension and relaxation, the pulse count, and blood pressure. He tried the hypnotic suggestion of a juggler's performance, without any success. Then he gave them a graphophone concert, with lively dances, marches, operatic songs—the so-called "hits." This was successful. In every curve the albuminuria disappeared during the playing, if it had been present before; or it failed to appear when the music ceased. This particular music plainly had the effect of emphasizing pleasure or delight, while the juggler's tricks had produced rather the stimuli to tension or relaxation. Schreiber suggests that it is wise to bear these mental processes in mind, alike on diagnostic as on therapeutic grounds.

LEGAL

PRIVATE HOSPITALS—LEGAL LIABILITY FOR ACTS OF NURSE

By LORENZ J. BROSNAN, Esq.

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The legal liability of a charitable, not-for-profit institution for acts of its employees has been the subject of a long series of decisions in this and other States. Many of these decisions we have reviewed in these columns. Succinctly stated, it may be said that a charitable, not-for-profit institution is not responsible for the acts of its physicians, nurses or internes, provided due care has been exercised by the hospital in the selection of such physicians, nurses or internes. We do not, however, find in the reported decisions many cases dealing with the legal liability of the so-called private hospital. An interesting case against a private hospital for the acts of one of its nurses recently arose in one of our Southern States. In order to understand the situation before the court, it is necessary to set forth the evidence at some length.

The plaintiff, while working in a mine, sustained certain injuries to his right hip and leg and was taken to a private hospital for treatment. He there obtained a private room. As the plaintiff on the trial of the case testified, what transpired was substantially as follows:

"They wanted to know what doctor I wanted, and I told them Dr. R. told me to call for Dr. C. . . . He afterwards came. I was suffering bad and don't remember exactly, but he came in an hour and a half or two hours. . . . There was a lady that came up the first afternoon that I took to be the clerk, but don't know who she was, except I know she was not a nurse, and she said, 'If you've got any valuables, I will take them to the office.' So I had some money and my watch and gave them to her and she took them out of the room. . . . Dr. C. came in the afternoon and examined me and says: 'We will have to have an x-ray made of that right hip and see what kind of an injury you have. I do not believe you have got anything but a bad sprain and a bad bruise,' . . . A day nurse and a night nurse attended on me—one during the day and one during the night. I was discharged from the hospital on Thursday afternoon. Dr. C. had told me that I had a bad sprain and bruise and said, 'If you want to go home, I do not see why you can't do as well at home as you can here,' and I said, 'I am a poor man and unable to pay hospital expenses if I can get out of paying them.' So, on Thursday morning I asked the nurse and said: 'Did the doctor say anything about me getting off?' She said, 'He hasn't said anything to me about you

leaving, but if the doctor says you haven't got anything but a bruise I don't see why you can't go.' I said, 'I would like to go home if I don't have to stay, would like to be at home if I can do as well at home.' There wasn't anything more said about it until that afternoon when she came around about one or two o'clock and I said, 'Have you seen the doctor yet?' And she said, 'No, sir.' And I said, 'I think some of my people will be here this afternoon and I would like to go home.' And she said, 'I haven't seen the doctor yet—Don't know whether he is going to be over here in the hospital or whether he is out of town. Don't know where he is.' That afternoon my wife and some neighbors came to see me. I said to the nurse that came in with them, 'Nurse, I want to go home this afternoon, but I am not going to leave here without the doctor's, without a discharge from the doctor,' and she said, 'I will go and see the doctor or will call him and see if you can get a discharge.' She went out again and I judge this was about four or five o'clock. When she came back there was another lady with her. This lady had my pocketbook and watch and my bill and she said, 'Here is your money.' I took the money, and said, 'How much is my bill?' She handed me the bill and I paid it. The lady that brought my pocketbook and money was the same lady that took my pocketbook and money. The nurse said if the doctor ordered me discharged she would have my bill sent up. . . . I left the hospital that evening. After I paid my bill I left as quick as the boys could put me on a stretcher and carry me down and put me in the car. . . . On the way home every time we would turn a curve either way it was just like a knife running through my hip. When my leg would creak a little I would feel something like a grinding, like two somethings rubbing together."

The plaintiff was driven home a distance of about forty-five miles over rough roads and the ride was extremely painful to him. Upon arriving at his destination he consulted another doctor and it was ascertained that he was suffering from a fracture of the leg. The patient was directed to immediately enter another hospital for treatment. He finally obtained a bad end result with about two inches shortening of the leg and considerable limitation of motion.

He instituted a suit against the private hospital, charging that the suffering which he went through and the bad result obtained by him was

directly attributable to the negligence of the nurse in discharging him from the hospital without the actual consent of the doctor in charge of the case. It was clear from the testimony at the trial that the nurse who had discharged the patient was a student nurse who had been in training for somewhat more than two years and that she had not communicated with the physician in charge of the patient's case or obtained his consent before discharging the patient from the hospital. A verdict was rendered by the jury in favor of the plaintiff.

An appeal was taken and the highest court of the State ruled that the judgment obtained in the lower court should be reversed. While the court stated the law to be that a private hospital operated for profit is held to the duty of ordinary care in the treatment and protection of patients and is responsible for injuries resulting from failure to perform such duty, the court ruled that under the facts of this case a cause of action had not been proved against the hospital. The court said in its opinion:

"In the case at bar the plaintiff selected his own physician. Therefore, the hospital assumed no liability and was charged with no responsibility for the medical treatment of the plaintiff for the time when the relationship of patient and physician should be terminated by discharge of the patient. Nor was the hospital, under the circumstances, charged with any duty in procuring a termination of the relationship of patient and physician. Hence, if no such duty was imposed upon the defendant and if it did not assume the performance of such duty then there is no negligence upon its part, and, consequently, no liability.

"The record discloses that the patient requested the nurse to secure for him certain information from his physician. Assuming that the nurse negligently failed to do so, it is apparent that she was acting upon the request of the plaintiff in a matter with which the defendant hospital was not concerned."

The Appellate Court in its decision ruled that if it appeared from the credible evidence that the nurse "was assigned to the plaintiff's case for the purpose of carrying out the orders and instructions of Dr. C. in the treatment and care of the plaintiff, and that she undertook, at the instance of the plaintiff, or at the suggestion of the plaintiff, or upon her own motion in behalf of the plaintiff to procure the consent of Dr. C. to the plaintiff's returning home," the said nurse,

"was the agent of the plaintiff and not the agent of defendant hospital and that her act in so doing was not the act of the hospital and the hospital is not bound by her said act and the defendant hospital would not be liable for her act."

The court in its decision made reference to a recent case which was passed upon by the Court of Appeals of New York State in which a similar ruling was made. The said case arose out of the employment by a railroad company of a nurse who acted under the general direction of the railroad company's physician. In its opinion the Court of Appeals said:

"But a trained nurse called in on a special case is not in the service or the servant of the employer. She is a professional person like a physician, employed to exercise her calling to the best of her ability according to her own discretion, subject only to the general directions of the physician in charge of the case.

"The circumstance that nurses are subject to the general supervision of the physician in charge of the case and do not, like such physicians, act entirely on their own responsibility, has not led the court to distinguish between physicians and nurses in this regard. They are regarded as especially equipped to render professional services to patients when called on to do so rather than as workmen. They are grouped with doctors and lawyers rather than cooks and chambermaids.

"The rule of relationship between employer and nurse is not limited in its application to charitable corporations, although it has often been applied to relieve such corporations from liability for the negligent acts of physicians and nurses employed by them in the treatment of patients. It rests on the fact that one who employs such a nurse to take care of an injured person undertakes, not to treat the employee through the agency of the nurse, but to procure a nurse for the special purpose for which her services are required. This is all that the railroad company did in this case. It procured the nurse, but it did not act through her in caring for the patient. She was left to act on her own responsibility under the general direction of the physician in charge of the case. Although she was, in a general sense, employed by the railroad company she was not its employee. She occupied the position of an independent contractor following her own calling rather than that of one in the service of the employer. The fact that she was employed by the railroad company rather than the hospital in no wise alters her status."

LUNG ABSCESS FOLLOWING TONSILLECTOMY

A woman about thirty-five years of age consulted the defendant who specialized in ear, nose and throat work, complaining of headache and dizziness. He examined her and found a condition of hypertrophied and diseased tonsils. He advised their removal and suggested that the operation be performed under a local anaesthetic. The plaintiff refused the operation under a local anaesthetic, stating that she was afraid, and that she wanted a general anaesthetic. The doctor agreed to use the general anaesthetic, and the next day the tonsillectomy was performed at a private sanitarium. The doctor was assisted by a physician who gave the anaesthetic and an experienced nurse. The operation was uneventful with very little bleeding. The patient remained at the hospital for twenty-four hours and then returned to her home.

A week later she returned to the doctor's office for examination. He found her throat clean and discharged her. Apparently, a few days subsequent thereto the patient went for a trip by open motor car a distance of over 100 miles and contracted a heavy cold. She developed a lung abscess and entered a hospital where she remained for about a month, receiving treatment for her condition by several doctors. At her discharge therefrom she was in need of further treatment and left the hospital contrary to the advice of her physicians.

The next the defendant doctor saw of the

woman was about eight months after the tonsillectomy when she came to him for examination and he found a condition of rhinitis with a thick mucous discharge. He did not treat her but referred her to another doctor.

A few months later he received papers starting suit on behalf of the patient, claiming that contrary to proper practice and contrary to her wishes, the doctor had performed the tonsillectomy under a general rather than a local anaesthetic and as a result she had a lung abscess.

Some time after the suit had been started the plaintiff's attorney applied to the court and obtained an order permitting that the testimony be taken before trial of one of the doctors who had treated the patient for the lung abscess. The said doctor appeared in court as a witness for the plaintiff and was interrogated at length by plaintiff's counsel with respect to the cause of the lung abscess, and obtained answers in reply to his own questioning that completely vindicated the defendant doctor. The plaintiff's counsel sought to obtain from the said doctor expert testimony in advance of the trial to aid his case, but as a matter of fact the doctor so used as a witness, in answering all questions dealing with the cause of the lung abscess, and the propriety of the treatment rendered by the defendant, gave replies so favorable to the defendant doctor that a few days later the attorney for the plaintiff consented to discontinue the action.

APPLICATION OF IODINE PETROGIN TO THROAT

A middle-aged man consulted an ear, nose and throat specialist with respect to a condition which was diagnosed as acute frontal sinusitis. The doctor determined to administer as treatment an application of ephedrine to the nasal chambers and 25% argyrol to the throat. On the second treatment, in some unknown way, the doctor's vial of iodine petrogin had been changed in location on his treatment table so that it was placed where his vial of argyrol was usually kept. As a result when the doctor made the application to the patient's throat on the occasion of the said visit he applied a 5% solution of iodine petrogin to the patient's throat instead of the intended argyrol. The patient suffered an immediate muscle spasm, which caused the patient to become greatly agitated. The doctor at once sprayed pure liquid vasoline into the patient's nose followed by a starch solution by mouth. He was then allowed to rest on a couch and was taken to his home by the doctor. The doctor

called at the patient's home thereafter and continued to care for the patient. No real harm appeared to result from the error, and in a week's time the sinus condition as well as the reaction to the iodine was completely cleared up.

Suit was brought by the patient charging that the application of ten per cent iodine petrogin was negligent and caused injuries to his pharynx, larynx and nose. It was further claimed that he had suffered for an extended period of time complete nervous exhaustion, blurring of eyesight, dizziness, pains throughout the body, and a nervous shock causing fear of high elevations, and loss of control of the tear ducts, as well as other miscellaneous injuries. He also claimed that as a result of the application of the iodine he had been prevented from attending to his vocation for three months.

The case came on for trial before a judge and jury and after the issues had been submitted to the jury, the verdict was no cause of action.



NEWS NOTES



THE ANNUAL MEETING

The one hundred and twenty-sixth annual meeting of the Medical Society of the State of New York was held on May 23, 24 and 25, 1932, in the Hotel Statler, Buffalo, N. Y. This meeting was one of the most successful in the history of the Society; in fact it was the most successful in many respects, as it naturally would be, in view of the great progress in the activities of the Society.

Attendance: The total attendance cannot be determined until the registration at the several divisions of the Society is compiled and duplications eliminated; but an unusual number of physicians were present. One noticed the great number of new faces among the groups of older men who are known as regular attendants. It is an excellent sign of progress that the younger men find satisfaction in their association with those of long experience in Society affairs.

Several of the newer attendants were heard to comment on the great amount of work which had to be done in order to prepare for the meeting and keep it running smoothly. This *Journal* of May first called attention editorially to the fact that about 275 members were directly concerned in making the preparations for the meeting. Add to this the 175 members of the House, and the number who came because of their special interest in some phase of the meeting, and it will be found that over 500 physicians took part in the preparation and execution of the program of the meeting.

An important factor in securing a large attendance was the publicity given by the *Journal* to all phases of the meeting. The *Journal* printed 75 pages of programs, reports, and descriptions in its issues of April fifteenth and May first. This is almost equal to the entire space in one issue of the *Journal*. The results have justified the efforts put forth in education and publicity, for the members came together well informed as to the questions to be considered.

House of Delegates: The deliberations of the House of Delegates were marked with promptness and efficiency. The principal business was a consideration of the reports of the officers and committees, and action on the policies which were suggested. The wise transaction of business was greatly facilitated by two features which have only recently been introduced into the House.

1. The publication of the reports a month in advance of the meeting.

2. The full consideration of the reports by the

reference committees which were appointed to study the reports and to express opinions regarding their wisdom and value. Some of the reference committees began their studies immediately after the publication of the reports, and were therefore prepared to express their opinions concisely and clearly. The result was an unusual degree of harmony in the deliberations. If a matter was controversial, it was referred back to its officer or committee for further study.

The report of the Committee on Economics had been given extensive study by the reference committee. The report was stated to be essentially a plan for future study rather than a final settlement of any problem in medical economics. The report made a favorable impression and its chairman was unanimously re-elected.

The subject of press publicity aroused a considerable degree of interest. This subject is one of the latest to be considered by the State Society, and a special committee on the subject was appointed only a few months ago. It plans to inspire the County Societies to give publicity to its efforts and policies in its own local districts. It also considered the question of similar publicity by the State Society, but time has been too short for the development of definite plans of action.

Consideration was also given to the radio publicity carried on by the special committee on periodic health examinations. The evolution of all forms of publicity will be left to future developments.

The newspapers gave the physicians the space to which they would be entitled in a proper balance of news of the day. The *New York Times* sent a special correspondent who cooperated with the Press Publicity Committee in preparing readable reports of the proceedings of the meeting.

The complete minutes of the House of Delegates will be published in the *Journal* as soon as they can be prepared. Few persons realize the amount of work that is necessary in checking up every item of the proceedings and in preparing the paragraphs and cross references for easy reading and comprehension. The minutes will probably appear in the *Journal* of June fifteenth.

Scientific Exhibits: A series of scientific exhibits was arranged in the lobby of the Ball-Room which was used as the principal assembly hall of the meeting. The Buffalo Medical School and City Hospital arranged a series of specimens in pairs, one representing the x-ray of the condition and the other the pathological specimen of the

affected organ or tissue. These specimens were in regular use in teaching medical students, but were equally instructive to practicing physicians.

A striking exhibit was that of the circulation in the kidney of a living frog. The capsule of the kidney is thin and transparent, and the outlines of the glomeruli and tubules may be readily seen on the surface by reflected light. The capillaries and smaller arteries and veins were beautiful streams of suspended blood cells coursing among the islands of tubules and glomeruli.

The State Department of Health had an exhibit of wax models of syphilitic lesions colored true to life. Over fifty conditions were shown in the collection. The method of taking serum from primary sores for diagnosis was also shown.

Clinics: The response to the clinics announced for the first day of the session was unusually great. Some clinic rooms were filled to overflowing. The members showed a special interest in the clinics and exhibits of the New York State Institute for Study of Malignant Disease of which Dr. Burton Simpson is Director. This Institute is at the service of every physician in New York State. It is desirous of receiving specimens of all tumors, and will examine and report their nature free of charge.

Scientific Meetings: The afternoon meetings were given over to general sessions for the discussion of problems of interest to all practitioners of medicine. One subject of great interest was the value of serum from recovered cases of poliomyelitis in the prevention and treatment of the disease.

Mornings were devoted to meetings of the sections. The papers read at the sections and general meetings will be published in this Journal throughout the year.

The Anniversary Meeting and Banquet: The banquet was held on the evening of May twenty-fourth. Nearly one hundred tables had been set, each for six persons, and there was scarcely a vacant seat in the Ball Room. In fact, a whole row of tables had to be set in the gallery.

The anniversary meeting which is required by the original charter of the State Society took the

place of the after-dinner addresses. President Johnson presided and clothed his remarks with the combination of fact and poetry for which he is noted. The principal speaker was Dr. George David Stewart, Professor of Surgery in the New York University and Bellevue Medical School, whose subject was "The Individual in Medicine." The reputation of Dr. Stewart as a pleasing speaker was undoubtedly a factor in securing the large attendance.

Dr. Johnson introduced the incoming President, Dr. Chas. Gordon Heyd, of New York City, who expressed the greetings of the new officers and committeemen, most of whom were already veterans in the service. An inaugural statement by Dr. Heyd appears on page 674 of this issue.

The Technical Exhibits: The limitation of floor space prevented the development of the technical exhibits to an unusual size, but the State Society showed its good will toward the exhibitors by tendering them a supper and entertainment on the evening of the first day of the session. Most of the exhibitors are also patrons of the advertising pages of the Journal, and their good will is felt throughout the entire year.

The Printed Program: An innovation that was favorably received was the program of sixty-six pages. This contained a greater amount of information than any previous program. Of special value was the outline of each scientific paper and summary of its contents.

Social: The feature which most members will recall the most frequently is that of meeting their medical friends and forming new acquaintances. Impressions of new discoveries and methods of action are derived largely from the privately expressed opinions of those who are qualified to judge. The choice of a lecture to attend will often depend on the advice of a friend or new acquaintance. A physician seeks for confidential information regarding the progress of public health in a county in which all published reports are laudatory. Not the least pleasant of the memories will be those of stories obtained in exchange for equally ancient ones which renew their youth when transported to new fields.



sibility to the public in the present financial situation, that it was recognized that every doctor in the county was treating numerous cases and would continue to treat numerous cases for which he did not expect a fee or at most a delayed or greatly reduced fee. It was not the desire of the committee to interfere with this traditional role of the physician but on the contrary to encourage it and to let the fact be known that such was the practice.

Dr. Smith also brought out the point that on the other hand there are about 15,000 recorded indigent families in Nassau County who are getting relief other than medical at the expense of the several departments of social welfare, and that it was the belief of the committee that these families, already classed as indigents, should not be made an added burden to the medical profession, but that the physician should be entitled to submit a bill for his services, and should expect to be paid by the same organizations providing the other forms of relief.

The committee asked that this basic principle be recognized and established as a policy of the Society, and that the committee be authorized to negotiate with the proper welfare officers to attempt to arrive at a mutual understanding regarding methods of procedure, fees, etc., which should be necessary to reach the solution of this problem. The request was approved.

Dr. B. W. Seaman, for the Hospital Committee, stated that it was expected that bids on bonds for the new county hospital at Meadowbrook would be opened on May 3, 1932, and that it was confidently expected that a satisfactory interest rate would be offered and that the bonds would be sold. Dr. Seaman stated that if this were accomplished, it probably would mean that construction of the hospital would start by May fifteenth.

Drs. Louis N. Goldstein, Valley Stream, and Henry McD. Painton, Baldwin, were elected to membership in the Society.

Dr. L. A. Van Kleeck, President of the Second District Branch, congratulated the members and the officers of the Society upon the meeting, and upon the interest taken by the members in the work of the committees as evidenced by their attendance. Dr. Alec N. Thomson, Treasurer of the Second District Branch, invited the members to attend an afternoon of golf, and dinner at the Lawrence Golf Club on June eighth.

The President then announced that he hoped to hold an outing for the County Society the latter part of June, and after discussion, it was voted to hold a clambake.

Upon motion of Dr. Van Kleeck, the Executive Secretary was directed to send a copy of the minutes of this meeting to the NEW YORK STATE JOURNAL OF MEDICINE for publication.

RENSSELAER COUNTY

The regular meeting of the Rensselaer County Medical Society was held May 10, 1932, at the Samaritan Hospital, Troy, N. Y. After a brief business session, the following scientific program was given by members of the hospital staff.

1. Case histories.

- (a) Carcinoma of the brain
- (b) Pernicious Anemia with Spinal Cord Lesions, Dr. Harry W. Carey.

2. A paper on "Vincent's Infection—a Medical and Dental Problem," was read by the hospital dentist, Dr. J. Lester Sherman.

3. Illustrations of affections of the thyroid, showing diminution of function, were given by Dr. William Kirk.

4. Patients were shown with

- (a) Corneitis, Interstitial Keratitis with Scleritis
- (b) Foreign bodies in the eye
- (c) Incipient cataract of both eyes by Dr. Miles McGrane.

5. A new method of ventral suspension was discussed by Dr. John Trotter.

6. A few mastoiditis cases, cholesteoma teatoma of the ear were presented by Dr. John J. Rainey. Considerable discussion followed relative to the time to operate upon the mastoid.

7. A patient with keloid of the face was presented by Dr. James Donnelly.

The members were the guests of the hospital at a supper served under the direction of the Superintendent, Miss Grace Allison.

WILLIAM B. D. VAN AUKEN, *Secretary*

WASHINGTON COUNTY

The semi-annual meeting of the Medical Society of the County of Washington was held at Greenwich, May 10, 1932, at 4 p.m., with the President, Dr. D. M. Vickers in the chair, and the following members present: Drs. Vickers, MacArthur, Pashley, Sr. and Jr., Banker, Cuthbert, Prescott, Park, LaGrange, Holmes, Bailey, Falkenburg, Leonard, Armstrong, Rogers, Joslin, and Ring.

The meeting consisted of three parts—a business session, a social supper, and a scientific session.

Reports were made by the treasurer, Dr. C. A. Prescott of Hudson Falls; the Legislative Committee by Dr. W. A. Leonard of Cambridge; the Public Relations and Medical Economics Committee by Dr. M. A. Rogers, Greenwich; the Physical Therapy Committee by Dr. S. J.

Pashley, Jr., Hudson Falls. Dr. H. L. K. Shaw of Albany spoke on legislation.

At the scientific session the subject of "Urologic Infections" was presented by Dr. T. H. Cunningham, of Albany, who discussed the diagnosis and showed slides of the x-ray findings and surgical treatment. Dr. H. L. K. Shaw of Albany discussed the early diagnosis and medical treatment.

"Milk-borne epidemics" were described by Dr. Paul B. Brooks, Deputy State Commissioner of Health.

"Pain in the Ear" was discussed by Dr. T. F. MacArthur, Greenwich.

The subject "Prognosis" was presented by Dr. S. J. Pashley, Jr., of Hudson Falls.

S. J. BANKER, *Secretary*.

SCHOHARIE COUNTY

The Schoharie County Medical Society held its semi-annual meeting in Smith's Tavern, Middleburg, N. Y., on Thursday, May 5, 1932, seventy-five per cent of the members being present.

A business session was held and nominations for officers for 1933 were made. After a social dinner, the scientific program was carried out:

"Medical Ethics," by Dr. Don Morse Griswold, formerly of Detroit, but now of Albany.

"Diagnosis and Treatment of Pneumonia," by Dr. Thomas Ordway, Dean of the Albany Medical College, who illustrated his paper with lantern slides.

H. L. ODELL, *Secretary*.

SULLIVAN COUNTY

Dr. George F. Herben, of Loomis, and Dr. J. M. Rosenthal, of Monticello, were nominated for president of the Sullivan County Medical Society at the semi-annual meeting of the Society held at the Lenape Hotel in Liberty, on May 11, 1932. The elections will be held at the Society's annual meeting in October.

Other officers nominated were Dr. Harry Golembe, Liberty, vice-president; Dr. L. C. Payne, Liberty, secretary and treasurer; Dr. V. G. Bourke, Livingston Manor, Dr. S. W. Wells, Liberty; Dr. Harry Jacobs, Hurleyville, and Dr. J. H. Moore, Loomis, Board of Censors; Dr. Harry Golembe, chairman committee on public relations; Dr. Ralph S. Breakey, Monticello, Chairman legislation committee.

Dr. Alvan L. Barach of New York City, a visiting physician at the Presbyterian Hospital

in New York and a member of the teaching staff of Columbia University Medical School, was the guest of the society at the meeting. He spoke on the therapeutic use of oxygen in cardio-respiratory diseases, a subject on which he is recognized as one of the leading American authorities. Sullivan physicians considered the talk timely, as many county residents have suffered from severe pneumonia, a disease in which the use of oxygen properly is of great importance. In conjunction with his talk, Dr. Barach gave motion picture and still slides demonstrating the value and use of oxygen.

More than 40 physicians were in attendance. A dinner was served after the meeting.

HARRY GOLEMBE, *Chairman*,
Committee on Publicity.



THE DAILY PRESS



THE DREAM VENDER

Dreams are unfulfilled aspirations. They visualize the thoughts which are in our minds during our waking hours. James J. Montague, in his column "More Truth Than Poetry" in

the New York *Herald Tribune* of May 9, assumes these facts to be true in his verses called "The Dream Vender," which doctors might teach to their small children.

"When fades the gold that rims the West
And falls the evening dew,
When every bird is in its nest
Except an owl or two,
There comes a funny little gnome
Who never makes a sound
The while he flits from home to home
To bring the dreams around.

"One never sees him as he flies
Among the shadows dim;
The very sharpest human eyes
Could not discover him.
As swiftly as a shooting star
He hurries all about
And not the strongest iron bar
Could ever shut him out.

"The dreadful dreams he's sure to save
To bring at dead of night
To little ones who misbehave,
And sometimes even fight.
But if you always try to do
Exactly as you're told
He's pretty sure to bring to you
A dream of shining gold.

"You'll never glimpse him as he flies
On swift and golden wings,
But when the stars are in the skies
You *live* the dreams he brings.
So be as kindly as you can
And when your sleep is sound
You'll have a visit from the man
Who brings the dreams around."

READING WITH APPRECIATION

How many of us know how to read? It is often said that anyone with intelligence can read; but can they read understandingly? One of the greatest difficulties with students is that they do not grasp the meaning of what they read. Many, for example, do not possess the ability of picking out the subject, the predicate, and the object of a fairly complicated sentence, and are lost when it comes to placing the leading and the subordinate clauses in their proper relations. From time immemorial sentences have been constructed according to definite grammatical principles which must be borne in mind by readers as well as writers. It takes imagination as well as broad intelligence to interpret some sentences which come to an editorial office.

The New York *Times* of April 11 has an editorial on the problem of learning to read intelligently, and says:

"A lesson in reading, applied by Lee Emerson Bassett of Stanford University to college students, but useful to any one resolved on getting the most from literature, is the leading article in *The Quarterly Journal of Speech* for April.

"The purpose is to help students to understand and to enjoy 'the best thought of the best minds in their best moments.' There is no intention to develop public speakers, to train orators or actors. Material is chosen for its intrinsic value, and when selections are used, students are required to familiarize themselves with the whole text and with the life and work of the author. The oral reading reveals in most instances the student's intellectual honesty; and if the teacher suspects pretended knowledge, he can soon discover by a question or two how well the material is really understood.

"Students of Cornell University remember with pleasure the privilege of hearing Dr. Corson's reading, and Professor Copeland at Harvard similarly instilled a love of literature. Such teachers treat it as an art to be enjoyed."

The *Times* might have included Professor Francis A. Marsh of Lafayette College, probably the most distinguished and successful professor in teaching college students how to read intelligently, and to get all the information possible from a printed page.

FEDERAL AID

State aid for county projects is matched by Federal aid to States, as is shown by the following editorial from the *New York Sun* of March 19:

"Representative Chundblom of Illinois has done a service by spreading on the pages of the Congressional Record an account of the current appropriations for Federal aid work, appropriations in almost every instance authorized by legislation of the dollar matching stripe, whereby the States must appropriate a dollar for every dollar of Federal aid. The appropriations for the present fiscal year follow:

Rural post roads....	\$159,000,000
Federal-aid highways ...	59,000,000
Forest roads and trails ...	12,500,000

Federal Board for Vocational Education	9,694,000
Agricultural extension work . . .	8,672,000
Agricultural experiment stations.	4,357,000
Agricultural colleges	2,550,000
Rural sanitation studies	2,338,000
Forest fire cooperation	1,775,000
National forest funds	1,640,000
Mineral leasing act	1,500,000
Various special funds	657,000
Epidemic diseases	400,000
State marine schools	100,000
Forest planting stock	95,000
Education of the blind	75,000
Cooperative farm forestry	74,000
Interstate quarantine service . . .	68,000
Water-power act	58,000"

WHY QUACKS FLOURISH

The *New York Sun* of May 4 comments editorially on the investigation conducted by the National Committee on the Costs of Medical Care on the reasons that quacks flourish, and summarizes them under four heads as follows:

"1. Because of inattention by some physicians to minor illnesses and to ailments of the mind

"2. Because doctors cannot cure all diseases, and those who have failed to obtain help from regular doctors feel that little is lost by trying the 'irregulars.'

"3. Because many people are still basically superstitious about disease and health

"4. Because many patients are unaware of the limitations of healing cult practitioners

The *Sun* continues

"It will be observed that emphasis is laid on inattention by medical men to trivial ailments and to minor mental disturbances. This is another way of saying that in approach to patients some physicians lack, or refuse to use, that comforting and consoling demeanor which may be defined by the phrase 'a good bedside manner.' The quack who neglects this element of treatment does not prosper. Some physicians and surgeons are incapable of simulating interest they do not feel; others deliberately seek to avoid display of that excess of concern which is supposed to mark a certain type of practitioner and which quacks so adroitly use."

THE HYGIENE OF WEALTH

Dr. James Bayard Clark, writing in the June issue of the *Review of Reviews*, under the title "A Doctor Looks at Economics," discusses the present-day illness of the body politic from the standpoint of a practicing physician. He leads up to the idea of a "Hygiene of Wealth" as the key to the present epidemic of depression. We are somewhat familiar with the newer idea of a hygiene of the mind, and understand the practice of physical hygiene and its marvellous effects in the prevention of the physical plagues which formerly devastated the world as frequently as economic ills do now.

Dr. Clark makes a physician's examination of society, and forms the diagnosis of a common delusion regarding the essential value of money

in the purchase of happiness and contentment. He closes with the following words on prognosis and treatment.

"As with the great plagues which have been banished through making their cause definitely known to society at large, and as with the disaster of war which enlightened groups are doing their utmost to bring to the realization of all peoples, so it must be with the distressing situations brought about through an over estimation of the value of money and the consequent shrinkage of other and real values. This is why the doctor advocates a hygiene of wealth as a preliminary and salutary step toward the stabilization of human health and happiness—the *raison d'être* of all honest economics."



BOOK REVIEWS



THE CONQUEST OF OLD AGE. Methods to effect rejuvenation and to increase functional activity. By PETER SCHMIDT, M.D. Translated by EDEN and CEDAR PAUL. Octavo of 307 pages, illustrated. New York, E. P. Dutton & Co., Inc., 1931. Cloth, \$5.00.

As a result of the unfulfilled promises of Steinach and Voronoff as regards rejuvenation—one naturally approaches this subject with a marked degree of skepticism. However fruitless the experiments of these workers may have been they have made certain claims which find no basis of proof. And in this book the author has further fortified himself with a timely weapon of defense with which he aims to explain away the "good" accruing from such previous experiments, namely, the principle of internal secretions.

That all of us cherish such remote possibility as rejuvenation is probably the reason for its continued interest by a small portion of our profession. After reviewing some of the brilliant discoveries in other branches of endocrinology the writer finally aims to show that vasoligature for the male and diathermy for the female should win recognition by the profession as an absolutely reliable remedy. He reminds us that while we may not have much confidence in such unconventional procedures our routine approaches to the diseases of old age have produced for us no results of which we can be proud. A number of "successful" case reports are recorded in detailed manner to defend the cause of rejuvenation.

It is unfortunate that no mention is made of corroborative testimonies by authorities whose observations in other fields have won the respect of the profession. Until such a change of attitude is adopted such procedures cannot find their place in recognized medical practice.

EMANUEL KRIMSKY.

ELECTROTHERAPY AND THE ELEMENTS OF LIGHT THERAPY. By RICHARD KOVÁCS, M.D. Octavo of 528 pages, illustrated. Philadelphia, Lea & Febiger, 1932. Cloth, \$6.50.

When one reads a treatise on any subject that corresponds exactly with his own experiences and thoughts, very little criticism can be offered. In fact, instead the reviewer experiences a sense of hyperenthusiasm and is wont to cry "Amen" after every sentence and chapter.

Since our experiences during the Great War, there have appeared many works on the above subject matter. Some have attempted to cover the subject in a purely scientific manner, dwelling mostly upon electrophysics and electro-chemistry. Others have stressed mostly the clinical side but unfortunately in an empirical manner, without basing their results upon any definite pathological or physiological basis. There have been a few books on various phases of physiotherapy as applied in a few specified diseases. These have been of great value, especially when properly supervised clinical and pathological findings accompanied the cited case reports.

This volume is the result of a very careful and excellent observer working with all the worth-while knowledge of Physiotherapy in the atmosphere of real supervised clinical medicine. The results of these must necessarily be an excellent piece of work. Although not voluminous, it is complete and covers the elementary aspects of electrophysics, also the apparatus for the production of the different electrical currents. It explains their actions on the various tissues of the body. Adequately and very simply describes the technique of application in the principal pathological conditions. Most of all, it separates the wheat from the chaff and only

gives the therapeutic procedures that in his large experiences have stood all the proper tests.

A few chapters are especially devoted to Phototherapy. This résumé of the present status of that form of therapy would have been best if the author had not mentioned this use of Ultra-Violet therapy, even in Chronic Pulmonary Tuberculosis because all the authors at present agree it is absolutely useless and sometimes even dangerous. In Surgical Tuberculosis the volume properly stresses heliotherapy or the sun rays as the best form of light therapy but he could also have added the great moral effect of artificial forms of therapy, especially when the sunshine is unobtainable. This is not written in the sense of criticism but we are sure will be corrected in future editions, which this volume certainly deserves.

A very interesting and highly instructive part of the book is devoted to applied Electrotherapy stressing the therapeutic application of the various modalities in relation to the specialties in medicine. Electrotherapy as applied in Neurology, Gynecology, Arthritis, Genito-Urinary Surgery and Diseases of Circulation. Special chapters on application of Electrotherapy in Laryngology and Dermatology were written by eminent authorities in these specialties.

The last chapter devoted to Physiotherapy in Institutional Practice is to be considered one of the most important contributions in this volume. With the present trend of grading hospitals according to their equipment, inquiries are being received daily as to essential requirements for various sized institutions. This chapter is not only complete in regard to necessary equipment but also in detailing the various types of cases met with in hospital practice where physiotherapy has proven a very valuable adjuvant in treatment.

It is the best contribution to the subject of Electrotherapy that has thus far appeared in the English language.

B. KOVEN.

PHYSICIANS' MANUAL OF BIRTH CONTROL. By ANTOINETTE F. KONIKOW, M.D. Octavo of 245 pages. New York, Buchholz Publishing Company, 1931. Cloth, \$4.00.

As clinical evidence about the vaginal occlusive pessary by one skilled in its use, this book is important. The author bases her statements on her personal experience with birth control in office practice over a long period of years in a large city. The patients were drawn from all social classes, professionals predominating, and included many sent by charitable agencies, who would usually be served in a dispensary, were this particular service available, as it is not in her state.

The author is openminded about various forms of pessaries and has evidently studied the reports of other observers with care. She herself uses the vaginal diaphragm chiefly with or without a contraceptive jelly but the cervix cap for antelexion and retroflexion, making careful distinctions as to her reasons for choices in type and size. The reviewer finds no mention of the Matrisalus or other special forms for cystocele or rectocele.

Reports are made in detail on over 1,300 patients, of which one series of 415 were studied with special reference to success and failure in the use of the pessary. Among 379 patients following instructions faithfully, the author reports 97 per cent success. It should be noted that the figures 94 to 97 per cent repeat themselves in almost all clinic statistics as applied to the

patients who are skillfully fitted and who follow instructions

The author is inclined to condemn or disregard other methods, such as the condom, and has no reports on records of use of jellies alone, nor consideration of methods of sterilization without unsexing such as harm less vasectomy. To make a brief comparison with other writers, she presents the "case for the pessary" well, whereas the Stopes book might be called the case for my pessary" while Cooper (1928) is more comprehensive, and W J Robinson (1929) lacks the tabulation of case records shown in this book.

The summaries of Russian experience are welcome, particularly the chapter of accidents from tincture of iodine injected in women who are overdue. It is hoped that a new edition will correct some of the diagrams and certain statements on physiology, but the author's clinical travel and clinical work make her testimony of very high value.

ROBERT L. DICKINSON

LIVING THE LIVER DIET By ELMER A MINER MD
12mo of 106 pages St. Louis, The C V Mosby Company, 1931 Cloth, \$1.50

This is a very nice book written by a physician who himself has Pernicious Anemia has witnessed the help less condition of the patient before the use of the special diet and has used personally the liver treatment with pleasure and the utmost satisfaction. The Minot-Murphy diet is the one adhered to in this book. The author presents the details of the diet as used by himself with success. Different ways of preparing liver are described, one which the writer calls the "Liver Appetizer Supreme," makes a palatable drink which can be taken as a medicine and not necessarily as a part of a meal. The other foods included in the diet are also described.

With regard to the effects of sunlight, the author states that most relapses in anemia occur in the summer time when the sun's rays are most direct and he thinks that those prone to pernicious anemia should exercise caution relative to sun baths and that a liberal amount of indirect sunlight seems best.

This is a book very useful to both physician and patient and will save much time and trouble for both.

W E McCOLLUM

A DOCTOR OF THE 1870'S AND '80'S By WILLIAM ALLEN PUSEY
Octavo of 153 pages illustrated Springfield, Charles C Thomas, 1932 Cloth, \$3.00

That there may be romance in the practice of medicine is often overlooked in our preoccupations with routine affairs. That it does exist is usually realized only in moments of reflection. However colorful our lives may be it cannot seem to equal that of the country doctor. We hold a peculiar warmth of affection for the country doctor even though most of us congregate in the crowded cities.

Doctor Pusey has written a biography of his father—a not an affectionate appraisal of a great father, but of a true country doctor, of a man who lived close to nature and who knew his patients as humans, of a man who struggled with the elements in pioneering fashion and thereby learned to appreciate happiness in greater depth than we could. We read about horses and buggies and other experiences which are more alluring in fancy than in actual fact. Above all, we are made to feel that the country doctor is a myth who has gone down in the pages of medical annals.

However industrial our age may be, there surely must still be some "country doctors" in our midst. They may be obscure, but when they have passed away as this interesting old doctor, they will lend further color to the biographical pages of medical history.

EMANUEL KRINSKY

A NON-SURGICAL CONSIDERATION OF PROSTATIC ENLARGEMENT Including a lecture on The Myth of the Bladder Neck Bar. By EDWIN W HIRSCH, MD.
Octavo of 79 pages, illustrated St. Paul, Minn., Bruce Publishing Company, 1931 Boards, \$2.00

This booklet of 80 pages is a plea for more conservatism in the treatment of prostatic obstruction. The author believes that many enlarged prostates should be treated by massages, instillations, and dilatations, and that such treatment is usually efficient. He allows surgery if the prostate is of unusually large size but he does not believe that a punch operation is ever indicated.

The author's comments are very stimulating and well worth reading, his inclination to overstatement and the use of a polemic rhetoric are detracting.

H L WEHRBEIN

CONQUERING ARTHRITIS By H M MARGOLIS, M D
Octavo of 192 pages, illustrated New York, The Macmillan Company, 1931 Cloth, \$2.00

This book may be understood by any intelligent patient and gives a satisfactory account of the various types of arthritis. The author divides these into senescent, static, metabolic and infectious. Some of the chapters treat of the history of the disease, sources of infection, structure of the bones and joints, pathology and the various remedial measures. A very good general idea of treatment is given describing the effects of rest and exercise and indications for each, diet, drugs, removal of infectious foci, physiotherapy, vaccines and orthopedic measures.

The title might cause to arise, some false hopes in the mind of the patient, for the disease is certainly far from conquered by any measures described, but the author aims to instill optimism which is to be desired.

W E McCOLLUM

A TEXT BOOK OF MEDICINE FOR NURSES By E NOBLE CHAMBERLAIN MD, MSc
Octavo of 439 pages, illustrated New York, Oxford University Press, 1931 Cloth \$5.00 (Oxford Medical Publications)

In addition to medicine proper, the subjects of bacteriology and materia medica receive attention in this book which is written especially for nurses, in a somewhat simpler manner than that of the text-books for medical students. It is however, quite a comprehensive volume and suitable for the type of training school which aims at extensive theoretical as well as practical instruction for nurses. It is very well illustrated with 38 figures from various sources and 8 colored plates which are very well done.

As a text book it contains more information than many physicians would consider necessary for nurses but as a reference book it is excellent and of high grade throughout.

W E McCOLLUM

A RADIOLOGICAL STUDY OF THE PARA-NASAL SINUSES AND MASTOIDS By AMEDÉE GRANGER, KCB, MD
Octavo of 186 pages, illustrated Philadelphia, Lea & Febiger, 1932 Cloth, \$5.50

In this volume the author has compiled his numerous manuscripts pertaining to these subjects. The work is devoted almost exclusively to a discussion of his special technique for radiographic study of the sphenoid and mastoid cells. The Granger method of demonstrating the sphenoid and posterior ethmoid cells has proven the most satisfactory so far devised, while his mastoid position serves as the most practical means of demonstrating the petrous in conjunction with the mastoid portion of the temporal bone; it is well, therefore, that a complete description of these procedures has been made available for Roentgenologist and Otorhinologist.

RICHARD A RFNDICH



OUR NEIGHBORS



SURVEY OF MEDICAL AGENCIES IN MICHIGAN

An account of the progress of the survey of medical agencies and services in Michigan, authorized by the 1931 House of Delegates, was printed in this Journal of May fifteenth, page 638. The May issue of the *Journal of the Michigan State Medical Society* gives an outline of the plan of study which has been adopted by the committee. Its operation will be supervised by Mr. Nathan Sinai of Ann Arbor, Michigan, who has conducted extensive surveys of public health service in this country and in Europe.

The outline of the plan of study is printed in fine type and fills two pages of the journal. It is divided into two sections, the first six of which deal with the organization of special committees on the study by county societies, and the preparation of the forms and schedules to be filled out by county societies, individual doctors, and health agencies, and welfare organizations. Section seven outlines the classes of subjects to be investigated, and is as follows:

Collection of Data

A. Preliminary survey (Specimen 2) to be completed by local county society committees

B. Detailed individual schedules

1. Physicians' schedules

a. Mailing of preliminary letter (Specimen 10) signed by local committee in each county to all physicians in private practice. (Enclose Specimen 1)

b. Mailing of survey schedule, letter and return postal card

c. Follow-up by local committee

1. Telephone or personal contact

2. Hospital schedules (Specimen 4 or abbreviated schedule)

a. Mailing of schedules to local committees

3. Laboratory schedules (Specimen 5)

a. Mailing of preliminary letter (Specimen 13) signed by local committee

b. Mailing of schedule and return postal card

c. Follow-up by local committee

1. Telephone or personal

C. Special Studies

1. Economic structure of population

a. Distribution by counties

1. Urban

2. Rural

b. Economic data

1. Distribution of wealth

2. Incomes

3. Costs of living

4. Other county data

2. Health agencies

a. Data from study for Governor's commission (Specimen 6)

3. Industrial Service

a. Detailed schedule distributed through Manufacturers' Assn.

b. Schedule to other organizations such as fraternal, etc.

4. Welfare service

a. Data from study for Governor's commission

1. Afflicted adults

2. Afflicted children

3. Crippled children

4. Mothers' pensions

5. Tuberculosis

a. Hospital service

1. Detailed schedule (Specimen 8 to be prepared) to hospitals

b. Clinical service

1. Data from public health survey

c. Field service

1. Data from public health survey

6. Mental diseases

a. Hospital service

1. Detailed schedules to public and private hospitals

b. Clinical service

1. Special local studies

7. Miscellaneous

a. Workmen's Compensation

1. Analysis of laws

2. Relation of physician to carriers

3. Defects and merits

b. Contract practice

1. Data from physicians' schedules

2. Data from industrial study

c. Experiments

1. Medical society care of indigents

2. Group practice

3. Diagnostic clinics

4. Immunization by private practitioners

5. Collection and loan services

6. Other

d. Medical society activities

1. Data from local committees concerning scientific programs and public relations activities

e. Patients discharged from hospitals

1. Costs

2. How costs were met

Section eight deals with the analysis of the data, presumably to be made by Mr. Sinai after a plan which is outlined as follows:

Analyses and Correlation of Data, by Counties in Michigan

A. Physicians

1. Distribution

a. Urban

1. Ratio to population

2. Per capita wealth

b. Rural

1. Ratio to population

a. Population per square mile

2. According to land valuation

a. Per cent of land in farms

3. Per capita wealth

2. Ages and years in practice

a. Urban

b. Rural

1. Correlate with above rural data

3. Professional training

a. Urban

b. Rural

4. Post-graduate training

5. Specialization

a. Urban

1. Types

2. Degree

3. Preparation

b. Rural

1. As above

6. Types of cases excluded from practice by general practitioner and partial specialist

a. Urban and rural

7. Equipment (to be determined by committees)

a. Urban and rural

8. The physician's "normal" week

a. Office practice

1. Night office hours

b. Home calls

1. Night calls

c. Hospital calls

9. Number of patients

a. Urban and rural

10. Dispensing of drugs

a. Urban and rural

11. Practice of preventive medicine

a. Urban and rural

12. Fees

a. Urban and rural

13. Financial adjustments for patients

a. Method

b. Fee and part-pay service

14. Hospital affiliations

a. Urban and rural

15. Gross cash incomes

a. Years 1928-1929-1930-1931

b. Urban incomes

(Continued on page 696—adv. xiv)

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(Continued from page 694)

1. General practitioners
 - a. Years in practice
 2. Specialists (partial and complete)
 - a. Years in practice
 - b. Type of specialty
 - c. Rural incomes
 1. General practitioners
 - a. Years in practice
 - b. Type of community
 1. Correlation with county data
 2. Specialists
 - a. Years in practice
 - b. Preparation
 - c. Type of community
 1. Correlation with county data
 - d. Income from salary
 1. Public health
 2. Industry
 3. Fraternal
 4. Hospital
 5. Insurance
 6. Teaching
 7. Research
 - e. Income from contract
 16. Expense
 - a. Items
 1. Urban and rural
 17. Net incomes (1928-29-30-31)
 - a. Urban and rural
 - b. Same correlations as "Gross Income"
 18. Total book accounts
 - a. 1928-29-30-31
 19. Normal percentage of collection
 - B. Hospitals (Urban and Rural, Other than State Hospitals)
- Note: Data from state hospitals will be analyzed and correlated with special studies, such as tuberculosis and mental diseases.
1. Distribution and ownership
 - a. Accredited
 2. Growth of facilities
 - a. Ten-year period
 - b. Correlate with population data
 3. Type
 - a. General
 - b. Special

4. Bed capacities
 - a. By type
5. Occupancy
 - a. By class of patient
 1. Economic
 2. Illness
6. Services
7. Staff
 - a. Type
 - b. Personnel
 - c. Duties
8. Record keeping
 - a. Cases, autopsies
9. Nurses' training
10. Financial
 - a. Gross income (1928-29-30-31)
 1. Sources
 - b. Expenses
 1. Items
 - c. Net income (1928-29-30-31)
 1. Method of balancing deficit
- C. Laboratories (Urban and Rural, other than hospital and health dept.)
 1. Distribution
 2. Ownership
 - a. Personnel
 1. Training
 3. Type
 - a. Services provided
 4. Gross income (1928-29-30-31)
 - a. By services
 5. Expense
 - a. Items
 6. Net income (1928-29-30-31)
- D. Analyses and correlation of data from special studies

Sections nine and ten deal with the final reports.

The outline is more elaborate than that of the Governor's Health Commission of New York State. While the committee is instructed to report at the autumn meeting of the State Society, months will be required for the completion of the report.

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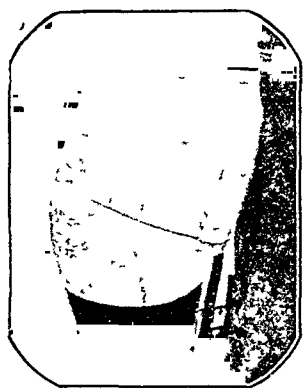
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COMMITTEE ON PUBLICATION.

ANNUAL REPORT IN OHIO

The May issue of the *Ohio State Medical Journal* contains the annual reports of the officers and committees of the Ohio State Medical Association scheduled to meet on May third. Ten reports are printed, covering thirty-six pages.

Committee on Public Policy: The first report is that of the Committee on Public Policy:

"The Committee on Public Policy has been called upon to consider an ever-increasing number of perplexing questions, ranging from those of government functions and legislation, to acute problems of ethics and professional conduct."

"In times of unrest, radicals, theorists, reformers, uplifters flourish. They propagandize for a new social and political structure. Artificial panaceas are advocated to correct social and economic imbalances, which would add new governmental functions, create greater centralization, more bureaus and departments, and new services to supersede local responsibility, individual initiative and enterprise."

"The antiquated theory that medical organization need not greatly concern itself about governmental and legislative questions, unless they pertain directly to public health, scientific medicine and medical practice, must be discarded. Present-day developments clearly show that practically all questions—social, economic and political in nature—have some effect, large or small, on public health; tend to modify to some extent medical practice; and effect in many ways the social and economic status of the individual physician. It is the duty and responsibility of every member of medical organization to keep himself accurately informed on the trends in government and legislation, and to take an active, personal interest in moulding public opinion in accordance with the fundamentally sound, concerted medical viewpoint on matters affecting public health, medical practice, scientific medicine, and the social-economic status of physicians."

The Committee devoted a page to an argument against the plan of indiscriminate relief of ex-soldiers of the World War. It devoted a column to the care of the indigent, and concluded:

"This committee feels that the question is largely one of local administration and local determination. A satisfactory solution should be worked out jointly by a committee from each county medical society or academy of medicine and the local public officials. A mutual and proper understanding of the responsibilities of public officials, as well as the medical profession, to the indigent sick should be attained, as well as an understanding of the proper spirit of cooperation that should exist between these two groups. Numerous instances could be cited where proper understanding and cooperation have been developed by effective and concerted effort on the part

(Continued on page 699—Adv. xvii)

(Continued from page 698—Adv xvi)

of the county medical society, and where public officials have been convinced of the desirability of providing the dependents of the county with the proper type of medical service for which fair compensation is paid."

A discussion of medical ethics covered a page The committee reported

"New angles in the question of professional relations are constantly arising because of the rapid increase in the number of persons engaged in health and medical activities in the number of individuals belonging to professions accessory to medicine itself, and in the number of non-descript healers, practicing some limited branch of medicine or exploiting some ism or cult."

"The sentiment of the various members of the Council, in which your committee concurs, was that it is unprofessional for any physician to call into consultation unqualified practitioners, and that it also is unprofessional for physicians to consult with practitioners inadequately trained in the medical sciences 'who are unfit or unqualified because deficient either in moral character or education'."

The committee also briefly discussed the following topics

State Department of Health

State Pharmaceutical Association

State Nurses' Association

State Bureau of Motor Vehicle (The examination of auto drivers)

State Child Welfare Conference

Establishing a State Criminologic Institute

Inspection of Osteopathic Schools

Committee on Medical Economics The committee on economics reported

"The practice of medicine is confronted with the two-fold responsibility of adjusting itself, first, to its own changing technics, and second, to the changing organization of society"

"The difficulties which frequently follow any modification of the relationship between the medical profession and the public are reflected in problems which have arisen as a result of the expansion of governmental functions in the field of medicine and health, the exploitation of socialized health and medical undertakings, and the increase in the number of unnecessary specialized movements"

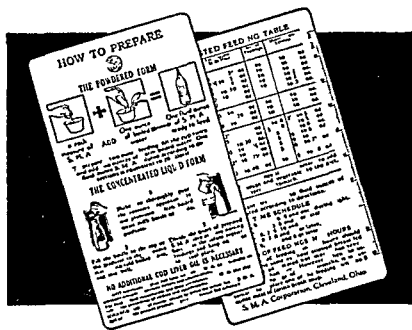
The committee then entered into a lengthy discussion of a physician's liability for disclosing information secured under the Workmen's Compensation law. It also discussed the general operation of the law, and the racket of irresponsible agencies for collections and insurance

Publication The report of the committee on Publication filled two pages, and was an excellent exposition of the policy of the Journal. Two paragraphs are of special interest

"Several papers submitted by Ohio physicians who were not members of the State Association

(Continued on page 700—Adv xviii)

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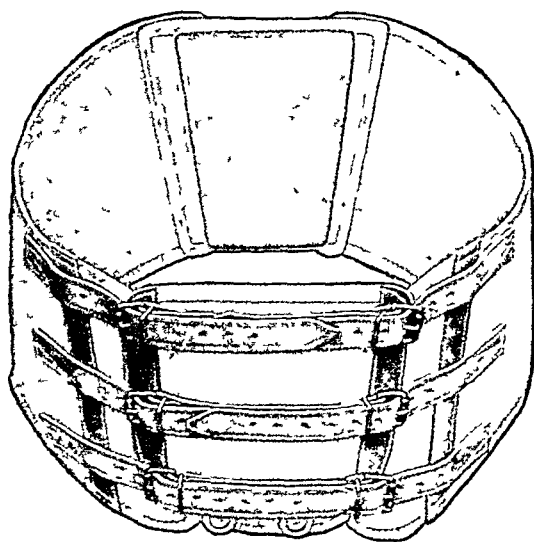
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(Continued from page 699—Adv. xvii)

were rejected, the committee feeling that since non-members are not permitted to enjoy the privileges of the State Association, it would be inconsistent for the committee to permit non-members to use the columns of The Journal for scientific presentations."

"Each month The Journal has carried numerous news notes and personals concerning Ohio physicians. It has endeavored to keep the members informed about the activities of the hospitals of the state."

Medical Defense: The Journal devotes three pages to the report of the Committee on Medical Defense, and discusses the problem from many angles. It gives the following summary of suits against doctors:

"Year"	"Suits"	"Threats"
"1916-1920, inclusive	53	43
"1921	18	9
"1922	15	15
"1923	10	10
"1924	14	7
"1925	13	10
"1926	18	16
"1927	10	9
"1928	21	7
"1929	23	16
"1930	16	17
"1931	19	20
"1932 (Jan. to March)	4	4
	234"	173"

Medical Education and Hospitals: The five-page report of the Committee on Medical Education and Hospitals is largely an essay discussing the general phases of the following topics:

Social Problems.

Post graduate Ability.

Interne Training.

Approved Hospitals and their A.M.A. Rating

Periodic Health Examinations: The three-page report of the Committee on Periodic Health Examinations first discussed three popular misconceptions regarding the examinations:

1. That it guarantees increased longevity.

2. That an impersonal examination is more valuable than that by a family physician.

3. An excessive value of the examinations conducted by incorporated groups, concerning which the report says:

"The methods employed by these concerns, employing certain physicians on a salary basis to make the examination and submit their reports to a 'central office' for interpretation and a re-check, has tended to undermine the confidence of a portion of the public in the ability of the local medical profession. Such tactics have disturbed the relationship between the public and

(Continued on page 701—Adv. xiv)

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(Continued from page 700—Adv. xviii)

local practitioners, and anything that disturbs this relationship is detrimental to the best interest of the public."

The committee gave the following practical advice:

"Any program of activity which a county medical society or academy of medicine should decide to undertake may include cooperation between the society and various local civic, welfare and health groups and organizations in the promotion of the periodic health examination movement. The advice and counsel of the profession should be given to such groups to guide them in their activities. Individual physicians when invited to do so, may with propriety, appear before civic groups, clubs, societies and public gatherings to discuss the question of health examinations and other subjects having to do with preventive and curative medicine. A number of county medical societies and academies have formed contacts of this character and have been of much assistance in promoting health programs among the laity."

Financial: The report of the finances of the State Association was given by the Committee on Auditing and Appropriations.

Mental Hygiene: The report of the Committee on Mental Hygiene consists largely of arguments for increasing the capacity of the State Hospitals for mental cases.

Military Service: The Committee on Military Affairs discussed the problem in a general way, but without disclosing any direct connection of the State Medical Association with military organizations.

Councilors: The Secretary of the Council gave the report of the councilors of the ten District Branches. The Council holds meetings about once every two months.

References: An excellent feature of the annual reports was the numerous references to articles and reports published in the Journal throughout the year. The *Ohio Journal* fulfils its object of being in reality the organ of the State Society.

ANNUAL MEETING IN OHIO

The April issue of the *Ohio State Medical Journal* contains the advance notices of the Annual Meeting to be held in Dayton on Tuesday and Wednesday, May 3 and 4.

The House of Delegates will meet on Tuesday morning and late on Wednesday afternoon.

(Continued on page 702—Adv. xx)

Please mention the JOURNAL when writing to advertisers

(Continued from page 703—Adv. xxi)

Department was so inadequate it could not function except for liberal federal assistance.

"We have many problems yet to be dealt with in the next legislature, such as the care of insane patients in state institutions.

"We maintain bank examiners, hotel inspectors, weight and scale checkers, inspectors for livestock, and many others. How much more necessary it is to maintain a Medical Board to supervise the care of thousands of patients now confined in state institutions.

"Our Association is rapidly building itself into the life of the state. We are enjoying far more prestige, confidence, and good-will than we ever have before. Cooperation such as we are now getting from individual members will in the future carry our influence to undreamed of heights."

CRIPPLED CHILDREN IN KANSAS

An unusual phase of the problem of the care of crippled children is shown in the following presidential message from Dr. P. S. Mitchell, President of the Kansas Medical Society, printed in the March number of the Journal of the Society:

"My attention has been called to an article published in the *Topeka State Journal* under date of February 24, 1932, in reference to scandals emanating from recent legislation on aid for crippled children.

"As president and active chairman of the Council at the Mid-winter Council Meeting, I wish to state I sat through the entire meeting and heard every word, discussion and motion. Not even an intimation or a suggestion was made by any member or any one present in reference to the charge made, or any plan whereby the Kansas Medical Society should even consider any such responsibility. No mention was made of any plan for the development of such a hospital.

"Personally, it is my opinion that high-class surgeons all over the state should be selected, first as being men capable of doing this work in their home hospitals if adaptable and permit each worthy individual to be treated if practical in his home community.

"We should recognize in this day that no one has a corner on worthy surgery. It is true that some surgery is more approved than that of others, but such may be arranged in the first selection."

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LIBELOUS LETTERS IN MICHIGAN

New York physicians may learn a practical point in libel by reading the following medico-legal note in the April number of the *Journal of the Michigan State Medical Society*:

"In typewritten letters this identification mark 'JD/JS' is assumed to mean that the letter was dictated by John Doe to Josie Stuat, the stenographer. Firms, institutions, employing several or more stenographers, adopted this identification means. When typewriters were made attainable by the rank and file many of us purchased one and felt we were in an advanced class of business progressives. We used the typewriter and our own 'hunt and pick' system to write our letters—some still do. And then a new custom became in vogue—to employ a stenographer, if you could afford it, and you dictated your letters, they were typed and all you did was sign the letter. The 'JD/JS' in the lower left corner conveyed to the recipient that you had graduated from the 'hunt and pick' system and were up with big business in employing a stenographer.

"We advise that you stop it. If you have a stenographer forbid this identification. Do not use it yourself. Why?

"In a recent suit for libel and slander, the plaintiff presented letters sent by the defendant that were identified in the lower left corner by a 'JD/JS.' The claim was made, and upheld by the court, that the identification mark was proof positive that the libel and slander statements had been made to a third party, the stenographer, and this won the case and a monetary verdict. Had the JD/JS been omitted from the letter there would have been no evidence of a third party and no verdict.

"So forget style or pride. Ban the identification mark. Safeguard yourself in these

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days when we are prone to write 'harsh words' to the party who doesn't pay his bill. In these depression days it is not a mark of 'common class' not to have a stenographer, and slander or libel suits cost money."

STUDENT LECTURES ON ECONOMICS IN OKLAHOMA

The annual report of the Committee on Medical Economics of the Oklahoma State Medical Association, printed in the May Journal of the Association begins with a discussion of lectures to medical students under the auspices of the State Association.

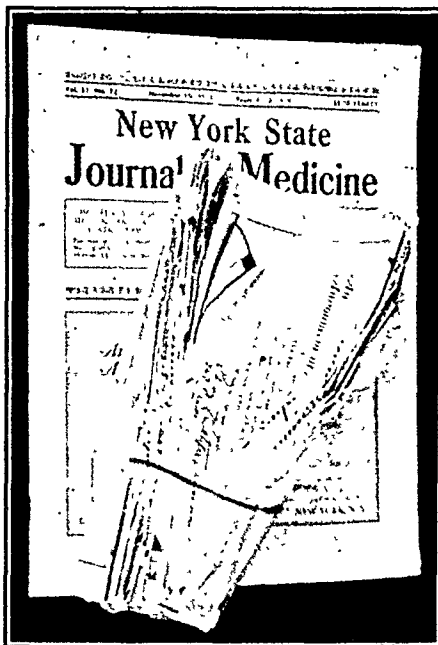
The report says:

"Members of the Committee on Medical Economics knew that a course on Practical Economics was being given to the dentists of the State by the Extension Division Department of Post-Graduate Medical and Dental Study of the University of Oklahoma. Your Chairman discussed with Mr. L. W. Kibler, Director of Post-Graduate Study, the feasibility of offering this course to the medical profession.

"Following this discussion, the first thing necessary was to know if such a course could be applied to the medical profession. To determine this, the Extension Department conducted a survey. Their field workers went into several of the doctors' offices in various points throughout the state. Results of this survey and reports from the doctors whose offices were visited, thoroughly indicate that not only is a course applicable, but highly desirable. The Councilors of the state have been informed of this survey and the results, and this matter will be presented to them at their next meeting. From the knowledge your Chairman has of this work, it is hoped that one of the several plans suggested will be adopted by the Councilors, so that the members of the Oklahoma State Medical Association may have the benefit of this course."

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A CASE OF POLYCYTHEMIA TREATED WITH PHENYLHYDRAZINE *

By THEODORE S. EVANS, M.D., NEW HAVEN, CONN.

IN reviewing the literature regarding polycythemia, a great many references were found. General reviews of the subject were published by Weber^{25,26,27,28} and Gaesböck,^{28,29} et al. The most painstaking and complete summary of the subject was written by Harrop,³⁰ and in this discussion, all of the aspects of the disease are brought out, but some are not clearly defined. There are certain unusual points in this case which were not stressed by him.

The literature for the past five years is replete with reference to the use of phenylhydrazine in the treatment of polycythemia. However the small dose which had such disastrous effects in this case, the extreme difference in the effect between the freshly prepared drug and that prepared long before being used, the very low point which the hemoglobin and the red blood count reached, and the apparent idiosyncrasy of the patient to this drug are all points of unusual interest. Then, too, the patient has been carefully followed over a long period of time, and the idiosyncrasy of the drug has been apparent in the course of the disease by reason of the very small maintenance dose.

Barker⁹ gives an interesting discussion of the physiological states in which polycythemia is seen, and discusses particularly polycythemia as seen in pulmonary disease. The presence of high red blood count and hemoglobin at the extremes of life is well known to every practitioner and has been ably discussed by Lippman,⁴⁵ Hirschfeld,^{33,34} Hammer³² and Schlesinger and Naegeli.⁴⁶

Further interesting studies of the condition which is present immediately after meals, during exercise, during the menstrual period, and so forth, were made by Hirschfeld^{33,34} and Naegeli.⁴⁶ Barcroft^{7,8} and Lamson,^{40,41,42,43} et al, called attention to the importance of the spleen as a storehouse for red blood cells and to its coincidental enlargement in cases of polycythemia vera. The effect of altitude on the red blood cells has been discussed by Bert¹² and Viault⁶⁹ as early as 1882 and 1890 respectively.

Börnstein¹⁰ produced an anemia by increasing the oxygen tension and a polycythemia by decreasing the oxygen tension. His work was corroborated by Campbell,^{17,18} Drinker, et al.,^{23,24} and Sabin⁵⁰ have studied the blood flow through bone marrow in cases of polycythemia vera.

The use of phenylhydrazine in reducing the red blood cells and hemoglobin was first studied by Hoppe and Seyler³⁵ in 1885 in animal experimentation. They found it very prompt, effective and quite safe. However, its clinical application was not made until 1918 when Eppinger and Kloss²² used it in man in polycythemia vera. Since then, their sterling work has been corroborated by workers all over the world, particularly during the last five or six years. Hurwitz and Falconer³⁸ discussed the use of benzol and its derivatives and compared its value with that of α -ray of the long bones, but they were inclined to think that α -ray was a far better treatment.

Hurwitz and Levithin³⁹ brought out relatively the same subject matter and arrived at the same conclusions.

In 1921, Taschenberg³⁴ reported a case in which he had used phenylhydrazine for one and a half years. His results were excellent in reducing the blood count and making the patient comfortable, and he encountered no ill-effects.

In 1923, John Dorsey of Baltimore reported a case in which he used the drug with very good results. This case was incorporated into the work of Trevor Owen.^{47,48,49} In 1924, Trevor Owen^{47,48,49} reported its successful use, and again in 1925 and 1926, he made further reports on the subject. In 1926, Perrin Young⁶⁰ found the drug safe and effective. But even as late as 1928, the drug was not recognized generally as being the treatment of choice in these cases and in that year, Harrop³⁰ still leaned toward radiation of the long bones as the test treatment. However, from 1928 to 1931 the work of Owen at Hopkins, and Allen^{1,2,3,4,5} and co-workers at the Mayo Clinic firmly established the use of the drug.

The case cited below was seen in August, 1929, and has been followed carefully over a period of

* Case reported to the Grace Hospital Staff.

two years, during which time checks have been carefully made upon all findings.

Case Report of R. M. Forty-five years of age. Female. White. Divorcée.

This patient was first seen in July, 1929, at which time she gave a history of frequent "sore throat" and was complaining of "bursting sensations" of the shin bones. She also complained of large blue tender areas in the anterior portion of the neck, as described by Pich and Kaznelson,¹¹ edema of the legs, marked shortness of breath, general weakness, and "splitting" headaches. She has also noticed that she is very sensitive to the heat, and has had marked sensory disturbances, such as was described by H. L. Christian.²⁰ She believed that the whole illness dated back to vaccination, one year and a half ago. At that time, she had what sounds very much like a phlebitis in the left leg. Her past history revealed only scarlet fever, which ensued after an operation for hysterectomy, and frequent bad "sore throat." Her family history was not relevant to the subject.

Physical examination revealed a woman with a very "muddy" skin. The extremities were quite dusky. There were three areas on the left side of the neck, about an inch in diameter, which were quite purple. These were palpable and raised above the surface of the skin, and were very tender. Her teeth, ears and nose were negative. Throat was negative. The heart was not large but a systolic murmur was heard in the third left interspace and at the apex, and was transmitted to the axilla. There was slight accentuation of the second pulmonic sound. The spleen was easily palpable, but not tender. The shin bones were very tender to touch. The skin was quite "glassy" over them. There was a sensation of fullness but not true fluctuation in this region. Red blood count 6,200,000. Hemoglobin 100%. White blood count 10,000. Differential, polys 80%. Urine is normal. Blood pressure 120/70.

Previous Therapeutics: She was sent to me by another physician who was leaving town. She had taken 25 1/10 grms. capsules of phenylhydrazine for polycythemia vera, given in the following manner: 1 capsule once a day for fifteen days. Then 2 capsules a day for five days.

For three weeks before her visit to my office, she had taken no phenylhydrazine. Her red blood count had been reduced during the three weeks of treatment from nearly 7,000,000 to 6,200,000, and she had had no treatment for three weeks, previous to seeing me. She was therefore given a prescription for a capsule containing 1/10th of one gram each of phenylhydrazine. As this could not be filled in town, Merck and Company sent a fresh supply of the drug to the local pharmacy, and the capsules were made up according to instructions. She began taking them on July 24th; after one month without treatment.

Because of the previous results, i.e., reduction from 6,800,000 to 6,200,000 from twenty-five capsules, each 1/10th of one gram, she was told to take two capsules a day. After she had taken these four days, i.e., eight capsules in four days, July 29th, she was seen again and was still complaining of the same symptoms. However, there had been a marked improvement of the "muddiness" and cyanosis of the skin, and the blue spots in the neck had entirely disappeared. The physical examination at that time revealed no changes but the red blood count was 4,500,000, hemoglobin 85%, white blood count 12,000. Polys 75%, eosinophiles 8%.

This rather spectacular drop in red blood cells made it seem wise to discontinue the drug, although she had not reached the minimum amount of 4,000,000 at that time. Two days later, she called to say that she was quite yellow. The urine was very dark in color and the stools black, but not bloody. She was seen immediately. The physical examination was unchanged except for an evident prostration and a very yellow color to the sclerae and the skin. The red blood count was 3,000,000, hemoglobin 70%, white blood count 20,000, polys 70%, eosinophiles 15%. The stools were "tarry" and contained gross blood. The urine did not contain blood but was very dark in color and gave a strong bile reaction. There was no pain over the liver or the kidneys. The blood pressure remained consistently the same as previously. The rather surprising reaction immediately made one suspicious that there had been a mistake either in prescribing the medicine or in putting up the prescription. The patient fortunately had one of the original capsules and a number of the new ones. These were very different in size,—the new ones being nearly twice the size of the old ones. This led to a great deal of worry until a visit to the druggist was made. It was found that the prescription had been written properly and upon weighing the different capsules, it was found that they each weighed 1/10th of a gram. The discrepancy in size was accounted for by the fact that the original prescription has been "tamped" and the second "scooped."

On the 2nd of August the patient got out of bed to care for an aunt who had a cerebral hemorrhage and rushed around the city most of that day. Naturally, on the following day, she was feeling very much worse and was completely prostrated. Her color was very much worse but she had had no "tarry" stools and the urine was lighter in color.

The red blood count was 2,300,000, white blood count was 22,000, polys 70%, eosinophiles 20%, hemoglobin 50%, blood pressure 110/60. The edema over the shin bones, together with the "bursting" sensations had entirely disappeared. Under the circumstances, preparation was made

for a transfusion the next day, but the patient was feeling very much improved and the prostration was much less. The red blood count was 2,200,000 and the hemoglobin was between 40 to 50%. It was deemed unnecessary to transfuse her. The smears of the blood on this day showed anisocytosis, poikilocytosis, and polychromatophilia, but only one nucleated red cell was seen in the smear. Two days later, the patient showed marked improvement subjectively. The stools and urine were light in color. There was a mild degree of headache and some shortness of breath. The physical examination showed no change. The blood pressure was still normal, and the pulse was 72. The red blood count was 2,300,000, hemoglobin 50%, white blood count 35,000, eosinophiles 20%, polys 64%.

On August 8th, the blood count reached 2,900,000, hemoglobin 60%, and the smear showed much improvement in the size and shape of the cells. The white blood count was 30,000.

On August 13th, the patient went to work, did not get very tired and felt quite well except for the shin bones which had become painful again, although the legs were not swollen. The red blood count was 3,300,000, the white blood count was 30,000, and the hemoglobin 60%.

Five days later, August 18th, she reported that she had been at work for five days and did not feel tired. In fact she had felt better for the past week than at any time during the last two years. The legs had become painful again while walking. The physical examination was unchanged. The red blood count was 3,900,000, white blood count 19,000, and the smear was nearly normal in appearance.

October, 1929. After a period of two months abstinence from the drug, she came in complaining of cyanosis of the extremities, dyspnea, and "bursting" sensations in the legs. At that time, the red blood count was 7,200,000, and the hemoglobin was 100%. She was given 4/10ths of one gram of phenylhydrazine in 1/10th gram doses at intervals of two days. One month later she came in feeling perfectly well with a red count of 5,000,000 and hemoglobin of 90%.

During the past two years, she has been seen frequently and it has been found after careful experimentation that she needs only 4/10ths of one gram of phenylhydrazine per month to keep her blood count in the neighborhood of 4,500,000. When the red count stays at 4,500,000 or below that figure, she is free from symptoms except for "bursting" sensations in the legs when she gets tired.

On a number of occasions during the last two years, she has attempted to withdraw the drug but has always found that her symptoms return so that she has resumed its use in 4/10ths of one gram per month or 1/10th of one gram per week.

SUMMARY

This is a case of polycythemia treated by phenylhydrazine.

(1) Two and five-tenth grams of the drug were given in 25 days with a reduction from 6,800,000 to 6,200,000 in the red blood count.

(2) A lapse of 24 days occurred without any treatment.

(3) Eight-tenths of a gram taken in 4 days caused a marked delayed effect and a very severe anemia.

(4) Recovery was made over a period of three weeks to normal count.

(5) A rise of red blood count from 2,300,000 to 7,200,000 occurred within 10 weeks after stopping treatment.

(6) She has been followed over two years when she has been in good health with normal counts averaging 5,000,000 on a dose of 1/10th of one gram each week.

COMMENT

In this case are clearly defined certain interesting features:

(1) The drug which was used first had been in the physician's office for a considerable time before it was administered and had about the effect one would expect in the average individual. It followed closely the recommended dose of I. L. Cabot⁶ and C. W. Stealy,³⁵ and the results were approximately the same as theirs.

(2) The freshly prepared drug produced spectacular and alarming results, in the same daily dosage, over a very short period of time. The total poisoning dose being 8/10ths of one gram,—this is far below the average recommended dose.

(3) The difference in the size of the capsule added a touch of humor and fright until it was found they each weighed 1/10th of a gram.

(4) As was pointed out by Harrop,³⁰ and Brown and Giffin,^{13,14} the cumulative effect of the drug is very marked. In this case a drop of 2,300,000 was noted after withdrawal of the drug in comparison with 1,000,000 previously reported by Owen.

(5) No mention of idiosyncrasy to the drug has been stressed in the literature, but it was evident from the startling result from a very small dose in this case and by the accumulative effect in the later history of controlling the red blood count by doses of 1/10th of one gram per week.

(6) Although the reaction was startling and more severe than other cases, no permanent damage to the liver or kidneys was found. This agrees with the findings of Huffman,³⁷ and Allen and Giffin⁵ in this regard.

(7) In contrast to Taschenberg,³⁴ it was found necessary to increase the dose at any time over a period of two years.

(8) The intimate correspondence of the erythromelalgia, "bursting" sensations, and the blue areas in the neck, with the height of the red blood count is also a very interesting point.

(9) As was shown by C. W. Stealy,⁵³ the white blood count rose in inverse proportion to the fall in the red blood count, and the eosinophiles also rose in inverse proportion, as was shown by Hay and Evans.³¹

(10) The history of phlebitis following vaccination is an interesting one and bears out the findings of Barta¹¹ that this condition is frequent in polycythemia vera, but it will be interesting to note whether widespread thrombophlebitis will develop as described by Horton and Brown.³⁶

(11) As yet no evidence of leukemia has developed although the white blood count was extremely high at the time of the blood reduction. All of the cells were of normal type. Cases of polycythemia resulting in leukemia were described by Daniels and von Buchem.²¹ Although Minot^{62,63} described pernicious anemia as an end result, no tendency of that kind has been shown in this case.

DOSAGE

That the dosage was not unduly high is amply

proved by a review of the sum of the doses used by others:

Trevor Owen recommended the use of 1/10 gram a day for 24 days. Total of 2.4 grams.

I. L. Cabot recommended the use of 1/10 gram a day for 20 days. Total of 2 grams.

Perrin Young recommended the use of 2/10s gram a day until the desired effect was obtained.

C. W. Stealy recommended the use of 2/10s gram a day for one month, and then reduced it to 1/10 a day for one month and then back to 2/10s gram for one month. On this dosage he reduced the red blood count to 3,000,000 but when he used 1/10 of one gram daily for one month, the red blood count averaged 5,000,000.

In closing the following points are once more brought forward:

(1) The drug should be freshly prepared.

(2) An idiosyncrasy to the drug does exist.

(3) Cumulative effect after withdrawal is very marked in this case.

(4) The drug is relatively harmless as far as permanent damage to the kidneys and liver are concerned.

(5) The drug is very effective in reducing the red blood count.

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THE RESULTS OF ONE THOUSAND ASCHEIM-ZONDEK TESTS FOR PREGNANCY

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Research conducted in the Departments of Obstetrics and Gynecology and Biological Chemistry and Sloane Hospital College of Physicians and Surgeons, Columbia University, aided by a fund from The Chemical Foundation and with the assistance of Sarah Ratner M.A., Stanley Goldman B.S. and Margaret A. Creelman, A.B.

IN a recent review of the literature on the Aschheim Zondek Test for pregnancy, Zondek collected a total of 5,515 cases. The present report covers 1,000 tests which were carried out under the supervision of the writer, who personally made all examinations of the ovaries. The error in diagnosis in Zondek's collected series was from one to two per cent. In the writer's series the error amounted to 12 per cent. Four hundred and sixty tests were positive, and five hundred and forty were negative.

The technique used in this present research followed closely the one originally advocated by Aschheim and Zondek. Six injections of 0.25 cc of morning urine were given over a period of three days, and all animals were sacrificed one hundred hours after the first injection. If the urine appeared to be contaminated, or if the mice appeared to be ill after a single injection, the urine was shaken with an equal volume of ether, the ether discarded, and the urine injected in the usual manner. Six mice were used for each test. A test was never reported as negative unless there remained at least three mice for autopsy, the ovaries of all of which were distinctly negative. If a single mouse gave a positive reaction the test was considered positive.

The indications for the test were those usually found in a large obstetrical and gynecological service. The cases included hydatid moles and two chorioepitheliomas. They will be considered in a separate publication. Interesting as were the number of correct diagnoses the cases in which the test failed were to us more interesting. The failures may be divided into two groups—incorrect positive (2 cases) and incorrect negative (10 cases) results.

(A) Clinically Found Not Pregnant—A-Z Test Positive (2 cases)

Case 1—This patient had been receiving injections of Prolan for several weeks prior to the test. The ovaries showed corpora lutea but no punctate hemorrhages. Microscopic examination of the curettings failed to reveal a pregnancy.

Case 2—This case was one of multiple fibroids, menopausal symptoms and amenorrhea for seven weeks. The ovaries of the test mice showed cor-

pora lutea but no punctate hemorrhages. The patient was curetted and the physicians reported that the macroscopic examination of the curettings failed to reveal a pregnancy. No microscopic examination.

(B) Clinically Found Pregnant—A-Z Test Negative (10 cases)

Case 3—Multiple fibroids and four months pregnant. The test was repeated one month later and a weak positive reaction was obtained.

Case 4—Pulmonary tuberculosis. Menstruation ten days overdue when the test was done. Curettage revealed an early pregnancy.

Case 5—Cardiac disease with beginning decompensation. Menstruation 11 days overdue. Curettage and microscopic examination of the curettings revealed an early pregnancy.

Case 6—Menstruation 5 days overdue. The test was repeated two weeks later and a positive result obtained. The pregnancy was later confirmed clinically.

Case 7—Menstruation one week overdue. The test was repeated three weeks later and found positive. Clinically confirmed.

Cases 8, 9—The menstrual periods were 10 days overdue. Subsequent tests were positive in each case.

Cases 10, 11, 12—These cases occurred early in our series. On macroscopic examination of the ovaries of the mice we were unable to interpret the findings correctly. The results were probably due to faulty technique. In the light of our present knowledge some explanation may be offered for the failure of the test to correspond to the clinical facts in some of these cases.

Case 1—This patient, with oligohypomenorrhea, had been receiving two to four hundred rat units of Prolan intramuscularly each week for a period of several months. We believe that there is a definite renal threshold for Prolan and that some of the injected hormone, in this case, was excreted in the urine. Since the Prolan that we used contained both the follicle stimulating hormone and the luteinizing hormone, in a ratio of about 9 to 1, it is quite likely that the urine when injected into the mice produced both ripening and luteinization of the follicles. The finding of

the corpora lutea we interpreted as a positive result for the test.

Case 2.—While it is quite likely that the physician was correct in his macroscopic examination of the curetting these were not examined microscopically. A thickened endometrium could be easily mistaken for an early decidua.

Case 3.—We have no reasonable explanation to offer for the negative test at the first examination and the weak positive reaction at the second test one month later. Both tests were done during the second trimester of pregnancy. The patient went to term and both child and placenta were normal. No errors in technique could be detected.

Cases 4, 5, 6, 7, 8, and 9 can be considered together. In these patients menstrual bleeding had failed to appear for five to ten days after the expected time. Our earliest positive test was in a patient in which the flow was one day overdue. We have never had a positive test before a patient had passed her regular period time. The factors determining the time of first appearance in the urine of the follicle-stimulating and luteinizing hormones (possibly also a hemorrhagic hormone responsible for the punctate hemorrhages or "Blutpunkte") are not known. Some theoretical considerations are, however, of some interest. Two factors which may greatly influence the time are the date of implantation of the ovum and the renal threshold for the hormones.

According to the most recent views of Fraenkel, spontaneous ovulation occurs between the 15th and 18th day after the onset of the last menstrual period. Fertilization probably occurs within 24 hours, and then migration of the fertilized ovum begins. The duration of the migration (according to a recent review of the facts by Grosser) is from 10 to 14 days, two-thirds of this time being spent in the tube, and one-third in the uterine cavity. Then implantation occurs. In a woman with a 28-day cycle this would take place slightly after the normal time for the onset of the next menstrual period and would correspond to the time of our earliest positive test.

On the other hand, Grosser places the limits of spontaneous ovulation between the second and the twenty-fourth day of the menstrual cycle. This opinion is based on the study of a fairly large number of very young embryos. Furthermore the statistics of Siegel, Pryll, Jaeger, Zangemeister show that the optimal time for conception lies between the 6th and 10th day following the onset of the menstrual period. We may assume that the ovum remains fertilizable for only 24 hours, and that the fertilization power of the sperm is about of the same duration. If in any instance ovulation occurs early in the menstrual cycle, for example, on the 6th day, we may add to this the average time of migration of the fertilized ovum, 12 days, and reckon the 18th day as the time of implantation. Such a case may

give a positive A-Z test several days before the expected failure to menstruate. If, however, ovulation takes place on the 24th day, and we add 12 days as the average period of migration, implantation would be expected to take place about 8 days after the normal time for the menstruation. Our cases of failure of the A-Z Test within 10 days after the expected onset could therefore be explained on the basis of such late ovulation.

Still another factor that could vary the time of ovulation, and hence, of implantation, would be the possibility of an induced, provocative or violent ovulation, induced by coitus or possibly by emotional stress or drugs. This type of ovulation is known to occur in the rabbit and in the cat. Heuser was the first to suggest this possibility in the human. Grosser, Chazan, Zangemeister, R. Meyer, Fraenkel, Triepel, Thomson and V. Moellendorff have also considered the possibility of induced ovulation.

We are accumulating some evidence that would seem to show a definite renal threshold for estrin and prolan A. It is very likely that prolan B may also have a renal threshold value. Patients with a high renal threshold would spill these hormones into the urine later than those with a low renal threshold and in this way the time of appearance of a positive A-Z Test might vary.

In addition to the 1,000 A-Z Tests reported, there were six positive tests of special significance in the study of sterility. The cases came from our Sterility Clinic. In each of these cases the test was positive within a few days after the expected time of onset of the skipped menstrual period. In these cases, normal menstrual flow appeared before the tests were completed. The periods were normal in every respect. The tests were repeated later and found negative. This small group of cases would tend to support the view that some "sterile" women become pregnant, but that for some unknown reason the embryo dies at a very early age.

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SOME CONSIDERATIONS IN BUYING AND INSTALLING A FLUOROSCOPE FOR USE IN GENERAL PRACTICE

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IT has been truthfully said that the general practice of medicine can be and frequently is conducted with only that equipment which can be carried in a hand bag. Yet there are obviously other instruments which materially assist in the better diagnosis and treatment of disease—the basal metabolism machine, the quartz lamp, the diathermy and many others. Still we many of us postpone the acquisition of these articles for one reason or another; a doubt as to the general applicability to our particular practice, a thought as to the time consumed in operation of them, a question as to technical knowledge required, a hesitancy perhaps as to cost. Few of us, I think, but what sooner or later find ourselves asking the question: "Shall I get a fluoroscope?" Will such an instrument enable one to do better work, how much trouble is it to install, is there room in the office, what kind should be purchased, what will it cost and will the cost be justified? It is remarkable how difficult it is to get reliable answers to questions such as these beforehand and it is with this idea, through the recounting of my own particular experience, that this more or less haphazard article is written. No attempt will be made to describe an X-ray laboratory nor that heavy apparatus used by those who specialize in this work but rather what the busy practitioner with limited space in his office and limited time to devote to the subject will want to know before he commits himself to the purchase of that minimum equipment necessary to make this instrument a useful adjunct to his general work.

There are many makes of the upright fluoroscope on the market but they are mostly of about the same type and they do about the same work. There are, however, certain minor differences which will help decide which to take. It should be rugged and strong in appearance, with baked on enamel with a minimum of nicked parts to keep polished. It should be so protected that patients cannot get their bodies near the high tension. The moving parts should be not too complicated and should work smoothly. High tension reels and cords should be few or absent altogether. A large fluoroscopic screen (12 by 16) is an advantage. A groove on the back of the screen arm to support a cassette or exposure holder is most desirable. The best thing to do is to see as many makes as possible preferably those already set up and working in a doctor's office and preferably not too new. The cost of this machine complete with X-ray generator, filament transformer and oil immersed circuit

breaker, control panel, screen, and a good 30 M.A. tube and lead glass shield is about \$900 cash.

The accessories required in the operation of this machine are rather large in number and take some thought especially if one plans to take roentgenograms and self develop them, an almost necessary procedure in view of the great limitation in usefulness when fluoroscopy only is employed.

In the following list of general accessories some possibly useful hints have been appended to certain items. Costs are net and vary with different manufacturers. They prevailed during 1930 and 1931 but have been somewhat reduced since.

Hand timer for accurately regulating exposure time. Indispensable to the beginner. Cost—\$45.

Foot switch with room-light control. Cost—\$25.

Room light. May be used as pilot light also when rotary is used. Cost—\$2.

Lead-rubber apron and gloves. Cost—\$23.

Illuminating box. Cost—\$19.

Windows. This is a vexing subject. To render them totally dark even to sunlight requires heavy shades of leatheret enclosed in boxes and running in deep grooves usually constructed of metal. They are unsightly and not very efficient when a draught occurs. They are a necessary evil unless one's office happens to be equipped with the hard wood inside shutters sometimes found in private houses. In this case they can be made perfectly light tight with some black felt, glue and patience. Other windows opening upon hallways, etc. where there is but a dim light can be made dark with ordinary black window shades especially if the undressed side of the cloth is painted with ordinary black leather dye diluted with alcohol. Cost for rendering two large windows light tight in the usual manner—\$100.

Cassettes and exposure holders. At least two of the former will be required, one 14 by 17 and one 8 by 12 inches. Undersized films cannot be used in cassettes as they are apt to injure the tungsten screens. Plenty of all sizes of exposure holders should be on hand to accommodate films taken from the cassettes. Cost of two cassettes with screens—\$110. Cost of one dozen exposure holders—\$3.

Transformer and rotary converter. These may not be necessary unless some change in current is required. If direct current only is available then the rotary must be used. This is readily purchasable in the used market. Cost

cords and reels. The patient can be burned by the X-ray also but the fact that liability insurance rates are not raised by the use of X-ray for diagnostic purposes would seem to indicate that the danger is small. Static discharge can be largely obviated by having a metal frame at the back of the panel grounded to a cold water pipe. The operator must be completely protected at all times always using apron and gloves during fluoroscopy and keeping out of the direct rays during photography. An easy way to avoid the latter while making an exposure is to stand behind an open door, say the dark room door, on the back of which has been hung, on three hooks, the lead apron. Parenthetically it would be well to mention an annoying feature of a new lead apron. This is the soap stone used to preserve it which will not wash off with any ordinary means but which constantly sheds on one's clothing. This can be avoided by lining the apron with two layers of surgical gauze held in place at the edges with adhesive.

When a higher voltage is used (76 K.V.P. or over) in photography especially on damp warm days some trouble may be experienced with the high tension current jumping to the negative or to the grounded framework thereby ruining the film. This can be obviated by intervening at places where this occurs a layer of ordinary thick, rubberoid roofing felt. This material is an excellent insulator and, when heated, can be readily moulded to form a cap over the tube terminal or other situations of close approximation of the negative and positive high tension.

Too much emphasis cannot be placed on the necessity for the use of a definite routine procedure during fluoroscopy. This is well illustrated in the technique of fluoroscopic examination of the chest as routinely carried on at the Home Office of the Metropolitan Life Insurance Company, Medical Division.²

Records will need to be kept not only of the findings during fluoroscopy and of film interpretations but also details as to voltage, amperage, distance, etc., for all exposures for a long time so as to constantly correct technique. This will be in addition to marking, labeling, dating and filing of films.

If no tube stand is included, some ingenuity must be exercised in order to expose certain parts of the body correctly since the upright fluoroscope can send out rays horizontally only. Yet, with the help of sand bags, several small boxes neatly covered with towelling or gauze as supports and an ordinary good office treatment table it can be done. The best way to make a table roll freely is to replace the castors with a set purchased from the makers of quartz lamps. A chair with a head support is

of value in some cases such as in photographing the teeth where care must be exercised in getting the angles correct.

Dark room procedure is time consuming. The screens must be kept scrupulously clean and the cassettes protected from denting and warping. The solutions must be prepared carefully according to directions and losses due to evaporation and depletion made up constantly from fresh solution. At infrequent intervals the solutions will have to be entirely replaced. Finally the films need developing at just a certain temperature. This temperature is easy to maintain except in hot weather when quite large quantities of ice will be needed in the cooling chamber. Five minutes is consumed in developing, about twenty in fixing, but during this latter one is not confined to the dark room. Bathing takes another twenty minutes of intermittent attention and then the films are hung up to dry.

During the operation of the unit it will be necessary from time to time to call in the representative of the seller of the machine for the so-called service included in the purchase. If one is at all mechanically inclined these calls will be infrequent. The tendency is to over-emphasize to the prospective buyer the importance of this service.

The cost of operation, barring accident to the tube or other expensive parts is insignificant except for the cost of the films.

Interpretation will prove the most difficult part for the general practitioner and will depend largely on his previous experience and contact with the results of roentgenography. Association, without necessarily taking a formal course, with the X-ray department of an active hospital for a few weeks will be of immense value in this respect. Well-illustrated books on this subject are of some assistance but experience only will render one competent to interpret with reasonable reliability. A practice of following a routine procedure in fluoroscopy so that the normal as well as the abnormal is repeatedly observed as well as a habit of making an additional examination of the lungs and heart of stomach cases will serve to teach interpretation. Contact with the clinical aspect of his own cases gives the general practitioner some advantage. However, there will be certain occasions when it will be necessary to consult someone more expert in the reading of a film and opportunity to obtain this or the lack of it should be a consideration in the purchase of the equipment.

Assuming that one is about to purchase the minimum apparatus described above—an upright fluoroscope and dark room outfit—the question next occurs: "What will it do?" and "What are its limitations?" Few seem to real-

ize how much can be done with such limited means. Fluoroscopy of the throat, esophagus, stomach, duodenum, rectum, descending colon, heart and lungs are relatively simple and the results satisfactory. Foreign bodies and fractures can also be detected with the fluoroscope alone but negative findings are not conclusive. Excellent films can be taken of the skull (including the accessory nasal sinuses and mastoids), teeth, cervical vertebrae, lungs, heart, long bones and, with the exception of hip in stout patients, all joints connected with long bones as well as foreign bodies. However, the above is about the limit with any degree of satisfaction and certainty of results. This leaves a large field such as deep visceral photography, calculi, stereoscopic work, spine, etc., for which more equipment will be necessary. X-ray therapy is out of the question.

And, lastly, will it pay? Adding the cost of the various articles mentioned above gives the sum of \$1,684. This includes installation and first supplies and would be, of course, somewhat less for alternating current. As to how soon this will be made up in actual extra fees will depend on the type of practice. Among patients of moderate means many fluoroscopic examinations will be made without extra fee and photographic plates at but small extra charge but these cases will be retained under one's control that formerly drifted away or required to be referred to diagnostic clinic or hospital. This policy of utilizing the machine freely and frequently, almost routinely, and without too close a regard for the patient's ability to pay an extra fee most emphatically will pay in the form of more accurate diag-

nosis, wider range of work and those intangible factors that produce satisfied patients. If the original cost of the machine is spread over a period of ten years (after which it may be considered obsolete) and at the same time it is utilized often then the cost of an individual fluoroscopy is negligible and of films but little more except for the time expended in operation. It should be borne in mind that these films, within the capabilities of the machine, are not make-shift poor exposures but that, with painstaking attention to technique, films of the finest detail and contrast can be turned out which compare favorably with the products of professional laboratories and often excel them. In addition there are a few patients who consult chiefly for X-ray diagnosis especially those who are referred. These cases expect to pay extra fees which, together with small occasional extra charges made to regular patients, will, within a reasonable time, serve to write off the original cost.

In conclusion we would state that in our experience in a rather large general practice among people of moderate means the acquisition of an upright fluoroscope with dark room facilities, while attended with many unexpected details and while limited in its field of applicability, is thoroughly practical and profitable to the general practitioner and that limitation of space available need not preclude the utilization of this most interesting diagnostic tool.

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RECURRENT PARALYTIC INTESTINAL OBSTRUCTION—REPORT OF A CASE OF UNKNOWN ETIOLOGY

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THE post-operative occurrence of a paralytic ileus is common enough, of course, and is frequently encountered after all sorts of laparotomies, especially early in the post-operative period. It is commonly considered as due to the operative trauma and exposure and the pathological lesion is primarily in the nerve endings of the intestinal musculature.

But, the occurrence of a paralytic ileus without any previous laparotomy is an entirely different matter. Besides, its incidence is extremely rare. Rarer still must be the occurrence of two distinct attacks of intestinal obstruction both due to a paralytic ileus, first involving the large gut, and

then, after a week, a second attack involving the small gut, in the same individual. I, therefore, feel it worth-while to report the following case which presented just such a condition and which, because of the absence of a better name, I have termed "recurrent paralytic ileus."

The etiology in this particular case is unknown although the probable cause is some abnormality in the retroperitoneal region with consequent stimulation of the sympathetic nerves and hence a paralytic ileus. There is no extended bibliography covering such a case—only a few scattered statements mentioning the fact that a paralytic ileus may follow gallstone, colic, renal colic, retro-

peritoneal hemorrhage*, sub-acute pancreatitis, spinal cord injuries, abdominal trauma and, finally, fractures of some of the long bones.

A detailed report of my case follows:

Name—Louis Scutiére.

Age—65. Record No. 75793.

Admitted Oct. 2, 1931—Discharged Nov. 4, 1931.

Chief Complaint—Pain in left side past two days.

Family History—Negative.

Past History—Married. 7 children. No serious illness of any kind.

Present Illness—On September 30, at night, complained of sharp non-radiating pain in the region of the left kidney. Pain lasted until Oct. 2nd when he was admitted to this hospital. When first seen by family physician a diagnosis of kidney colic was made. The patient was given $\frac{1}{2}$ gr. of Morphine subcutaneously and advised to take capsules of sodium-amytal (3 gr. each) one each hour until relieved. When next seen by physician he had taken 8 capsules and was very drowsy but still complained of persistent pain in the left kidney region and the upper left abdominal quadrant. When I first saw the patient some 36 hours after onset he was very drowsy, complained of considerable and persistent abdominal pain which had generalized throughout the abdomen and it was accompanied by frequent eructations of gas, and was also accompanied by failure to pass gas or feces rectally for past two days. Although slightly nauseated the patient did not vomit and an enema given at this time returned without result. A tentative diagnosis of low-grade intestinal obstruction was made and patient sent to hospital.

Physical Examination—Man, elderly, acutely ill, complaining of abdominal pain and distention. Head, neck, chest, heart and lungs were negative.

Abdomen—Moderately distended, slight tenderness everywhere, no rigidity, no masses.

B. P. 160/90. Pulse 100, good quality. Temp. 101°. Rest of physical examination essentially negative.

Operation—On Oct. 2nd sigmoidoscopic examination negative. Then, a laparotomy performed under gas and local. A moderate amount of free straw-colored fluid was found in the abdomen. There was a uniform, moderate distention involving the whole of the colon from the ileocecal valve down to the pouch of Douglas. *No mechanical cause* for the dilated large bowel and the clinical symptoms of intestinal obstruction could be found. This exploratory was done through a left para-median incision and the whole abdomen carefully examined. A routine appendectomy was then done and wound closed.

Oct. 7th—Jejunostomy performed under local

anesthesia for the relief of obstructed small bowel.

Laboratory Findings—

Urine—Repeated examinations entirely negative.

Blood—Oct. 2—WBC 13,200—N.P.N. 36—Chlorides 379

Oct. 6—WBC 7,600—N.P.N. 92—Chlorides 379

Oct. 7—WBC 6,200—

Schilling shows:

Myelocytes 2%

Juveniles 7%

Stab nuclears 43%

Segment nuclears 17%

Monocytes 6%

Sputum—Oct. 7—Negative for "pneumococci isolated from mouse."

Stomach Contents—Total acidity 2. Free HCL absent.

Blood—Oct. 8—N.P.N. 100—Chlorides 346—Sugar 125—Creatinin 4.3

Oct. 10—N.P.N. 120—Chlorides 400—Sugar 118

Oct. 12—Schilling shows:

Myelocytes 0

Juveniles 2%

Stab nuclears 37%

Segment nuclears 37%

Monocytes 4%

WBC 9,200

Oct. 13—N.P.N. 110—Chlorides 415—Sugar 121

Oct. 15—WBC 9,200

Schilling shows:

Myelocytes None

Juveniles None

Stab nuclears 29%

Segment nuclears 53%

Monocytes 5%

Oct. 19—N.P.N. 50—Chlorides 455—Sugar 138

WBC 10,200

Schilling shows:

Myelocytes 0

Juveniles 0

Stab nuclears 12%

Segment nuclears 63%

Monocytes 4%

Nov. 2—N.P.N. 29—Chlorides 430—Sugar 135

WBC 7,000 — Hemoglobin 78%—RBC 4,010,000

Schilling shows:

Myelocytes 0

Juveniles 0

Stab nuclears 8%

Segment nuclears 66%

Monocytes 5%

* A summary of such a case is appended to this article.

X-Rays—Oct. 2—Flat A.P. films of abdomen.

The colon is well outlined with the gas in it from the cecum down to the sigmoid. This shows considerable widening and is very suggestive of an obstruction in the region of the sigmoid.

Oct. 4—A.P. films of the chest; the diaphragms are elevated. No pathology is seen in the lung fields.

Oct. 7—Flat A.P. films of the abdomen: The loops of small bowel are rather widely distended and are in a ladder pattern across the abdomen. The colon is not dilated at this time.

Nov. 2—Flat film of the K.U.B. region. No evidence of pathology is seen.

Progress Notes—

Oct. 3—Considerable abdominal distention, slightly relieved following hypertonic salt sol. intravenously. Excellent gaseous result with milk and molasses enema. Expecterated some blood-streaked sputum.

Oct. 4—Great abdominal distention—expectorating blood-streaked sputum again. Respirations have increased—but examination of lungs shows only a few scattered rales both bases posteriorly. Patient receiving salt sol. subcutaneously, and hypertonic salt sol. intravenously. Jutte tube passed and 1000 c.c. of greenish fluid obtained.

Oct. 5—Jutte tube in all day. Cough has subsided. Abdomen still distended—passes no gas rectally.

Oct. 6—Milk and molasses enema with good gaseous results but after 3 hrs. patient vomited several times. Toward the end the vomitus was fecal. Jutte tube reinserted. Stomach washed out.

Oct. 7—Vomited watery fecal matter during night. *Flat plate of abdomen now shows definite obstruction of the small bowel, hence, enterostomy was done.* Since return from operating room the enterostomy tube has not drained. Jutte tube inserted and 1000 c.c. greenish fluid aspirated from the stomach. Temperature 103°. Patient feels better since gastric lavage.

Oct. 8—No drainage from enterostomy. Stomach aspirated and washed through Jutte tube. Patient getting plenty of salt solution subcutaneously, but blood chemistry findings are becoming progressively worse—N.P.N. 100.

Oct. 9—Enterostomy tube has drained a little during the night. Early this morning patient had a spontaneous liquid stool containing fecal mat-

ter and passed a considerable amount of gas. (This is patient's first stool since admission.) Apparently enterostomy tube drains best when patient is on left side. Patient very weak. Can retain nothing by mouth. Temp. 104°.

Oct. 10—Receiving glucose sol. intravenously in addition to 3000 c.c. salt solution subcutaneously each day. Patient was coughing again but physical examination fails to reveal any evidence of consolidation.

Oct. 11—N.P.N. 120. Patient's condition is unimproved. Retained a little broth today and thinks he is able to pass just a little gas rectally at times. The enterostomy tube fell out during the night. Abdominal distention is less, and patient is very weak.

Oct. 12—Profuse drainage from enterostomy wound, since tube fell out. Skin clips removed from both incisions. Taking broth and not vomiting. Schilling count more favorable today since the mature forms (the segment nuclears) are now 37% as against 17% on Oct. 7. Hence the prognosis is better.

Oct. 13—Condition much improved. Two spontaneous bowel movements today. Abdomen soft—distention gone—profuse drainage of fecal matter from enterostomy wound. Later in the day the patient had a third spontaneous bowel movement and now appears greatly exhausted as in a stage of mild shock with cold extremities and covered with a cold clammy perspiration. Temperature dropped to 99° and pulse to 90. Enterostomy wound is draining profusely and there is a slight irritation around it because of the digestive action of the intestinal juices.

Oct. 14—Profuse fecal drainage from enterostomy wound. Patient had several involuntary bowel movements today. He also has urinary incontinence.

Oct. 15—Two partially-voluntary stools today. Patient better. In the afternoon patient had seven liquid voluntary stools and was placed on anti-diarrheal medication.

Oct. 16—Diarrhea ceased. Enterostomy drainage is thicker and less abundant. Patient taking soft solids—fluids by mouth restricted.

Oct. 17—Six involuntary, formed stools during past 24 hours. Patient condition improved—out on porch yesterday. Abdomen flat and soft. Laparotomy wound remains clean and healed; enterostomy wound smaller, less irritated and drainage consists of formed feces in greatly diminished quantities.

Oct. 18—Two liquid voluntary stools past 24 hours.

Oct. 19—Four voluntary stools past 24 hours. Enterostomy wound filling in although slowly. N.P.N. down to 50 from 120 on Oct. 10.

Oct. 20—Feels better. One voluntary stool

past 24 hours. Very little drainage from enterostomy wound.

Oct. 21—Several voluntary stools. Sat up in bed for short time during morning. Getting saline subcutaneously only every second day now.

Oct. 22—Several voluntary stools.

Oct. 23—Condition improving. Patient wants to sit up in chair.

Oct. 26—Several spontaneous voluntary stools past few days. Enterostomy wound very small, permits very little drainage. The skin of the abdominal wall around the wound is entirely healed.

Oct. 28—Greatly improved.

Oct. 29—No drainage from enterostomy wound in past 24 hours. Bowels open. Sitting up in chair.

Nov. 1—Only very slight amount of liquid drainage from enterostomy wound in past few days. Patient stronger and anxious to go home.

Nov. 3—Final checkup before discharge—X-ray shows no dilated gut. Blood chemistry now practically normal. Blood count and Schilling differential are rapidly approaching the normal picture. Enterostomy wound still drains a little but does not require more than two dressings daily. Patient discharged in ambulance to be followed up at home.

Note: Patient placed on danger list on Oct. 11, 1931, and removed on Oct. 26, 1931.

Follow-up Note: Nov. 19, 1931—Enterostomy wound is entirely healed. Patient slowly gaining weight. Walks around home and yard. Has no abdominal distention nor any abdominal pains. Has regular bowel movements daily and uses mineral oil twice a week. Is satisfied and has no complaints.

Final Diagnosis—1. Paralytic obstruction of colon. 2. Paralytic obstruction of jejunum and ileum—cause of each unknown.

DISCUSSION

Possible causes of the paralytic obstructions:

1—The second paralysis (small gut) might conceivably be an ordinary case of post-operative ileus due to trauma and exposure subsequent to the exploratory laparotomy and appendectomy, but, it is probably more logical to assume that the

same unknown cause responsible for the first obstruction (large gut) is likewise the causative factor in the second one.

2—Idiosyncrasy to sodium amytal (through mistake this patient took 24 grains in 12 hours—although a large dose, not a toxic one; not a likely cause).

3—Most likely cause is that patient had a low grade, subacute pancreatitis with an intact peritoneum and an escape of pancreatic enzymes limited to the retro-peritoneal region and with a consequent involvement (over-stimulation) of the sympathetics, the inhibitory nerves of the gut. A few cases of recurrent ileus due to probable pancreatic pathology have been reported in the literature.¹

APPENDIX

As further evidence showing how retroperitoneal pathology may cause a paralytic obstruction of the bowel, I wish to briefly summarize the following case taken from our hospital ward records:

Mr. Guiseppe Guadagnino, age 75, Record No. 67501. Admitted: September 26, 1931. Discharged: November 7, 1931. History: Picked up semi-conscious in street after an auto accident; had fractured pelvis and numerous bruises. After two days patient presented clinical evidence of intestinal obstruction, and x-rays showed great dilatation of colon. Following day ecchymosis appeared in perineum and buttocks and the extravasated blood slowly gravitated to both ankles, posteriorly. Diagnosis of retroperitoneal hemorrhage with involvement of the sympathetics, causing a consequent paralytic obstruction of the gut was then logically made. Patient had a stormy convalescence but recovered entirely with conservative treatment—no operation was done at any time.

The occurrence of this second and somewhat similar case within a few days of my own, suggests the possibility that such cases may be more common than we now realize.

1. Wolff, A.: Ileus in Affections of the Pancreas, *Theraps. d. Gegenew*, 53:446-450, 1912.

2. Practice of Surgery, by Dean Lewis, Vol. VII, p. 9.



LATENT PNEUMOTHORAX. A CASE STUDY

By SAMUEL I. MULLER, M.D., LONG ISLAND CITY, N. Y.

THIS study is cited for its distinctive characteristics, viz.: Repeated or recurrent pneumothorax in the same individual; absence of tubercle bacillus in repeated sputum examinations; absence of demonstrable tuberculous lesions in the lung; absence of foreign body, tumor, atelectasis and history of operation; repeated incidence on the right side; spontaneous recovery.

Our individual is a young man, 22 years of age, married, white, American, at present a door-man, a position which he has held for four months, following a year's idleness in his usual occupation, that of jeweler. His family history is negative, both parents being alive and well and one sister in good health. He has been subject to frequent colds, until a year ago, but has never been seriously ill and these colds have rarely extended to his chest.

Present condition started six years ago at the age of 16 years. Comparison can best be made by charting the record.

LATENT PNEUMOTHORAX

Date	Side	Degree	Duration
1925	right	partial	two weeks
1928	right	slight partial	two days
1931	right	complete	four weeks

Because of the rapid amelioration of symptoms and due to the youth of the subject and the failure of the parents to properly grasp the significance of the condition, a proper study in two instances was not possible. In this last occurrence the subject was prevailed upon to submit himself to further study and observation. Examination disclosed an individual 6 feet 3 inches tall, weighing 156 pounds. On his first visit the *alae nasae* were moving with inspiration, which was 38 per minute, immediately after undressing for examination and subsided to 30 per minute on resting. There was pinched facies, with mild cyanosis superimposed upon pale cheeks and mucous membranes, joined with a tendency of the body to incline to the right side. There was distinct limitation of motion on the right side on respiration, with failure of retraction between the ribs on inspiration, impaired tactile fremitus, hyperresonant note over the entire right side, with soft, distant, amphoric breath sounds, particularly evident between the seventh and fourth ribs, posteriorly. One month later these clinical findings were gone. At two months, normal breath sounds persisted over the entire right lung and there was decided improvement in physical con-

dition, blood picture and an increase of six pounds in weight. History gives the best weight as 165 pounds.

X-RAY EXAMINATION

During Pneumothorax		After Recovery	
Right Lung	Completely collapsed; gradually expanding from above downward and from within outward, up to four weeks.	Right Lung	Is completely expanded at four weeks, free from tuberculous lesion; the bronchial tree to the middle and lower lobes is especially thickened, dilated and enlarged.
Left Lung	This is free from tuberculous lesion; the bronchial tree is marked and there is general congestion throughout the lung.	Left Lung	Is now free from congestion, otherwise the same.
Heart	Is definitely enlarged in all its diameters, especially widened over the auricles and the base of the aorta. The congestion of the left lung is due to cardiac embarrasment.	Heart	Is normal in size, slightly widened at the base of the aorta.
Diaphragm	On the right side is depressed below the level of the tenth rib and is immobile, the dome being lower than the left side.	Diaphragm	On the right side at its highest point is higher than the left side and is mobile.

In this case in the presence of a contraindication to the visualization by the use of iodized oil, visualization of the bronchial tree was obtained in a fair way by a change in the technique of the film development. When ready for development films were placed into developing solution just long enough to obtain an even blackness over the lung area and not long enough to have the other structures, as ribs, shoulders, scapulae, clavicles, heart and spine blend into the same shade. From then on the technique of washing and fixing is as usual. Advantage is taken of the fact that air inflated lung tissue permits passage of the x-rays more freely and that this area is therefore more readily developed. Development of the films until an even blackness covers the entire film results in the loss of detail obtained and desired. This technique is available in the study of bronchial structure and the changes taking place therein, when the rest of the lung, its coverings, the chest wall and other structures through which the rays must pass are not impaired.

skill in their execution, and others advanced in rank because of their excellent performance in the lower spheres of service. The change of administration is effected as usual without jar or friction; and the new policies of the officers are those which have developed in the natural course of growth and evolution.

THE HOUSE OF DELEGATES

The minutes of the House of Delegates, which met on May twenty-third, are published in full in this issue of the JOURNAL, page 732. The stenographic reports were read and transcribed, and prepared for publication within two weeks after the meeting. The principal element in making possible this new record for promptness is the fact that the Reference Committees and Delegates had had a month for considering the annual reports of the officers and committees; and so the discussions on the floor of the House were pointed and concise. The minutes of this year's meeting are therefore true reflections of the opinions and sentiments of the members of the

Medical Society of the State of New York to a greater extent than ever before. They have been edited with numbered paragraphs and cross references, so that any one can readily find the whole account of every topic that was discussed.

Minutes are often considered to be dry reading and to deal with formal subjects; but the twenty-four pages of this year's record are sprinkled with interesting discussions. Some members will be interested in the discussion on press publicity, and those with legal temperaments will want to note the changes in the Constitution and By-Laws. Every member will find something that will appeal to him personally.

IS MEDICINE A SCIENCE?

Popular magazines frequently carry articles exploiting the failures of doctors to cure or prevent diseases. Some of the articles place the blame on the individual doctors who fail to make the best use of the scientific knowledge that is available to them; while other writers assert that medicine itself is not an exact science, and that still less so is its practical application to people who are sick. Even doctors themselves often say that medicine is not a science, but is an art subject to the uncertainties of human interpretation and application.

The implication of the articles is that medicine lacks the scientific qualities which characterize many other professions. Let us compare medicine, which deals with the living body, with architecture, which deals with the houses in which men live.

Architecture is called an exact science. It is founded on mathematics which is as exact and immutable as any science can be. It deals with materials whose qualities and strengths are known; and the finished building embodies the plans whose preparation and execution the architect controls in their every stage.

The physician, on the other hand, takes a human body already formed. He seldom has any voice in its building, for people ignore the science of eugenics and consult the doctor only when the human mechanism is out of order.

The science of architecture, as well as that of medicine, is divided into three stages, or divisions:

1. Construction
2. Operation
3. Repairs

The popular fame of an architect rests principally on his ability in design and construction.

If the science of architecture is to be compared fairly with that of medicine, then the element of construction must be eliminated, and only the elements of operation and repair be considered.

After an architect has constructed a building, he turns it over to the owners for its operation. It is at this point that the analogy of architecture to medicine becomes apparent. The architect has as little to say about operating a building as a physician has about operating the human mechanism of his patient. If an architect were judged by the way in which an owner operates a building, his scientific reputation would suffer to the same degree as that of the physician. Men will subject both their buildings and their bodies to over-work, and neglect, and abuse, in spite of the warnings of the architects and their physicians. Most persons expect to operate both their buildings and their bodies to the fullest capacity; and then blame their scientific advisors for not making them fool-proof when they were constructed. The physician is as scientific as the architect in the operation of the mechanism with which he deals.

When one considers the third branch of the science of architecture, that of *repair*, the analogy to medicine becomes still more apparent. The repair of the human mechanism constitutes the greater part of the work of a physician; and he is called unscientific because he cannot reconstruct the human body by eliminating old parts and inserting new ones in their places. But if the architect were denied the privilege of eliminating old parts and inserting new ones which were worn out or broken or defective, his scientific reputation would suffer even more greatly than that of the doctor.

Suppose, too, the architect were denied the use of the blue prints of the plans of a defective

building, would his diagnosis be anywhere nearly as scientific as that of a physician? Could an architect take out defective parts and insert new ones while the vital activities of the building continued without danger? The scientific skill of the surgeon exceeds that of the architect, for the surgeon must not interfere with the vital process of any vital part of the body. The architect, for example, may cut off the pipes which carry water, heat, air, and electricity to any part of a building; but a surgeon dares not interfere with the

lines of circulation and enervation for even a few moments.

When one compares the science of medicine with that of architecture, or chemistry, or any other exact profession, the only fair basis is that similar standards shall be used. When one considers the natural limitations imposed on the physician, his work in operating and repairing the human mechanism is even more scientific than that of the architect in dealing with buildings.

LOOKING BACKWARD

This Journal Twenty-Five Years Ago

Medical Libraries: Dr. Albert Vander Veer has an article in this Journal of June, 1907, descriptive of the New York State Medical Library, which was established by an Act of the Legislature in May, 1891, and in 1907 contained 17,000 volumes. Dr. Vander Veer argued for its development as a circulating library.

The same Journal contains an article on State Aid for Medical Libraries, by Dr. Smith Baker, of Utica, who says:

"There are at present in the State some sixteen incorporated medical libraries, with an additional one at Utica, but just started, and the New York State Medical Library at Albany. Tabulating the number of volumes in the ten libraries heard from, we find a grand total of about 180,986 volumes. For the purchase of new books and periodicals there is used annually a sum derived from private and corporate sources of something under eleven thousand dollars, while the State contributes for its own library \$3,000—and additionally to the University of

Buffalo, for a like purpose, the magnificent sum of just \$100.

"A public medical reference and circulating library should be established in every city and village of any size in the State; and by way of encouragement, it can safely be said that probably no step taken since the organization of this society in 1807 can rightly be considered as of more importance both economical and educational than the successful establishment of such libraries would prove to be.

"Nor is it wise to say that this cannot be done or is not worth while. Wherever there are half a dozen medical practitioners there is the place to begin. First, by a mutual exchange of periodicals and books privately purchased; and then by such mutual agreement as eventually will prevent duplication and waste, and will secure greater variety as well as economy. If, by last will and testament, these accumulations are eventually made the nucleus of a central library, all the essentials of the subject are thus assured."





MEDICAL PROGRESS



Plethora Abdominalis (Dyspepsia Intestinalis Flatulenta).—Fr. Cramer says that he described in 1924 under the term "dyspepsia intestinalis flatulenta" a morbid picture in which the gastric and intestinal manifestations must be regarded as secondary symptoms, the results of obstructions in the region of the portal vein. The most striking phenomenon is the meteorism, due to abnormal collection of gas in the intestine. This is caused by portal obstruction, resulting in lack of resorption of the gas, especially in presence of reduced intestinal motility. The meteorism is commonly greater on the right side than on the left. Similarly the musculature of the abdomen does not react equally on the two sides, but does so much more weakly on the right. If the patient is asked to cough, the abdominal muscles contract more vigorously on the left side. The hindrance caused in the movement of the diaphragm results in disturbances of circulation within the abdominal cavity, especially in the liver. In plethora abdominalis an increase of blood pressure is also observed, which is favorably influenced by massage of the abdomen. If the obstruction continues for a long period, cirrhotic changes appear in the liver. Hyperemia of the gastric and intestinal vessels appears after eating, more pronounced in those who systematically overeat. The causes of this plethora are rooted in the mode of life of the patient, in his occupational habits, his abuse of food, in high living associated with lack of muscular activity. A sedentary life results in defective breathing. Long-continued superficial respiration is one of the main causes of plethora abdominalis. Increasing obstruction in the liver leads to enlargement of this organ, and the obstruction extends to the entire portal region. There is no doubt that through this long-continued obstruction the function of the liver becomes deranged. Treatment consists in a radical change in the habits of living. The patient must be made to understand that only by complete obedience to the orders of the physician can he hope to improve his condition. Since the trouble lies essentially in a disturbance of the circulation, digitalis is in order, as well as other cardiac remedies. Breathing gymnastics, massage of the liver, and carbonic acid baths are useful measures. Attention must be given to the regulation of the bowels; aloin is one of the best antispasmodics for this purpose. Oil enemata and vibratory massage are excellent measures. Smoking should be discouraged,

since nicotine has a selective effect on the intestine. — *Münchener medizinische Wochenschrift*, February 12, 1932.

The Significance of the Familial Type of Certain Hereditary Diseases.—In the opinion of O. Nägeli the present-day concepts of the action of the genes in building the constitution tend to reach rather too rigid conclusions. A quantitative difference in the working out of an Anlage should be possible, and would give a better insight into certain deviations in the appearance of a disease within the members of a generation or within several generations; for there is no doubt that such deviations exist. Such changes of manifestation are better understood by means of Goldschmidt's concept of the dynamic working out of the gene, and of the quantitative differences caused thereby; but it cannot be doubted that we must reckon with a changed hereditary constitution, such as is shown by great numbers of family trees. Too little attention, however, has been given to the fact that in one family there is a constant tendency to a severe type of a given disease, and in another family to a mild type of the same disease. The prognosis must then be given, not along general lines, but by consideration of the particular type of the disease that prevails in the family in question. An extraordinarily clear example of this is shown in constitutional hemolytic anemia, in which there is one familial type of extreme malignity, and another of striking mildness. This disease is marked by different constitutional structure of the red blood corpuscles, and is characterized also by microcytosis. Yet in all Nägeli's cases the average size of the red cells has been above normal. It can only be, then, that these blood cells have taken on a more spherical form, and this is the most important fact; for everything else may be absent in this mutation. Cases have been observed in which the affection was so mild that it was never diagnosed. A further classic example is offered in hemophilia. Families are seen in which numerous deaths from bleeding have occurred in early years of life; while other families exist with clearly demonstrated manifestations of hemophilia, in which there has never been a death. Nervous diseases exhibit these mutations, as for example Recklinghausen's disease, atrophic myotonia, Friedreich's disease, syringomyelia, spastic spinal paralysis, etc. It will be the task of the future to test these relations and discover their practical significance. The field

of nervous diseases offers especially rich opportunities of this kind.—*Schweizerische medizinische Wochenschrift*, February 20, 1932.

The Coincidence and Reciprocal Influence of Diseases.—R. Rössle says that the attention of physicians has from time immemorial been drawn to the coincidence of attacks of diseases of different kinds. Lotze attributed this to "sympathy." In order to have a clear idea on the subject, it is necessary to distinguish between those combinations which are based on a natural law, and those that are accidental. In the former class, again, we must differentiate those diseases in which one follows the other in succession, and those which have to some extent a common pathogenesis. To the former class Pfaundler gave the name "syntropies," to mean the tendency of two diseases to meet in one. The syntropy of severe affections is much more frequent according to autopsy findings than according to clinical impression. The concept of syntropy embraces the idea that all sicknesses are combinations of diseases, and must of necessity be so. Since then we have learned to recognize "syndromes" as the outlet of individual "diseases"; in these there may appear phenomena of opposite polarity for the functioning of one and the same organ, as for example menorrhagia and menopause in Graves' disease, or diarrhea and constipation in Addison's disease. Among "syndromatic" diseases are found particularly those of endocrine organs, the so-called pluriglandular diseases. It is possible now to speak of true biglandular diseases. The question may be asked, how is it possible to know what combinations are accidental, and what ones obey a law? Hitherto statistical investigation has been the usual method for such determination, but there will always be room for medical intuition in this field. Thus, for example, we may recognize the inexplicable coincidence of hemolytic icterus with tower skull, and of cirrhosis of the liver with lenticular degeneration in Wilson's syndrome; but we do not know the nature of the relationship, whether the lenticular disease is dependent on the liver disease, or whether both have a common origin. Another illuminating example is the coincidence of epithelial tumors with the generalized form of osteodystrophia fibrosa cystica. The syntropy of rickets and spasmophilia may also be recalled, and that of obstipation and eclampsia. It must be acknowledged that our present knowledge of the internal connection of the parts of the organism is still very faulty. Thus we do not know why there is a syntropy between pulmonary stenosis and progressive pulmonary tuberculosis, and a negative syntropy between the latter and mitral stenosis;

but we can see in this fact how closely syntropies are related to the problems of disposition.—*Deutsche medizinische Wochenschrift*, January 20, 1932.

The Effect of Calcium Upon the Heart.—A. Zarcinas says that since Billigheimer (1924) and Singer (1929) made their reports on the similarity of the action of calcium and of digitalis upon the heart, a number of other attempts have been made to determine how calcium combined with digitalis affects the heart under pathologic conditions. Zarcinas himself observed that calcium administered alone had a favorable effect in mild cases, such as those of extrasystole. These mild disturbances in the conduction system of the heart are usually caused by general nervous conditions, and it is for this reason that the use of calcium as a regulator of the vegetative nervous system, on the one hand, and as a cardiac stimulant, on the other, is doubly indicated. A case is reported in which strong extrasystoles occurred at every third or fourth beat without the patient being aware of it, and in which quinidine had produced no effect. As soon as 5 c.c. calcium gluconate was injected intravenously, the extrasystoles disappeared. Six further injections of the same amount were given at 3-day intervals, after which in the last week of the treatment 3 ampules of 10 c.c. each were similarly administered. This resulted in permanent cessation of the extrasystoles, with disappearance also of irritability and nervousness of disposition that had been prominent symptoms. The various patients who have been treated in this way have all responded well to the method. In no case have there been disagreeable secondary symptoms; all that has been observed is a rather pleasurable sense of warmth. Zarcinas thinks that this simple remedy, with its very prompt action, should be regarded as of great value in the present age, when engagement in sports and in occupations that produce nervous tension is so widespread, and so frequently causes extrasystoles to appear.—*Münchener medizinische Wochenschrift*, March 4, 1932.

The Effect of Cardiac Arrhythmias on the Operative Risk.—T. Jenner Hoskin, writing in the *Practitioner*, April, 1932, cxxviii, 4, emphasizes the importance of being able to judge accurately of the cardiovascular condition prior to operation. One of the most difficult problems likely to confront the surgeon is that of cardiac arrhythmias. Sinus arrhythmia of itself is of no importance, though it is occasionally found in diseased hearts as well. The diagnosis of this arrhythmia is not difficult, as it disappears on holding the breath or raising the heart rate by exercise. It becomes more

marked on deep breathing. The significance of sino-auricular block depends upon the intensity of the symptoms; if these are absent or slight, the condition would not affect the operative procedure. Ectopic beats may be brought about by any factor causing either decreased excitability of the sino-auricular node or increased irritability in any other part of the heart. In Hoskin's opinion, they are due to the latter condition. Ectopic beats may be either extrinsic or intrinsic. When extrinsic, that is, due to a cause outside of the heart, such as increased intraabdominal pressure, they have no significance as regards the integrity of the heart. Intrinsic premature beats are due to some cause within the heart itself, most commonly a toxic myocarditis. Their significance depends upon the results of clinical and electrocardiographic findings. Their presence in an elderly man with enlarged prostate requiring operation demands careful consideration as to the nature and extent of the operation the heart will stand. Both auricular and ventricular premature beats in patients with cardiovascular degeneration are an unfavorable sign. Physiological bradycardia is of no significance, but slow pulse due to ectopic beats alternating with normal beats (these ectopic beats failing to reach the radial pulse) and to partial or complete heart block indicate serious myocardial damage. These conditions contraindicate all operations other than those of dire necessity. Auricular fibrillation is commonly found in four conditions, namely, acute infections, myocarditis (Graves' disease), and myocardial degeneration, and secondary to mitral stenosis. Hoskin found auricular fibrillation in 10 per cent of 366 cases of Graves' disease. Removal of the greater part of the diseased thyroid tended to restore normal rhythm in 50 per cent of these cases. Auricular fibrillation with myocardial degeneration naturally makes operative risk very much more serious. Paroxysmal tachycardia, due to a run of ventricular ectopic beats, is more serious than the auricular and nodal types. Cardiac arrhythmia is not uncommonly found in cardiovascular syphilis, and patients with this affection stand operation badly. Therefore its presence or that of a positive Wassermann reaction increases the operative risk.

Treatment of Typhoid and Paratyphoid Fever by Vaccinotherapy (Bacteriotherapy).—According to L. Nove-Josserand, Euvrard and Feuillade, who write in the *Journal de médecine de Lyon*, of March 5, 1932, typhoid or paratyphoid vaccine (TAB stock vaccine or auto-vaccine) if administered very early, before the 8th day if possible, and at latest before the 12th day, with due observance of cer-

tain definite rules, has been found extremely efficacious for producing rapid and complete cure, generally in less than 25 days. When employed according to the rules the method, known as vaccinotherapy or bacteriotherapy, seems not to present any dangers. It is applicable to all ages and has been used effectively in children, adults, and aged persons. It appears to prevent the complications of the 3rd and 4th weeks of the fever, and has the advantage in times of large epidemics, when specialized nursing service is difficult to obtain, of dispensing with the need of cold baths and antipyretics. The earlier it is injected the more favorable its effect upon the course of the disease. If autovaccine is to be employed, a hemoculture must be made on the second or third day of the fever if possible, and at very latest on the 1st or 2nd day of the 2nd week. This makes the use of auto-vaccine somewhat difficult, so that the authors advise giving an initial subcutaneous injection of an average dose (300 millions) of a typhoid-paratyphoid stock vaccine while awaiting the result of the blood culture, which for one reason or another may, moreover, be negative despite the existence of typhoid or paratyphoid infection. To have waited for this result is to have lost invaluable time. The authors have been using the subcutaneous method of injection, which they regard as the only useful one. According to the age, size, and apparent resistance of the patient, a dosage of 250, 500, or 1,000 million germs give the best results. In actual practice, if it is later than the 4th or 5th day, and if the patient is young and weak, it is more prudent to test his susceptibility with 300 or 500 millions. Sometimes the fever curve yields rapidly and a second injection is not necessary. As a rule the third injection accomplishes nothing. A maximum of 3 injections, in 12 to 15 days at most, should accomplish complete apyrexia by the 21st day. The mechanism by which the vaccine acts is still unknown, but it is probably that of immunity. Twenty-three cases have been treated, with a single death in a patient recently operated on for ulcer and pyloric stenosis. These very gratifying results were accomplished by autovaccinotherapy, unaided by any other form of treatment.

The Mechanism of Action of Physiological or Natural Laxatives.—E. Lenz defines natural laxatives as those in which the "natural" factor lies chiefly in their point of attack and their mechanism of action, and not so much in their material origin. Regarded from this point of view, a laxative is the more natural, the more its mode of action is based on or supported by the physiological processes connected with the normal formation and transforma-

tion of the intestinal contents. The normal motor function of the intestine exhibits a well-proportioned division into that of mixing, retention, and transportation. Lenz thinks the bacteria of the colon play an important teleological role, in that by disintegrating the fecal mass they split up gases, acids, etc., which excite the mucous membrane and thus furnish the natural irritation that produces the strong peristalsis of elimination. It appears that the mucous membrane contains specific chemoreceptors which respond to these bacterial disintegration-substances and give the signal for the setting up of a great peristaltic reflex. Chemical influences exerted by the intestinal content upon these chemoreceptors are decisive for the regulation of the intestinal motor function. Substances which act in this way upon the motor function of the small intestine are soaps, glycerin, peptone, amino-acids, glucose, and lactose. In the large intestine the natural excitants of the mucous membrane seem to be, in greatest degree, the products of bacterial disintegration, for example products of fermentation of carbohydrates, such as volatile fatty acids—acetic acid, butyric acid, valerianic acid, caprylic acid, etc. Next to these stand gases, such as carbonic acid gas, hydrogen, etc. Other alimentary irritants that arouse peristalsis through action upon the mucous membrane are lactic acid (from fermentation of milk sugar), fruit acids, and etheric oils found in spices. Diffusible colloids which through their capacity for promoting water retention make the feces plastic are contained in vegetable food rests—hydrocellulose, hemicellulose, pentose, pectin substances, etc. Substances which cause the fecal mass to slide easily through the intestine are agar-agar, whole flaxseed, psyllium seed, mineral oil, olive oil, and butter. Saline laxatives act by dissolving the neutral salts that are retained tenaciously in the feces. These, as well as the plastic remedies and the anthraquinones may best be called “natural laxatives in the wider sense,” suitable for continued use in small, well regulated doses calculated to avoid producing “foreign body irritation.”—*Schweizerische medizinische Wochenschrift*, March 12, 1932.

The Symptomatology of Angina Pectoris.—

The question is raised by Hans Eppinger in the *Deutsche medizinische Wochenschrift* of April 8, 1932, whether in cases of angina pectoris one is sometimes justified in assuming a causal connec-

tion between the pain of the angina and certain anatomic anomalies that may be present. It is possible that an exact analysis of symptoms may throw some light on the subject. For instance, if the retrosternal pain appears chiefly during the exercise of a muscular movement, the prognosis is not so unfavorable as when the attacks appear during rest or in sleep. In the former case the angina generally reacts well to vasodilator remedies, while in the latter a treatment with digitalis will as a rule temporarily overcome the attack. Not only the symptomatology but also a description of the manner in which the pain starts deserves close attention. Eppinger gives an account of two types of attacks of retrosternal pain, both of which occupy a special place in the picture of the great symptom complex of angina pectoris, on account of the quality of the pain. These types are illustrated by two cases which the writer observed carefully for a long time, clinically, and which he was able to study anatomically afterward. In the first a paraesophageal hernia of the diaphragm was established roentgenographically, to which the original difficulty of the patient in swallowing could be attributed. It may be supposed that the hernial sac caused a temporary stricture of the esophagus; that the hernia was at first reducible; the patient must have had pain regardless of whether the stomach lay in the sac or could still slip out of it; that gradually the content of the sac became fixed in the region of the top of the hernia; an ulceration may have developed, through which the stomach gradually became adherent to the pericardium; thus this injury of the coronary vessels might be regarded as the actual cause of the fatal angina. The peculiarity that owing to the participation of the stomach in the diaphragmatic hernia, attacks appeared at the end of an act of swallowing, which were of the same kind as are wont to occur spontaneously when the coronary vessels are strained, gives this case a special significance. In the second case typical anginal pains appeared, but radiated to the right arm instead of to the left. The roentgenogram showed a distinct curve of the esophagus to the left at the level of the arch of the aorta, and revealed the characteristic picture seen in complete persistence of the right arch of the aorta. This, with the radiation of the pain down the right arm exclusively, suggests that there was a congenital anomaly of the anlage of the aorta, with the possibility that the sympathetic fibers leading to the heart had assumed a changed topographical relation to the spinal cord.



LEGAL



NEGLIGENCE ACTIONS — MENTION OF INSURANCE, GROUND FOR MISTRIAL

By LORENZ J. BROSNAN, Esq.

Counsel, Medical Society of the State of New York

In one of the Pacific coast states, quite recently a decision was rendered by an appellate court that is of constant interest in the defense of damage suits for personal injuries, whether based on malpractice or otherwise. The action was one in malpractice against a dentist, based upon his alleged negligence in removing an impacted tooth.

The case was tried before a jury and there was a judgment for the plaintiff. While the plaintiff was on the stand and was being examined by her own counsel, he requested her to relate a certain conversation she had had with the defendant dentist. Though there were repeated objections, she gave the following testimony:

"In regard to reimbursing us for doctors' bills. . . . Reimburse us for the expenses of the doctor; that it was out of his hands, and would have to be handled through his insurance."

The defendant's counsel immediately claimed that the asking of the question and the giving of the answer was such prejudicial misconduct as to require the court to order a mistrial. The trial judge, however, ordered the answer stricken from the record and directed the trial to proceed. On appeal, the higher court sustained the defendant's contention and reversed the judgment. It stated that the eliciting of evidence concerning insurance carried by defendant is so inexcusable that extremely stern measures are called for when such a practice is indulged in by counsel.

The appellate court referred to an earlier case in the same state as authority. In that case, which was a damage suit to recover for death alleged to have been caused by the negligent operation of an automobile, the following excerpt from the record makes clear the point at issue:

"Q. After the death of your husband, Mrs. S., did you have any conversation with Mrs. R.?

A. I did.

Q. State what that conversation was, . . . relating to the bringing of this suit and making a demand upon Mrs. R.?

COUNSEL FOR DEFENDANT: We submit that it is immaterial whether she made demand on Mrs. R. when she brought suit. . . . I have an idea it is an attempt to bring in extraneous matter here that has no relation to this matter.

THE COURT: I think I will overrule the objection.

A. I told Mrs. R. I was going to bring suit, that I thought I ought to get damages. . . . she said she didn't want it to cost her a lot of money but she realized it and that is the reason she had insurance.

DEFENDANT'S COUNSEL: If the court please, I assign the asking of that question as misconduct on the part of counsel, injecting extraneous matter into this case, and I now move that this jury panel be discharged and this case adjudged a mistrial.

THE COURT: The testimony about the conversation will be stricken out and the jury admonished when a matter is stricken out it is not to be considered by you in any way, it is to be considered the same as if no such testimony had been given or called for. The balance of the motion will be denied."

The court in its opinion ordering a new trial said:

"It must be presumed that counsel for the plaintiff knew the answer which his client would give to the objectionable question. Her answer could serve no purpose, except to get before the jury the fact that the appellant carried indemnity insurance. . . . The natural tendency of a line of examination that suggests to the jury that the defendant is indemnified against any judgment for damages against him is highly prejudicial to his rights, especially in a closely balanced case where the evidence otherwise would be easily sufficient on appeal to support a verdict either for the plaintiff or for the defendant. Such attempts on the part of counsel have frequently been held to be improper and prejudicial."

The rule that has been laid down in New York is similar. A few instances taken from the reported cases will well show its application.

In one case an employee sued his employer to recover damages for injuries received while using a press in a bookbinding establishment. In the course of his summation before the jury, the plaintiff's counsel stated:

"There is no evidence that he (the defendant) was insured; most of these people are. There is no evidence that there was anything of this kind here."

At that point the opposing counsel took exception to the remark and requested that a juror be withdrawn and a mistrial declared. The court denied the request, and the plaintiff's counsel added the further remark that "many people get insured, but there is no evidence of any such thing in this case at all." While the court instructed the jury to disregard these statements, on appeal the court reviewing the record of the trial ruled the remarks to have been entirely improper. The appellate court said that such statements of counsel had been designed to influence the jury by considerations which were not legitimately before them. A new trial was, therefore, ordered.

In another case a plaintiff brought suit against

a city based upon personal injuries claimed to have resulted from his falling upon an icy sidewalk of the city. The summation for the plaintiff included the remark to the jury: "You don't imagine for a moment that the city is going to pay. You know well enough who is going to pay." The statement was objected to. While no request was made to withdraw a juror or to impanel a new jury, the appellate court reviewing the matter ruled that the remark was manifestly improper, to the prejudice of the defendant. A new trial was accordingly ordered.

Another case where on appeal a new trial was ordered because of similar improper statements made in conducting cross-examination, is likewise of interest. A laborer working about a coal truck was injured by a crank-handle striking him on the head. A doctor was called on behalf of the defendant to testify regarding a physical examination he had made, on the question of the nature and extent of the plaintiff's injuries. The physician was cross-examined by the plaintiff's attorney and in the course of a line of questions was asked: "Q. You are the physician for the insuring company in this case?" His reply was evasive, stating merely that he was the physician for the defendant's attorney. A motion was made for the withdrawal of a juror, and denied. The appellate court reversed a judgment for the plaintiff, branding the question as improper for it conveyed to the jury the direct information that the defendant was insured.

A similar situation is revealed in another case where the offending questions and answers came from the direct examination of one of the plaintiff's witnesses. The situation as described by the appellate court was as follows:

"The plaintiff . . . called his brother, who testified that he had an interview with Mr. B, the general superintendent of the defendant, in the presence of a man to whom he was introduced by B. The witness was asked what B said when he introduced this gentleman, and, under objection and exception, he answered, 'I will introduce our representative, Mr. J.' He was next asked, 'Who did he say this gentleman, J, was?' Subject to objection and exception, he answered, 'From the insurance company.' The defendant's counsel then insisted that it was improper to ask a question which the attorney knew would elicit an improper answer, and asked the court to withdraw a juror and declare a mistrial. The court did not rule upon the motion, but made a distinct ruling that the evidence should stand, and the defendant again excepted.

"Subsequently another witness for the plaintiff testified to an interview with Mr. B, and stated that two attorneys were present at the time. He was asked, 'Where did they tell you they were coming from?' The answer was, 'X Insurance Company, I think they said.' There was no objection or exception to this question, and no motion was made by either party to strike out any of the evidence relating to the subject of insurance.

"Later on in the trial after one R had testified for the defendant, a paper purporting to be a statement made by the witness was offered in evidence to contradict him. The last words of the paper were: 'I made the insurance com-
ed my name.' The

defendant objected to the admission of the paper upon the ground, among others, that it was an effort 'to introduce in evidence and to give to the jury certain information which is improper, incompetent and immaterial,' and in this connection counsel particularly called the court's attention to the last clause in the statement as quoted above. The objection was overruled and the defendant excepted."

Counsel for the plaintiff attempted to justify his position by asserting that the answers objected to were unexpected by him. The court, however, said in reversing the judgment:

"If the answers were unexpected, as claimed, it was the duty of the plaintiff's counsel himself to move to strike out the evidence and to ask the court to instruct the jury to disregard it. Although warned by objection and exception, he had brought it into the record, and when he knew that it was not what he expected, but something highly improper, he should have lost no time in getting it out of the record and doing his utmost to correct his mistake. A prompt withdrawal of the evidence by the counsel for the plaintiff would go farther toward correcting the evil than any motion made by the attorney for the defendant. While there was no proof in this case that the defendant was insured, by suggestion and indirection the jury were given to understand that such was the fact and the result, apparently, is reflected in the verdict.

"Evidence that the defendant in an action for negligence was insured in a casualty company, or that the defense was conducted by an insurance company, is incompetent and so dangerous as to require a reversal even when the court strikes it from the record and directs the jury to disregard it, unless it clearly appears that it could not have influenced the verdict."

It is true that the law of this state does afford to the attorneys for the plaintiff an opportunity to bring before the jury, by way of suggestion if nothing more, the fact that the defendant is insured.

Section 452 of the Civil Practice Act provides as follows:

"The fact that a juror is in the employ of a party to the action; or, if a party to the action is a corporation, that he is an employee thereof or a shareholder or a stockholder therein; or in actions for damages for injuries to person or property, that he is a shareholder, stockbroker, director, officer or employee, or in any manner interested, in any insurance company issuing policies for protection against liability for damages for injury to persons or property, shall constitute a good ground for a challenge to the favor as to such juror."

This provision has been added to our law on the theory that a stockholder or employee of a casualty company might very well make an objectionable juror to the plaintiff. Under this provision, when the jury is being chosen, before any of the testimony is put in, questions are frequently asked on the examination of prospective jurors such as the following: "Are you interested as a stockholder or director in any insurance company that insures against liability for injuries to person or property?" It seems to us that this question is the equivalent of stating that the defendant is insured. Certainly, the average jurymen would so understand it,

TREATMENT OF DUODENAL ULCERS AND CHRONIC APPENDICITIS

A man forty-two years of age was referred by his family physician to the defendant doctor who specialized in the treatment of diseases of the stomach. A note from the family physician which the patient gave the defendant read: "Suspect duodenal ulcer. Kindly care for the patient." A history taken from the patient showed that he suffered from pain in the epigastric region extending to the back, which was relieved by eating, and further that the patient had been frequently awakened at night with severe pain, which was relieved somewhat by drinking milk. He told the doctor that he had lost thirty pounds from the malady.

The defendant doctor took numerous x-rays of the patient's stomach, intestines, gall-bladder and appendix. Examination of these showed several small duodenal ulcers, ptosis and chronic appendicitis. The doctor immediately sent the patient to a sanitarium and put him under a course of treatment which consisted chiefly of keeping him on a carefully supervised diet of cream, milk, broth and gruels for about three and a half weeks. The patient left the sanitarium greatly improved. He continued to call at the doctor's office twice a week for the next month, at the end of which time further x-rays were taken. These pictures disclosed that the ulcers had improved, but that the patient still had the chronic appendicitis with adhesions.

On the occasion of the first visit and on numerous occasions thereafter, the doctor told the patient it would be necessary for him to submit to an operation with respect to his appendix, but the patient delayed consenting to this operation.

After about nine weeks, the man was again sent to the sanitarium and put on a diet. The appendix condition was then so troublesome that, failing to obtain the patient's consent to an operation, the doctor treated the condition with applications of icebags. After a week the patient again left the sanitarium, and then called at the doctor's office for an x-ray examination. Again the condition appeared satisfactory except for the chronic appendicitis, and again the doctor told the patient of the need for operative treatment. Nothing further was heard from the patient until suit was brought by him against the doctor.

The claim upon which the suit was based was that the defendant doctor had treated the patient by a starvation diet for duodenal ulcers, whereas he was suffering from appendicitis, and that due to the improper treatment of the defendant an operation was necessary to remove the appendix. The case was tried before a judge and jury, and though no medical testimony was introduced on behalf of the plaintiff the judge sent the case to the jury. After about five minutes' deliberation, the jury returned a verdict for the defendant.

ALLEGED NEGLIGENT PLASTIC OPERATION ON NOSE

A young man, about thirty years of age, consulted the defendant, a specialist in nose, throat and ear cases. The doctor found that he had a marked retronasale nose with atrophic rhinitis. The doctor took two Wassermann tests but these were reported as negative. He gave him treatments from time to time of scarlet red emulsion into his nostrils. After this treatment had been continued for some time the patient requested that his nose be operated upon because he had been finding difficulty in obtaining employment by reason of his peculiar shaped nose.

The doctor put him under a general anaesthesia and took a piece of bone from the vertebral border of the left scapula which he shaped so as to make a nose bridge and then opening the flap of the plaintiff's nose, he incised at the junction of the nose and lip and placed the bone graft into position. After the graft had been finished the doctor sutured the flap and bandaged the patient's nose. The patient remained in the hospital for about a week and then went home.

The patient, thereafter, called at the doctor's office two or three times a week for several weeks and all went well with the case until about seven weeks after the operation the doctor discovered a small sinus had formed on the left side of the bridge of the nose which was discharging serum. The doctor applied dressings to the sinus and the patient continued to call at his office weekly for about three months for similar dressings. The last time he saw the patient the wound on the shoulder had entirely healed, but the sinus was still causing the patient slight trouble.

Suit was instituted against the doctor, claiming that the operation was improperly performed so as to cause a chronic infection about the nose which led to a permanent impairment of the plaintiff's health and a disfigurement of his face.

The case came on for trial before a judge and jury and at the close of all the evidence a motion which was made on behalf of the defendant to dismiss the complaint was granted, thereby terminating the matter in favor of the doctor.



HOUSE OF DELEGATES



MINUTES OF ANNUAL MEETING, MAY 23, 1932

The 126th Annual Meeting of the House of Delegates of the Medical Society of the State of New York was held at the Hotel Statler, Buffalo, New York, on Monday, May 23, 1932, at 2:00 P. M.

Dr. John A. Card, Speaker; Dr. Daniel S. Dougherty, Secretary.

The Speaker: The House of Delegates will please come to order.

1. WELCOME BY DR. BONNAR

The Speaker: There is among those present a man who for many years was a member of this House of Delegates, but who through the vicissitudes of misfortune, or otherwise, was not returned. We all remember last year this gentleman in the House of Delegates and his extending the invitation to hold this Annual Meeting in Buffalo, and I feel that we can afford to spare a few moments and ask Dr. John D. Bonnar of Buffalo to speak to this House.

Dr. Bonnar of Buffalo thereupon delivered an address of welcome.

2. COMMITTEE ON CREDENTIALS

The Speaker: The first order of business is the report of the Reference Committee on Credentials; Mr. Secretary.

The Secretary: Mr. Speaker and gentlemen, there are no disputed delegations. All gentlemen present have a right to vote.

The Speaker announced that the Secretary would call the roll by Counties for the purpose of determining the presence of recognized delegates.

The Secretary thereupon called the roll by Counties.

The Speaker: There being a quorum present, we will proceed to the business of the House.

3. APPROVAL OF THE MINUTES

The Speaker: The first order of business is the reading of the Minutes of the previous session.

The Secretary: As these Minutes have been published, I move that the reading be dispensed with and that they be adopted as published in the July 1st, 1931, issue of THE NEW YORK STATE JOURNAL OF MEDICINE. Motion seconded and carried.

4. REFERENCE COMMITTEES

The Speaker: I will now ask the Secretary to read the list of reference committees.

The Secretary read the following Reference Committees:

Reference Committee on the Report of the President: Floyd S. Winslow, Chairman, Monroe; Louis A. Van Kleeck, Nassau; Hyzer W. Jones, Oneida; Cornelius J. Egan, Bronx; John A. Hatch, Yates.

Reference Committee on the Reports of the Secretary, the Council and Councilors: Harrison Betts, Chairman, Westchester; Walter T. Dannreuther, New York; William A. Krieger, Dutchess-Putnam; Albert L. Voltz, Queens; Julius Ferber, New York.

Reference Committee on the Reports of the Treasurer and Trustees: Frederick H. Flaherty, Chairman, Onondaga; Edward R. Cuniffe, Bronx; Edwin A. Griffin, Kings; Francis M. O'Gorman, Erie; Franklin Welker, New York.

Reference Committee on the Report of the Committee on Legislation: Walter D. Ludlum, Chairman, Kings; B. Wallace Hamilton, New York; Joseph B. Hulett, Orange; Claude C. Lytle, Ontario; Joseph D. Olin, Jefferson.

Reference Committee on the Report of the Committee on Scientific Work and the Committee on Arrangements: Morris Maslon, Warren; David W. Beard, Schoharie; Sylvester C. Clemans, Fulton; Albert E. Payne, Suffolk.

Reference Committee on the Report of the Committee on Public Health and Medical Education: Reeve B. Howland, Chairman, Chemung; Edgar A. Vander Veer, Albany; James W. Smith, New York; Thomas M. Brennan, Kings; Richard H. Sherwood, Niagara.

Reference Committee on the Report of the Committee on Medical Economics: Terry M. Townsend, Chairman, New York; Horace M. Hicks, Montgomery; Albert A. Gartner, Erie; Samuel J. Kopetzky, New York.

Reference Committee on the Report of the Committee on Public Relations: Luther F. Warren, Chairman, Kings; Andrew Sloan, Oneida; Luther C. Payne, Sullivan; Leon M. Kyser, Steuben; Romeo Roberto, Westchester.

Reference Committee on the Report of the Legal Counsel: Augustus J. Hambrook, Chairman, Rensselaer; Charles C. Trembley, Franklin; Mary J. Kazmierczak, Erie; Carl Boettiger, Queens; Willard H. Veeder, Monroe.

Reference Committee on the Reports of the Committee on Medical Research and the Committee on Periodic Health Examination: DeWitt Stetten, Chairman, New York; C. Knight Deyo, Dutchess-Putnam; Walter A. Calihan, Monroe; Edwin H. Fiske, Kings; Guy S. Carpenter, Tioga.

Reference Committee on the Reports of the Committee to Study the Nurse Problem and the Committee on Physical Therapy: Alec Thomson, Chairman, Kings; Frederick J. Schnell, Niagara; George S. Towne, Saratoga; Reginald A. Higgons, Westchester, Nathan Ratnoff, New York.

Reference Committee on Credentials: Daniel S. Dougherty.

Reference Committee on New Business (A): Edward M. Colie, Jr., Chairman, New York; Aaron Sobel, Dutchess-Putnam; Harry Aranow, Bronx; Lucius H. Smith, Wayne.

Reference Committee on New Business (B): Edward Fiske, Chairman, Kings; Milton G. Potter, Erie; C. Ward Crampton, New York; Adolph De Sanctis, New York; William Klein, Bronx.

Reference Committee on New Business (C): J. Lewis Amster, Chairman, New York; George M. Fisher, Oneida; Frederic E. Elliott, Kings; Earl W. Wilcox, Chenango; Otto H. Leber, New York.

5. ADDRESS OF THE PRESIDENT

The Speaker: The next order of business is the address of the President.

The Secretary: Mr. Speaker, inasmuch as all the Annual reports, together with the President's have been printed and sent to the Delegates and are now in their hands, I move, that they be referred to the respective committees without being read.

Motion seconded and carried.

6 UNFINISHED BUSINESS

The Speaker Is there any unfinished business arising from the previous meeting?

The Secretary None, Mr. Speaker

7 NEW BUSINESS

The Speaker The next order is new business. Has any one a resolution to present?

8 GOVERNORS' COMMITTEE TO INVESTIGATE MEDICAL AND HOSPITAL PROBLEMS UNDER WORKMEN'S COMPENSATION

Dr. Irons of the Bronx The men of the Bronx County Delegation wish to institute a criticism of the Report of the Governors' Committee to Investigate Medical and Hospital Problems under the Workmen's Compensation Law and have instructed me to present the following resolution

1. The majority report of the Committee is adverse to the free choice of physicians

Certain doctors and clinics make a practice of capturing all the compensation work. These doctors and clinics make strenuous efforts to get authorization and are in a position to make their demands for compensation proportionately larger than they would be in the case of the private physician. The family doctor or private doctor, who has not or will not make the extraordinary effort to get authorization is, therefore, at a disadvantage. If free choice were to be denied the patient this recommendation should not be included in any proposed amendment. It can be refuted on the arguments of the report itself. It is plainly evident that the family physician is more concerned about his patient's welfare than any stranger would be.

It discusses and deplores the premature return to work of the injured employee.

This can best be avoided if the family or private physician were to care for those injured claimants. They have a personal interest in the patient and his family. What would the family physician gain by a premature discharge of a patient from his care? The patients treated in compensation clinics receive an impersonal attention and to quote from the report made by Dr. Myers to the State Labor Department on Compensation Clinics

The pervasive mistrust on the part of patients, or physicians in clinics attending them is prejudicial to the patients' morale and speedy recovery.

The Committee deplores the fact that the Department of Labor must rely on the data from the information supplied by the insurance companies. This is a further argument in favor of free choice and the attendance of the patient by his private physician.

2. It ignores the agreement made between the County Societies and the insurance carriers in compensation work which is producing good results and is virtually free choice. This agreement was approved by the Minority Report consisting of two insurance men, Messrs. Brown and Deckelman.

3. It criticizes the doctors generally as being incompetent to treat compensation cases and recommends the formation of a panel of those eligible to do compensation work. The law of this State grants equal rights to all duly licensed and registered physicians. It is known that about ninety per cent of industrial injuries are of a similar nature to those met with in private practice. As for major injuries, these cases being hospitalized are under the care of specialists anyway. The need for complete restoration as possible is the concern of every doctor.

4. It is opposed to lifting and makes certain recommendations for legislation.

We approve of the views and remedies of the majority report on the practice of lifting.

5. It recommends the establishment of state clinics for compensation work. This would be the beginning of a form of state medicine without due consideration and preparation is commented upon by Mr. Ganz in his dissenting report.

6. It condemns the existence of compensation clinics of the insurance companies and speaks of the abuses found by Mr. Meyer's Committee of the ordinary commercial clinics.

We approve of the Majority Report in condemning insurance, industrial and commercial clinics. If it is true that the information obtained from the insurance company clinics is prejudicial to the best interests of the patients, then it holds with equal force for the information about the condition of the claimant which is obtained from the private industrial clinics. Since these private industrial clinics get their whole profit from the treatment of compensation cases and must have the assistance of the insurance companies to do so, it is fair to assume that their interests will lean to the side of the insurance companies that supply them with cases.

7. It speaks of the establishment of a supreme court of medical review. When arbitrators are needed they can always be obtained through the County Societies.

8. It recommends the employment of part time physicians in departmental work. With this provision we are fully in accord and agree with the committee in its reasons therefor.

9. It favors the abolition of authorization for the hospitals. In no part of its report is its onenessidedness so apparent as in this paragraph. The hospitals seem to be protected from any possible inconvenience. Thus the committee recommends the abolition of authorization and gives the hospitals the right of lien, also other features that would obviate interference from any carrier. We fail to see why these same privileges should not be accorded the physician.

We feel that the sending of the C-4 form within a short time protects the interest of the doctor if no such notification has been sent by the employer. In the event that casual relationship has not been established by notifying the insurance company of the occurrence of an accident it protects the doctor by determining whether the casual relationship exists. The sending of the C-4 form prevents the doctor from treating a case for which he will not be compensated.

As to the matter of the inclusion in the compensation law of more occupational diseases and diseases arising out of industry, that should be a subject of study by a larger committee in combination with the State Labor Department.

We feel that the House of Delegates of the Medical Society of the State of New York, through proper channels should communicate with the Governor, and that this report be released to the press after it has been presented to the Governor.

In addition it is recommended that an amendment or ruling be rendered that payment of professional services must be made to that person who actually rendered each service stated in the bill.

It was further recommended that a Bureau be established in accordance with views expressed in the majority report where the question of continuous disability and further treatment be impartially settled.

The Speaker Inasmuch as the better part of the matter contained in this resolution has been covered by the report of the Committee on Medical Economics the speaker will refer this resolution to the Reference Committee which is considering the report of the Committee on Medical Economics (See par. 46).

Is there any further new business to come before the House?

9 STATE CLINICS FOR INJURED WORKMEN

Dr. Elliott of Kings presented the following resolution

WHEREAS Howard S. Cullman, Chairman of a committee appointed by Governor Franklin Roosevelt to review Medical and Hospital problems in connection with Workmen's Compensation Law made a report last February in which appeared a recommendation for the establishment of State Clinics for care of injured workmen; and

WHEREAS in rebuttal to criticism of such recommendation, Mr. Cullman in a written statement published in the *New York Times* Tuesday, May 17th, 1932, page 17, says: "The Committee's plan was formulated by group of physicians and surgeons of unquestioned integrity and ability, after mature study and deliberation," and

WHEREAS, on May 21st of this month, Dr. Adrian V. S. Lambert, Chairman of the Medical Sub-Committee, in a communication to the Economics Committee of this Society, says:

"This plan was proposed by a sub-committee on Departmental Procedure of the General Committee. There was no physician a member of this sub-committee.—The plan was placed in the report by majority vote of the General Committee," and

WHEREAS, on the 20th of this month, Dr. James Alexander Miller, in a communication to the Economics Committee of this Society says—"The majority of the medical members of the Committee, however, thought that the problem should be met in another way, and consequently a supplementary statement was prepared, although not incorporated in the body of the report, as such."

THEREFORE, BE IT RESOLVED that these repudiations of Mr. Cullman's statement be spread upon the minutes of this meeting and that the Secretary be instructed to send a copy of this resolution to the Governor, the Honorable Franklin D. Roosevelt, and that a copy of this resolution be released to the Press.

The Speaker: Referred to Reference Committee on new business.

Is there anything further under the head of new business?

10. ANTIVIVISECTION

Dr. Sondern of New York presented the following resolution:

To the House of Delegates, Medical Society of the State of New York on behalf of the Committee on Medical Research.

During the last session of the Legislature, the antivivisectionists have been so active in New York State as to call for greater exertions in future on the part of those defending animal experimentation. Instead of attempting to refute the claims made for animal experimentation in medical progress as in the past, they adopted the strategy of campaigning in districts in which the outcome of the election has been doubtful; and wherever a candidate was defeated who opposed their cause they claimed that they brought about this defeat. This new method of procedure acted to disturb the minds of the legislators. In both the Senate and the Assembly, they presented bills to prevent all experimentation upon dogs. These bills failed to be reported out of committee.

The National Antivivisection Society has sent to all members of the American Medical Association a questionnaire to obtain individual opinions with regard to animal experimentation and the use of sera. Many of the questions have been artfully devised for advocacy of their cause.

As a result of the agitation as a whole, we have been informed by certain members of the state legislature that they expect help from us during the coming year in convincing the public that their position in opposition to antivivisection legislation is warranted for the public

good. In this your Committee will need the aid of every physician in the state.

It is unnecessary to remind you that insulin was discovered through experiments upon dogs and that the liver treatment of pernicious anemia resulted from experimental observations on these animals; nor need I remark that the clinical methods of taking blood pressure were worked out upon the dog. You know also that the use of iodine in connection with the treatment of goitre resulted from tests made upon dogs living in the goitre belt and manifesting this disease. I need not point out to you that the present methods of chest surgery, of cardiac surgery, of stomach and intestinal surgery and of brain operations were all worked out upon the dog. Many other advances made by the use of this species will suggest themselves to you.

It is important for us to have clearly in mind for the information of the public the reasons why experimentation upon the dog is essential to medical progress and why it is impossible to utilize other species instead, as urged by the antivivisectionists. Some of these reasons may be mentioned here. For many sorts of experiments for the better understanding of disease and its cure, only a large animal can be used. To take but one example, repeated blood tests must often be made over periods of weeks and months, just as in patients. Now what choice have we amongst large animals? We have only the herbivora (sheep, goats, cows, horses) and the dog. It is not practicable to keep considerable numbers of sheep and goats in the laboratory, nor would these be suitable for the work even if this could be done, for they are grass eaters, differing markedly from man in the arrangement of their organs and in their essential physiology and chemistry. The liver treatment for pernicious anemia could never have been discovered by the use of them, for the simple reason that they will not eat liver. The dog will eat anything that man eats, and he is co-operative. One can control his diet and follow the course of his physical disturbances just as if he were a human patient.

There has been a great increase of late in the number of accidental deaths due to electric shock from the ordinary house voltage, as when the individual happens to be wet, as in the bathroom, for example; or has metallic contact with the ground. In many cases death is due to a fibrillation of the heart. A method is urgently needed to restore hearts from such fibrillation. It is essential to use dogs for the experiments since they are the only available animals in which the heart acts like the human heart as concerns recovery from fibrillation. Experiments on the dog's heart have led to much of our recent knowledge of cardiac irregularities and the ways to treat them. In proportion as we doctors prevent more and more people from dying before their time, the problems of the diseases of the aged, notably renal and cardiac diseases, will become more pressing. To obtain a further understanding of these diseases experimentation upon the dog will be necessary.

The antivivisectionists frequently say that medical students can be satisfactorily trained in the practical methods of surgery by the use of the cadaver. Anybody who has ever seized a bleeding artery will know that this is impossible. I wish to stress this point, since the antivivisectionists vigorously attacked the utilization of the dog for teaching purposes. The stomach and intestines of the dog are so nearly like those of man in their size, form and functions that by utilizing them the surgeon is enabled both to obtain his necessary skill and to work out new methods for use on human beings. The immense, grass-distended, sack-like bowels of the herbivora obviously cannot be employed, nor can the small fragile bowels of the cat and rabbit. The dog has a stiff-walled thorax, not a yielding one like those of the smaller laboratory animals. Operative methods must frequently be practiced upon this thorax before they can be attempted in man. So too with operations on the cranium and kidney.

The existing statute against cruelty to animals has been so drawn up that experimenters guilty of cruelty can be successfully prosecuted, as a test case has shown. In this case an experimenter had put adhesive tape loosely about the jaws of a diabetic dog between feeding to prevent the taking of food that might be offered by unauthorized persons. This was held to be cruelty by the judge, and the doctor was convicted. The case shows that the present law can be successfully invoked even for slight cause. It permits scientific experiments and investigations to be performed only under the authority of the faculty of some regularly incorporated medical college, university or laboratory of the state. As a special safeguard for the proper treatment of animals, the laboratory workers themselves voluntarily drew up a code of rules for the conduct of experiments and these rules are not only posted in all laboratories, but also strictly enforced by the directors. I state these facts to make it plain to you that there is no need for further legislation to protect the dog or other animals.

The antivivisectionists make the charge that dogs are employed for research and in teaching when smaller animals would do as well. Practical consideration are all against this. Dogs are expensive animals both to buy and to maintain, and are used only when other animals will not serve the purpose. In fact, it is imperative to use smaller creatures wherever possible, to cut down cost, if for no other reason. But there are also other reasons, very important ones: namely, that the smaller animals, rabbits, rats and mice as raised for the laboratory, have less individuality than dogs and can be utilized in larger numbers, the results being statistically more dependable. For example, cancer is very frequent in old female dogs, as you know, but to transfer the disease to other dogs for experimental purposes would require not only the use of groups of them, but these groups would have to be of precisely the same breed as the individual with the cancer, since otherwise the tumor cells could not be successfully transplanted. Because of these difficulties, to say nothing of the fact that the dog is not essential, workers on the cancer problem utilize cancerous rats and mice, transferring the malignant tissue to other individuals of the same species.

I hope I have made clear not only that experimentation upon the dog is essential to medical progress and to medical teaching, but furthermore, that all necessary legislation to prevent the abuse of animal experimentation has already been provided. The dog is used no more than is necessary, because of the reasons just pointed out.

In response to questionings before legislative committees, the antivivisectionists have repeatedly admitted that the bills they advocate each year to prevent experimentation upon the dog are merely entering wedges for legislation to prevent animal experimentation entirely. But they go much farther than this. At their New York City headquarters they distribute pamphlets warning people against the Pasteur treatments for rabies, asserting that there is no such thing as a mad dog and no such disease as hydrophobia. In other pamphlets they attack vaccines against smallpox and typhoid and the use of diphtheria antitoxin, calling them together with the Pasteur treatment for rabies, the "Four Whited Sepulchres." They also warn the public against any surgery for cancer, suggesting that such surgery is performed by the surgeons only for the purpose of making money. Instead of surgery they suggest a diet of carrots for cancer.

It must be evident to you from these facts that the antivivisectionists strike at the well being of the community in general. However, their immediate menace lies in their efforts to prevent experimentation upon dogs. It is essential that we physicians should combat this attack upon the public safety in the way indicated, and for this purpose on behalf of your Committee on Medical Research I crave your aid.

I will ask, if I may, that the members of this House of Delegates help your committee on Medical Research to obtain as many prominent lay signatures as possible to the following, namely:

"The Medical Society of the State of New York consisting of thirteen thousand physicians pledges proof at any time; that animal experimentations has largely contributed to the fact that the world has been made more healthful and safer not only for the human being but also for the animals themselves. The Society likewise pledges that such necessary experiments are now under complete legal control and are made in the most humane manner possible to serve their purpose. For those reasons I am opposed to any legislation which will restrict animal experimentation and thus hinder medical progress."

If you get me signatures enough to that I believe we can defeat our opponents.

The Speaker: This being a supplementary report of the Committee on Medical Research, it will be referred to the Reference Committee on Medical Research. (Par. 43.)

Is there anything further under the head of new business?

11. DISPENSARY ABUSES

Dr. Frucht of Kings presented the following resolution:

WHEREAS, the economic condition of the Medical Profession, especially in the metropolitan district, is in bad straits, because of dispensary abuses; be it therefore

RESOLVED, that it is the opinion of the Medical Society of the State of New York that all clinics should admit patients free of charge; and be it further

RESOLVED, that no patient should be treated in said dispensary or clinic who can afford to pay for treatment.

The Speaker: Referred to Reference Committee on New Business A. (Action par. 22.)

12. REGULATION OF FREE TREATMENTS IN HOSPITALS

Dr. Kazmierczak of Erie presented the following resolution:

WHEREAS, the Medical Society of the County of Erie has received information that hospitals operating under the general municipal law are receiving not only the indigent sick but also patients on the free or on a part pay basis who are financially able to pay the usual hospital charges and the fees of a private physician, and

WHEREAS, the visiting staffs of such institutions usually are composed of physicians who serve without pay, and

WHEREAS, physicians in the majority of cases are taxpayers and under these conditions not only are giving their services free but actually are being taxed to provide buildings and equipment for patients able to pay for private service, and

WHEREAS, the receiving of such patients by these publicly owned general hospitals makes it necessary at frequent intervals to expand such institutions at the expense of the taxpayers, and

WHEREAS, patients who are able to pay for private treatment have been encouraged by newspaper articles obviously inspired by the authorities of such publicly owned hospitals to seek free or part pay treatment, and

WHEREAS, such newspaper articles have violated the spirit of medical ethics by extolling great cures and even mentioning the names of doctors, therefore, be it

RESOLVED, that the Medical Society of the County of Erie in meeting assembled April 18, 1932, condemns such practices and instructs its delegates to present this resolution at the annual meeting in 1932 of the House of Delegates of the Medical Society of the State of New York together with the request that the House of Delegates instruct its Committee on Legislation to draft and

introduce in the New York Legislature a bill to remedy such abuses, and be it further

RESOLVED, that the Medical Society of the County of Erie circularize the county medical societies of the State with a petition to the effect that no hospital supported wholly or partly at public expense shall admit patients for diagnosis or treatment on the free or part pay basis, if such patients upon investigation is found to be financially able to pay for medical care and necessary hospital charges and that such patients shall be attended by a medical doctor or surgeon of his own choice, except in case of emergency. In case of a minor or one of legal incompetency the patients shall be received and the nearest relative or guardian shall be required to choose a physician for him. The bill to apply to all cases except patients afflicted with tuberculosis, malignancy or insanity.

The Speaker: Referred to Reference Committee on New Business A. (Action, par. 33 and 34.)

Is there anything further under the head of new business?

13. HISTORY OF MEDICINE IN NEW YORK STATE

Dr. Costello of Monroe presented the following resolution:

WHEREAS, the State Medical Societies of several of the states, are preparing and publishing valuable histories of medicine in their respective states, and

WHEREAS, the Medical Society of the State of New York has not undertaken any such publication recently, and

WHEREAS, there exists among the Membership of the Medical Society of the State of New York, men who have often shown a real interest and aptitude to engage in historical study, be it

THEREFORE RESOLVED, that the House of Delegates of the Medical Society of the State of New York, approve the appointment of a Committee to undertake the preparation of a history of medicine in New York State.

The Speaker: Referred to Reference Committee on New Business B. (Action, par. 23.)

Is there anything further under new business? Are there any Reference Committees ready to report?

14. REFERENCE COMMITTEE ON REPORT OF COMMITTEE ON LEGISLATION

(Journal, May 1, page 525)

Dr. Ludlum of Kings presented the following report:

The Legislative Committee offers one recommendation namely that: "Every County Medical Society, Academy of Medicine, and other scientific group should appoint an influential committee whose purpose it shall be to interest and organize the leading citizens of their community for the protection of the public against these senseless fanatics, bigots and quacks who are forever threatening to undo all that has been accomplished in public health, sanitation and hygiene."

Concurring with this and to give it force, the Reference Committee recommends that this recommendation be approved by this House and published *conspicuously* in the State Journal, with proper editorial preamble addressed to all constituent County Societies.

The Reference Committee desires again to express for you and the State Society its appreciation of the laborious and efficient work done by the Legislative Committee and of Dr. Lawrence's cooperation with it.

There being but a single recommendation involved the committee moves the adoption of the report as a whole. Motion seconded and carried.

The Speaker: Are there any other resolutions under the head of new business?

15. REPORT OF COMMITTEE ON THE REPORT OF THE COMMITTEE ON PUBLIC RELATIONS

(Journal, April 15, page 498)

Dr. Warren of Kings presented the following report:

The Committee recognizes the important work that devolves upon the Public Relations Committee of our Society and commends it upon its accomplishment of the past year. These changing and unsettled times demand much more thought and effort of this Steering Committee of Health Contacts—possibly more than any other time in our organization.

One reads through the lines of the report the spirit with which the Committee has approached its relationships problems. It has attempted through conference and discussion to bring harmony and understanding of purpose and action at all times between the parties concerned. It has taken into its conferences knowledge and scientific facts which can never be denied. It has brought reasonableness into the application of this knowledge and these facts and has been able to do what medicine must do, if the health of the people of the State of New York is to be best conserved; it must present leadership of a convincing and knowing character.

The report further shows that these public relations problems approached in such manner are capable of solution.

Your Committee then commends the great amount of work done by this Committee in the past year and approves of the manner and spirit in which this work was accomplished.

16. LECTURES TO MEDICAL STUDENTS

The next part of the report deals with lectures to medical students. These lectures were given to senior medical students with the idea of acquainting them with some of the laws having to do with medical practice. Your committee believes that medical education in the past has not supplied the outgoing senior with the knowledge that he should have possessed concerning, not only the laws but many other public relations under which he practices and with which he daily contacts. He has not then been educated to assume his full responsibility to the public in these matters. He has been almost led to believe that health departments and lay organizations dealing with health matters were his hidden enemies attempting to curtail his profession in any way that they might. This attitude has made him unfit to cope with many community affairs of public health importance.

Your committee believes that education is the strongest weapon we have to acquaint the soon-to-be doctor with the many public relations contacts that he must meet in matters of health activity, and it

RECOMMENDS, that the lectures given to senior medical students in medical schools throughout the State be increased as speedily as possible to cover in a thoroughgoing manner not only those laws pertaining to practice, but other public relations activities in which he should be instructed to have a proper idea of the newer responsibilities that medicine must assume along these lines.

The Committee further knows that some medical schools give instruction in the workings of the Medical Practice Act, medical ethics, and so forth, and it realizes that the medical curriculum is now so full that there should be no duplication of effort. It therefore

RECOMMENDS, that the Committee on Public Relations, through the deans of medical schools, get into contact with individuals in these schools giving this work, with the idea of cooperation in effort, to the end that these public relations problems be thoroughly developed and presented to medical students, without duplication.

I move its adoption.

Motion seconded and carried.

17. COOPERATION WITH OTHER COMMITTEES

Dr. Warren: The report then refers to its cooperative effort with the Committee on Public Health and Medical Education. It recites its efforts in studying with this body the report of the Governor's Special Health Commission, which report was received by the Special Session of the House of Delegates in Albany on January 14, 1932. Your Committee recognizes the splendid effort of the Committee in cooperating with the Public Health Committee in this work, to which we believe every member of this House owes thoughtful appreciation.

The report then passes to a discussion of the Committee's cooperation with the Department of Social Welfare. It tells of rules and regulations which are to be applied to all hospitals of the State and states that it aided in formulating such rules and regulations. As these rules and regulations have apparently been enacted as social welfare laws, the Committee has no recommendations to make upon this section of the report.

The activity of members of the Committee in working with the Greater New York Coordinating Committee is commended, and it is

RECOMMENDED, that the Public Relations Committee of the State Society take great interest and give support to the deliberations of the Greater New York Coordinating Committee, to the end that it adds weight, through state representation, to the efforts of this Committee; and furthermore, because the problems of the Greater New York Coordinating Committee are the same as those of the other Public Relations Committees throughout the state; namely, to bring to bear every effort that is possible for the solution and safe guidance of public relations problems to the ultimate health of the people of the State of New York.

I move its adoption.

Motion seconded and carried.

18. EXAMINATION OF SCHOOL CHILDREN

Dr. Warren: Examination of school children is next taken up by the committee. It states that the pre-school examination of children is a matter in which there is little interest among the practicing profession. Fifteen per cent of these children only are examined by the family doctor. Your committee

RECOMMENDS, that a study be made by this Public Relations Committee in conjunction with the Public Health Committee as to why more children are not examined by the family doctor, and that these committees report the results of their study to the Executive Committee, with recommendations for improvement. It further

RECOMMENDS, that the Executive Committee, after the receipt of this report, if it deems it advisable, acquaint the chairman of each County Public Relations Committee with the results and recommendations of this report, to the end that this matter be brought to the attention of every member of our Society, with the idea of stimulating interest and arousing the physician to the responsibility that he should have in his work.

I move its adoption. Motion seconded.

The Speaker: The motion in favor of adopting this portion of the report has been made and seconded.

The motion carried.

19. REGIONAL CONFERENCES WITH COUNTY CHAIRMEN

Dr. Warren: The report then speaks of regional conferences of the County Public Relations or Public Relations and Health Committees. It records with satisfaction that much interest has been aroused and much good has come from these conferences. Your Committee therefore

RECOMMENDS, that these regional conferences be continued and increased as deemed necessary to have the

County Society acquainted with the efforts of its parent State Society along these lines, or to have County Societies aided in their efforts through the strength and influence of the State Society Committee's help.

I move its adoption.

Motion seconded and carried.

20. PERSONNEL OF COUNTY PUBLIC RELATIONS COMMITTEES

Dr. Warren: In discussing the next part of the report telling of the personnel of County Committees the report strongly urges against the rapid change of personnel on County Public Relations Committees; for in its study and contacts it is found that those counties which have experienced, tried and well qualified persons on this committee are able to handle the important matters of this committee in the most satisfactory way. Some counties have even succeeded in getting all public relationship problems dealing with medical matters referred to the County Society for its deliberation and final recommendations. Your committee believes that these observations and contentions are sound, and therefore

RECOMMENDS, that as little change as possible be made in the personnel of the County Public Relations Committees. It also

RECOMMENDS, that members having a bent or special qualifications for conference and leadership should be placed upon such committees.

The committee further

RECOMMENDS, that every chairman of the County Public Relations Committees attend the regional conferences of the State Committee, so that he may be posted as to the activities of other regional groups and be the better informed of their actions on problems similar to those of his own community.

I move its adoption.

Motion seconded and carried.

21. PHYSICIANS ON LAY PUBLIC HEALTH ORGANIZATIONS

Dr. Warren: The committee agrees with the report that well qualified physicians especially interested in lay problems having a public health bearing should, if taken into the Board of such organizations, spend enough time and thought to be leaders in its activities and to guide such organization into workable programs.

Lastly, the report deals with the cooperation of medicine with all public relations medical activities. It recognizes the difficulties ahead, but it believes that with a spirit of cooperation and understanding all difficulties can be smoothed out and medicine advanced slowly but surely to the leadership of all public health relation problems—which it must assume if the health of the people of the State of New York is best conserved and the practice of medicine is to be maintained as a worthy and progressive profession.

I move the adoption of the Report as a whole.

Motion seconded and carried.

22. DISPENSARY ABUSES

Dr. Colie, Chairman, Committee on New Business A. The resolution of Dr. Simon Frucht of Kings County as redrafted is recommended. (Par. 11.)

"WHEREAS, the economic condition of the Medical Profession, especially in the Metropolitan District, is in bad straits, to which dispensary abuses largely contribute; be it therefore

RESOLVED, that it is the opinion of the Medical Society of the State of New York that all clinics should admit and treat free of charge patients as are indigent; and be it further

RESOLVED, that no patient should be treated in said

dispensary or clinic who can afford to pay for treatment.

I move that the recommendation be adopted.

Motion seconded and carried.

The Speaker: Are there any other committees ready to report?

23. HISTORY OF MEDICINE IN NEW YORK STATE

Dr. Fiske of Kings: "The Reference Committee, on New Business B, after due consideration of the Resolution of the County of Monroe relative to the preservation of the History of Medicine, recommends the adoption of this resolution; and the appointment of a committee to undertake such study. The committee should be instructed to further the preparation of the History of Medicine of the State of New York. (Par. 13.)

"It is further recommended that the said committee avail themselves of the already published History of Medicine in New York State up to about twenty years ago."

I move the adoption of this resolution and the appointment of the committee as named.

Motion seconded and carried.

The Speaker: Are there any other committees ready to report?

24. NEW SCIENTIFIC SECTIONS

The Secretary: Mr. Speaker, I have received applications for the formation of three new sections; a section on radiology, a section on gastroenterology, and a section on plastic and reconstructive surgery. I move these applications be referred to the Council.

Motion seconded and carried.

The Speaker: Is there any other committee ready to report?

25. REVISION OF CONSTITUTION AND BY-LAWS

(Committee report in Journal, May 1, page 531)

Dr. Heyd: May I suggest that in the presentation of the revisions of the Constitution and By-Laws, since there are but few controversial matters, that we adopt the procedure that if there is no objection each individual section be not put to a formal vote. Where an objection is entertained then that section shall be put to a formal vote and at the conclusion a formal vote be taken to ratify the revisions of the Constitution and By-Laws as a whole. I move the adoption of this procedure.

Motion was seconded and carried.

Dr. Heyd: Constitution. Article 1. Name and purposes. Add in the 9th line following the word "medical" "and public health" and also at the end of the paragraph following the word "medicine." In the last line strike out the word "great." The paragraph will then read:

"The name and title of the Society shall be The Medical Society of the State of New York. The purposes of the Society shall be to federate and bring into one compact organization the medical profession of the State of New York; to extend medical knowledge and advance medical science; to elevate the standard of medical education; to secure the enactment and enforcement of just medical and public health laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members, and to protect them against imposition; and to enlighten and direct public opinion in regard to the problems of medicine and public health."

Articles II, III and IV remain the same. Article V. Officers. In the 7th line following the word "thereof" place a period, striking out the word "and." Also strike out lines 8, 9, 10, 11 and half of 12. The 12th line to be changed to read as follows:

"The Officers shall take office at the termination of the annual meeting at which they were elected with

the exception of the Councilors elected by the District Branches who shall take office at the termination of the next annual meeting of the State Society."

The Speaker: If anyone has any objections to any of the amendments, please record them as they are read, as the time to make them is as each Article and Section is presented.

Dr. Heyd: "Article VI. Trustees. Strike out of the 2nd line the words "elected as such Trustees." Strike out the second paragraph. The Article will then read:

"The Board of Trustees shall consist of five members. The President, the Secretary and the Treasurer shall sit with the Board of Trustees with voice but without vote."

Article VII. Censors. Strike out the first 2 paragraphs and insert the following:

"The Board of Censors shall consist of the President, the Secretary and the eight District Councilors.

"Five Censors shall constitute a quorum.

"The President and the Secretary of the Society shall sit as Chairman and Secretary respectively of the Board of Censors but without vote except that in case of a tie the President, sitting as Chairman of the Board of Censors, shall cast the deciding vote.

"The 3rd paragraph now becomes the 4th paragraph and remains the same."

Dr. Schiff of Clinton: Merely as a point of information in regard to censors, what change, if any, does this amendment affect? Is it merely clarification of the wording?

Dr. Heyd: Most of these revisions are for the purpose of clarity. Where there is a fundamental departure I will indicate the difference.

Article VIII. Meetings. In the 1st line strike out the words "and the Intermediate Stated." In the 2nd line strike out the letter "s" of the word "Meetings" and change the word "or" to the word "and." The paragraph will then read as follows:

"The Annual Meeting of the Society and of the House of Delegates shall be held at the time and place designated by the House of Delegates."

In the 4th line, strike out the last word "The," also strike out the 5th, 6th and 7th lines and insert after the words "House of Delegates," the following:

"When the House of Delegates is not in session the Council shall exercise all the rights and duties of the House of Delegates that are not inconsistent with the Constitution and By-Laws of the Society."

Article IX. Funds. In the 7th line make a new paragraph beginning with the words "No funds of the." In the 11th line strike out the letters "s" in the word "committees" and in the 12th line strike out the letter "s" in the word "members"; in the 12th line following the first word "of" insert the word "any"; in the following word "Committees" strike out the letter "s"; in the 14th line following the word "been" insert the words "recommended by the Executive Committee and." The second paragraph of Article IX will then read as follows:

"No funds of the Society shall be expended for any purpose, except by the authority of a resolution of the Board of Trustees, nor shall any indebtedness be incurred by any officer, committee or member of any committee of the Society as a charge against the Society until the same shall have been recommended by the Executive Committee and approved by the Board of Trustees."

Article X. Referendum. In the 1st line strike out the words "annual or stated"; in the second line strike out the words "Society or of the"; in the 7th line strike out the words "or the Council"; in the 10th line following the word "after" add the word "the" and in the same line following the word "mailing" add the word "of"; in the 12th line following the words "majority of" strike out the rest of the line and also 13th, 14th

and 15th lines Article X will then read as follows with new additional wording at the end

"At any meeting of the House of Delegates a majority of the members present may order a referendum on any question consistent with the Constitution and By-Laws and in accordance with such regulations respecting the submission of the question as the House of Delegates may prescribe. The members shall vote thereon by mail. The poll shall be closed at the expiration of fifteen days after the mailing of the question, and if the members voting shall comprise a majority of all the active members of the Society, a majority of such vote shall determine the question and be binding on the Society and the House of Delegates. The Council may, in a similar manner order a referendum to the House of Delegates."

This is a change and permits for easier referendum by mail than under the old constitution

Article XI District Branches Sec 1 7th line combine "Dutchess-Putnam"

Article XII. County Societies In the 1st line change the word "and" to "or" the balance of the first two paragraphs remaining the same Add as a third paragraph the following

"If there should be an insufficient number of physicians and surgeons in any of the counties of this State to form themselves into a component county medical society, such physicians may become members of the component county medical society of an adjoining county when eligible by the Constitution and By-Laws of such county society."

Article XIII Amendments Second paragraph, 4th line following the word "published" insert the words "at least," in the same line following the word "once" add the words "and at least one month," the paragraph will then read as follows

"Notice of the proposed amendment shall be given at a previous annual meeting of the House of Delegates, and before the same can be acted upon, it shall be published at least once and at least one month before the annual meeting in the official publication of the Society"

Third paragraph, 1st line following the word "the" insert the words "members of the House of" and change the first letter of the following word "delegates" to a capital "D" The paragraph will then read as follows

"A two thirds vote of the members of the House of Delegates present and voting shall be necessary for adoption"

I move you that the revised constitution be adopted by the House of Delegates

Motion seconded and carried

Dr Heyd By Laws Chapter 1 Membership

Sec 1 remains the same Strike out Sec 2 and insert the following

Sec. 2 Any member expelled from his component County Society or suspended from its rights and privileges shall likewise be expelled or suspended for the same period from this Society. The right of appeal to this Society shall not be impaired nor shall such appeal prevent the carrying out of the judgment of the County Society pending such appeal. Members not in good standing or ceasing to be members of their county societies shall ipso facto have the same status in this Society"

Strike out the first sentence including four lines of Sec 3 and insert the following

A member in good standing, in his component county medical society reaching seventy years of age may ipso facto have the privilege of applying for retired membership in the State Society"

The balance of Sec 3 remains the same beginning with All such applications, etc"

In Sec 4, 10th line insert the words "House of" be-

fore the word "delegates" also changing the letter "d" to a capital "D."

Sec 5 remains the same

Chapter II House of Delegates Sec 1 5th line strike out "(d) Trustees" and following the word "and" in this same line change "(e)" to "(d)"

Sec. 2, New Section will read as follows

"Sec 2 A delegate to this Society shall not be considered in good standing or entitled to vote in the House of Delegates if the component county medical society by which he was elected is in default of the payment of any dues or assessments imposed by the House of Delegates, or if such component county medical society shall at the time be under sentence of suspension imposed by the House of Delegates, or if such delegate is not in good standing in this Society, or in the component county medical society to which he belongs. The term of a delegate elected by a county medical society shall begin at the first annual meeting of the House of Delegates subsequent to his election"

Section 2 now becomes Section 3

Insert new Section 4 as follows

"A quorum shall consist of fifty duly elected delegates"

Dr Bedell I would like, sir, to have an explanation on the preceding part where it says "a delegate to this Society shall not be considered in good standing or entitled to vote in the House of Delegates if the component county medical society by which he was elected is in default of the payment of any dues or assessment imposed by the House of Delegates—" I would like information as to what that means

The Speaker Will you answer that, Mr Chairman?

The Secretary I think that can be clarified by striking out the word "any" What your committee meant is, if the component county society is in default of dues or assessments

The Speaker Does that explain the matter to you?

Dr Bedell No, sir, not quite I don't quite understand that If, for instance, my county has a member who has not paid his dues, does that constitute reason for not seating a delegate from that county?

Dr Heyd It only means if the component medical society has not paid the dues, not the individual member

The Secretary If Albany County had not forwarded the dues of Albany County, of course, they are in default Their delegates cannot be seated

Dr Bedell That is just the question I bring before the House. If there is one member in the county society who has not paid his dues that delegate cannot be seated?

The Secretary I don't think that is what it says

Dr Rooney of Albany As a member of the committee I think that it is my duty to explain that it relates to the dues to the state society. It has nothing to do with the relationship of the dues of individual members of that county society to the county society. That, I think, is the intention of the amendment and it seems to me to be quite clear. However, if it does not—is not clear to the society, Dr Dougherty's suggestion of eliminating the word "any" may perfectly well care for any objection that might arise from the House. I do not feel that the word "any" is necessary, but, on the other hand, I want to determine the opinion of the House as a member of the committee. I will move as a substitute the word "any" be deleted from this sub paragraph by the By laws

The Speaker Gentlemen there is a motion on the floor that fifty delegates, constitute a quorum. You have been discussing an entirely different section. Now if the chairman will withdraw that motion we will go back and I will accept the motion of Dr Rooney

Motion relating to number constituting a quorum withdrawn by the chairman

The Speaker The motion fixing the quorum is withdrawn

Now, Dr. Rooney moves that the word "any" be deleted from that portion of the previous section which was read relative to county societies in arrears to the state society.

Motion seconded.

Dr. Sondern of New York: Mr. Speaker, it appears to me from the wording to infer that the county society pays dues to the state society. The county societies pay only the members' dues and, so, it is a little ambiguous, I think, to speak of the county society being in arrears. The county is only in arrears for the dues it has not received from certain members, because the county pays no dues as a society.

The Secretary: Mr. Chairman, the county society, naturally, as Dr. Sondern knows well enough, can be in arrears for assessments. They are not dues, strictly speaking, although assessments are dues when they are an annual assessment. The assessments are collected from the individual members by the county society and forwarded within a specified time to the treasurer of the State Society.

Now, a county society can be in arrears and we have had them in arrears. We have had county societies that have not forwarded their assessments to the State Society and the idea is that such county society is not in good financial standing with the State Society and cannot be represented in its House of Delegates.

The whole matter is more or less—I won't say a quibble, but is rather meticulous. We all know what it means. It merely means that your county must be financially sound with your State Society or you cannot have a representation in this House. Take it any way you please that gives you that understanding and you will strike exactly what the committee means. I also was a member of this committee.

Dr. Schiff of Clinton: It seems to me that this entire phrase "—in default of the payment of any dues or assessments imposed by the House of Delegates—" is unnecessary unless there is some definite provision in the constitution which decides exactly what constitutes a default.

If Dr. Rooney will change his motion to delete the word "any" and delete the entire phrase instead so that it reads "if the component county society by which he was elected shall at any time be under sentence of suspension imposed by the House of Delegates," I think it will clarify the matter.

Dr. Rooney: I accept the amendment.

The Speaker: The reason for this paragraph being inserted is this: there have been instances where every member of a component county society has paid his dues and that money had not been remitted to the State Society by the Treasurer. That is the reason why this clause was inserted.

Dr. Aranow of the Bronx: I move it be referred back for a clearer phrasing.

The Speaker: Do you move it be re-referred to the committee?

Dr. Aranow: Yes.

Motion seconded and carried.

Dr. Heyd: I move you that Section 4 be approved, "a quorum shall consist of fifty duly elected delegates."

Motion seconded and carried.

Dr. Heyd: In renumbered Sections 5, 6, and 7 strike out the word "It" at the beginning of each Section and in each Section insert the words "The House of Delegates."

In Sec. 8 (formerly Sec. 7), No. 8, insert the words "The Board of" following the word "of" making it read as follows:

8. Report of "The Board of Trustees."

Chapter III

Election of Officers

Sec. 1, 1st line strike out the comma following the word "officers" and strike out the word "Trustees" in

the same line. In the 11th line of Sec. 1 strike out the word "Trustees."

Sec. 2, insert New Section as follows:

"The Officers, except the Councilors and Trustees, shall be elected for one year or until their successors have been duly chosen.

"One Trustee shall be elected annually for a period of five years and in the event of a vacancy a Trustee shall be elected for the unexpired term."

Old Sections 2, 3, 4, and 5 remain the same with the exception of renumbering.

Strike out Sec. 6 entirely.

Chapter IV

Council

Sec. 1, strike out lines 3, 4, and 5. In the 2nd line following the word "Delegates" place a period and add the new sentence as follows:

"The members of the Council shall hold office until their successors are duly elected and qualified."

Sec. 2 remains the same.

Strike out old Sec. 3 and insert new Sec. 3 as follows:

"Sec. 3. A quorum shall consist of eleven members."

Sec. 4 and Sec. 5 remain the same.

Sec. 6 strike out entirely.

Sec. 7 now becomes Sec. 6 and reading matter remains the same.

Chapter V

Executive Committee

Sec. 1, in the 4th line following the word "President," insert the words "the President-elect."

Sec. 1, in the 15th line following the word "immediately," strike out the words "and elect a Chairman and a Vice-Chairman" and insert the words "under the Chairmanship of the President of the Society and proceed to elect a Vice-Chairman." Sec. 1 will then read as follows:

"Sec. 1. At its first regular meeting the Council shall choose by a majority vote five members of the Council, three of whom shall be councilors, who together with the President, the President-elect, the Secretary, the Treasurer and the immediate Past President shall constitute the Executive Committee. Candidates for election to the Executive Committee shall be nominated by the President, but other candidates may be nominated by any member of the Council. The Executive Committee shall hold office until the following annual meeting of the Council or until their successors shall be duly chosen. The Executive Committee shall, when elected, organize immediately under the Chairmanship of the President of the Society and proceed to elect a Vice-Chairman. The Executive Committee shall hold regular meetings at times and places that shall be fixed by the Chairman and any two members of the Executive Committee may require the Chairman thereof to call a meeting for such time and place as shall be designated by them in writing, of which the members shall have at least two days' notice. Five members shall constitute a quorum. It shall prepare a budget to be acted upon by the Board of Trustees."

Sec. 2 remains the same.

Sec. 3, in the 3rd line following the word "appoint" insert the words "a Publication Committee." In the 4th line the word "editor" the letter "e" to be changed to a capital letter "E."

Sec. 3, in the 7th line following the word "society" insert the following sentences:

"The Standing and Special Committees of the Society shall report to the Executive Committee and shall be subject to the jurisdiction of the Council or the Executive Committee when the House of Delegates is not in session. No Standing or Special Committee shall inaugurate or initiate any policy or commit the Society

to any policy unless the same has been expressly approved by the House of Delegates, and, or the Council and, or the Executive Committee."

The balance of Sec. 3 remains the same.

Sec. 4, in the 3rd line strike out the word "President" and insert the word "Chairman."

Sec. 5, in the 4th and 5th lines strike out the words "not repugnant to" and insert the words "in conformity with."

Chapter VI

Trustees

Sec. 1, in the 5th line following the word "meetings" insert the sentence "The Board of Trustees shall meet at least bi-monthly."

Sec. 2, in the 3rd line strike out the word "manage" and insert the word "supervise."

Secs. 3, 4, and 5 remain the same.

Chapter VII

Duties of Officers

President

Sec. 1, in the 3rd line following the word "Censors" insert the sentence "He shall be Chairman of the Executive Committee."

At the end of Sec. 1 following the words "the Council shall require" add the sentence:

"He shall not accept any civic or public duties without the advice and consent of the Council."

Sec. 2 remains the same.

President-Elect

Sec. 3, in the 3rd line following the word "Council" strike out the words "but shall attend the meetings of the" and insert the words "and the." In the 4th line strike out the words "without voice or vote."

At the end of Sec. 3 insert the sentence:

"He shall not accept any civic or public duties without the advice and consent of the Council."

Sec. 4 and Sec. 5 remain the same.

Secretary

Sec. 6, 6th line from the bottom strike out the words "The amount of his salary shall be fixed by the Board of Trustees."

Sec. 7 remains the same.

Treasurer

Sec. 8, strike out the last two lines following the word "Trustees": "His salary shall be fixed by the Board of Trustees."

Assistant Treasurer

Sec. 9, 6th line, following the words "shall be elected" insert the words "who, at the expense of the Society, shall give a bond for the faithful performance of his duties, which shall be approved by the Board of Trustees as to the amount, form and surety." The balance of the section remains the same.

Sec. 10 remains the same.

Chapter VIII

Traveling Expenses

Sec. 1, 1st paragraph remains the same. Second paragraph, in the 2nd line, following the word "railroad" insert the words "and Pullman." In the 4th line following the word "President-Elect" insert the words "and all other Officers of the Society." In the 5th line strike out the words "attending committee meetings" and insert the words "engaged upon official business." In the 25th line strike out "of \$250.00" and insert the words

"not to exceed \$200.00." The second paragraph of Chapter VIII will then read as follows:

"The President and the Secretary shall be allowed intrastate railroad and Pullman fares and a per diem for maintenance not to exceed fifteen dollars. The President-Elect, and all other Officers of the Society, shall be allowed traveling expenses when engaged upon official business. The members of the Board of Trustees of the Council, and of the Executive Committee shall be allowed travelling expenses to and from the places of meeting of these respective bodies. In all cases where no appropriation has been allowed a Standing or Special Committee, traveling expenses shall be allowed the individual members of the committee. Proper vouchers must be filed with the Secretary and approved by the Board of Trustees before any such allowance may be made. The Delegates to the American Medical Association who have attended each session of the House of Delegates of that Association and who shall have filed with the Secretary evidence of such attendance shall be allowed the actual cost of railroad transportation and Pullman accommodations to the place of meeting and return. The vouchers of such expense shall be approved by the Board of Trustees before payment. Each District Branch shall be entitled to receive a sum not to exceed \$200.00, exclusive of the work done by the Secretary regarding notices, programs, etc., to defray the expenses of holding the annual meeting of such District Branch, provided a proper statement of such expense shall have been presented to the Secretary and approved by the Trustees. All bills, claims or vouchers herein provided for shall be filed within thirty days after the date of the incurring of such expense. This time may be extended for any cause by the Board of Trustees and such extension shall not exceed ninety days."

Chapter IX

Censors

Sec. 1 and Sec. 2 remain the same. Sec. 3 remains the same with the addition of the following paragraph which is new matter:

"If the appellant desires to be present in person or by counsel at the hearing of said appeal, the notice of appeal must so state. In that event the appellant must file with the notice of appeal a bond in the sum of \$500.00 to cover the costs of said appeal. If the appellant fails to appear in person or by counsel upon the hearing of said appeal, he shall forfeit to the Medical Society of the State of New York such share of said bond as represents necessary expenditures incident to convening the Board of Censors for the hearing of said appeal."

Sec. 4, Sec. 5, and Sec. 6 remain the same. Sec. 7 remains the same with the addition of the following paragraph which is new matter:

"The appellant must also state if he desires to be present in person or by counsel."

Sec. 8 and Sec. 9 remain the same.

Chapter X

Committees

Sec. 1, 4th line following the words "the Council and" insert the words, "or the Executive Committee and, or." The paragraph will then read as follows:

"Sec. 1. The Committees shall be classified as Standing, Reference and Special Committees, Standing and Special Committees shall report to the Council, and, or the Executive Committee and, or the House of Delegates."

Sec. 1, strike out the 12th line, "Committee on Medical Research."

The committee has heretofore been a Standing Committee—the reason for this is that with the increasing possibilities of antivivisection legislation it may be necessary to create a much larger committee than specified

in the old By-Laws and it may be necessary to enlist as liaison members people who are not members of Medical Societies, such as presidents of colleges, and so forth, and it would be easier for your Executive Committee to handle that particular committee by having it a special committee rather than have it a provision in the By-Laws.

Sec. 2 remains the same.

Sec. 3, 2nd line strike out the word "three" and insert the word "five."

Sec. 3 will then read as follows:

"Sec. 3. The Committee on Legislation shall consist of five members including the Chairman."

Sec. 4, strike out entirely and insert the following:

"Sec. 4. The Committee on Public Health and Medical Education shall consist of nine members including the Chairman. It shall be the function of this Committee to investigate, study and report to the House of Delegates on matters of public health, preventive medicine, and medical education. It shall gather facts regarding the activities of health organizations, both official and non-official, and report to the House of Delegates regarding the same when it so deems necessary. It shall be the duty of this committee to advise the House of Delegates as to plans for post-graduate education for the general profession and shall be in charge of carrying out such plans as are approved by the House of Delegates. It shall cooperate with similar committees of component county societies in carrying out recommendations of the House of Delegates dealing with public health and medical education."

Sec. 5, strike out entirely and insert the following paragraph:

"Sec. 5. The Committee on Medical Economics shall consist of nine members including the Chairman. The function of this committee shall be to conduct investigations, to gather facts, to make studies or surveys on the general subject of the relationship of the physician individually and collectively with the public. It shall receive matters of general public information and study them both in regard to their effect upon the practice of medicine in private or institutional work. It shall concern itself with the financial aspects of the practice of medicine, throughout the State of New York, especially insofar as it affects the efficiency of medical service to the public. It shall concern itself with all economic phases regarding the practice of medicine in hospitals, private or public clinics, commercial organizations and other institutions established for diagnosis and treatment."

Dr. Goodrich of Kings: May I suggest that the number of members of the Committee on Medical Economics be changed from "nine" to "ten." This is for a practical reason. When you have a committee of ten, you can have five sub-committees of two and those sub-committees of two can be constantly working on separate problems from the other members of the committee. We have found that sub-committees of two are of great practical value. I therefore move that the membership of the committee be changed to "ten" members including the Chairman.

Motion was seconded.

Dr. Heyd: I move that Section 5 be approved as amended.

Motion seconded and carried.

Dr. Heyd: In Sec. 6 there is an omission from the report that you are reading. That is, the Committee on Public Relations shall consist of seven members instead of five. In view of the fact that this is before you for the first time, I would like to move that Sec. 6 be approved to read "The Committee on Public Relations shall consist of seven members."

The Secretary: I think it should read seven members including the Chairman.

Dr. Heyd: I move that the Committee on Public Rela-

tions consist of seven members including the Chairman. Motion seconded and carried.

Sec. 7 remains the same.

Sec. 8, strike out entirely.

Sec. 9, 1st line, the word "Chairman" shall be changed to "Chairmen."

Sec. 9 now becomes Sec. 8.

Sec. 10. *Reference Committees*. Strike out entirely and insert the following paragraph, which is now known as Sec. 9.

"Sec. 9. At least one month before the meeting of the House of Delegates the Speaker shall appoint such Reference Committees as he shall deem expedient for the purposes of the meeting. Immediately after the organization of the House of Delegates he shall formally announce the appointments to the committees. Only members of the House of Delegates are eligible for appointment on the Reference Committees. Such committees shall consist of five members, three members constituting a quorum, and shall serve during the meeting at which they are appointed."

Sec. 11, strike out entirely and insert the following paragraph, which is now known as Sec. 10.

"Sec. 10. Reports of Officers and Standing Committees shall be printed at least one month before the meeting of the House of Delegates and sent to the members of the Reference Committee appointed according to Sec. 9, for their preliminary consideration. All recommendations, resolutions, measures and propositions presented to the House of Delegates and which have been duly seconded shall be referred by the Speaker to the appropriate Reference Committee."

Secs. 12, 13, 14, and 15 remain the same with the exception of renumbering.

Chapter XI

Meetings

Sec. 1, 1st line, strike out the word "regular." In the 8th line in the word "Affidavit" change the capital "A" to a small "a."

Sec. 2, 2d line, strike out the word "meeting" and insert the word "or" following the word "annual." In the 2nd line following the word "special" strike out the words "or immediate stated." In the 2nd and 3rd lines change the word "meetings" to the word "meeting." Sec. 2 will then read as follows:

"Sec. 2. Each member in attendance at the annual or special meeting of the Society shall enter his name and the name of the component county medical society to which he belongs in a register to be kept by the Secretary of the Society for that purpose. No member shall take part in any of the proceedings of such meeting until he shall have complied therewith."

Secs. 3, 4, and 5 remain the same.

Sec. 6, 3rd line, following the word "delegates" insert the words "or at request of the Council." Sec. 6 will then read as follows:

"Sec. 6. Special meetings of the House of Delegates shall be called by the Speaker upon the request, in writing, of fifty delegates, or at request of the Council; and in case of the failure, inability or refusal of the Speaker to act, such meetings may be called by a notice thereof subscribed by fifty delegates."

Chapters XII and XIII

remain the same.

Chapter XIV

Component County Societies

Sec. 1 remains the same with the addition of the two following paragraphs, which are new matter:

"When a member in good standing ceases to practice in the State of New York he shall ipso facto cease to be a member of the Society and of his component medi-

cal society. His status shall be deemed that of a resigned member and all rights and title to any share in the privileges and property of the Society, the District Branch, or County Society, shall be deemed to have been forfeited by such action

"The dues of any member of the Medical Society of the State of New York may be remitted for the current year on account of illness when the request is made by the member's component county medical society"

Dr Schiff of Clinton With the privilege of referring to Sec. 1 of this chapter, when a member in good standing ceases to practice in the State of New York he shall ipso facto cease to be a member of the Society," strikes me as not being quite fair. In some places there are some very good members of this Society who may cease to practice although residing still in the State. While I believe primarily this was to cover or intended to cover physicians moving out of the State, I believe in all fairness they should be allowed to continue for the balance of the year for which they paid their dues, allowing them time for readjustment and to become members of some other State society. For that reason I would like to move to refer that Section back to the committee.

Motion seconded and carried

Dr Bedell of Albany May I ask, sir, that Section 3, Chapter 12, be re-referred to the committee. They have made no recommendations or change. The change I would like to suggest—it reads the election of officers of sections shall be the first order of business on the afternoon session of the second day of each Annual Meeting. I suggest it be the first order of business of the morning session. We have to adjourn and then reconvene so as to fulfill the requirements of the By-Laws.

The Speaker I will refer that back.

Dr Heyd Sec. 2 strike out entirely

Sec. 3 now becomes Sec. 2 and remains the same

Sec. 4 and Sec. 5 are combined into one Section and are now known as Sec. 3. In the 13th line of what is now known as Sec. 3 following the words "said society" insert the word "and"

Sec. 3 now reads as follows

"Sec. 3 The Secretary of each component county medical society shall keep a roster of its members and of all other registered physicians of such county in which shall appear the full name of each of said physicians, the date of his admission to such society his residence and the date when his license to practice medicine in this State was granted. He shall note any changes in said roster by reason of removal, death, revocation of license or other disqualification.

He shall forward said roster and information, together with the names and places of residence of each of the officers of said society and the names and residences of each delegate to the House of Delegates of said society to the Secretary of this Society thirty days before the date of its annual meeting"

Sec. 6 and Sec. 7 remain the same with the exception of renumbering

Dr Thomson of Kings Section 3 Chapter XIV, "The Secretary of each component county medical society shall keep a roster of its members and of all other registered physicians of such county in which shall appear the full name of each of said physicians the date of his admission to such society—" does not read very clearly and I doubt very much whether very many county medical societies do keep a roster of all registered physicians. I would suggest it be referred back.

The Speaker I will so order it

Chapter XV

Miscellaneous

Secs 1, 2, 3 and 4 remain the same

Sec. 5 1st line following the word "Officers" insert the word "and," and remove the comma in the first line

following the word "Officers" and in the second line following the word "Society"

Sec. 6 remains the same

Chapter XVI

remains the same *

Chapter XVII

Amendments

Secs 1 and 2 remain the same

Sec. 3, 2nd line, following the word "the" insert the words "House of" and change the letter "d" of the following word "delegates" to a capital "D"

Sec. 3 will now read as follows

Sec. 3 The affirmative vote of two thirds of the House of Delegates present and voting shall be necessary for adoption"

Sec. 4 remains the same

With the exception of those paragraphs that have been referred back for further study I move that the revision of the Constitution and By-Laws be approved by the House of Delegates (1 or action par 35)

Motion seconded and carried

26 REFERENCE COMMITTEE ON THE REPORT OF THE PRESIDENT

(Journal, May 1, page 515)

Dr Winslow of Monroe Dr William D Johnson has devoted the major portion of his time during the past two years to the office of President elect and President of the Medical Society of the State of New York. This committee approves of that portion of the report which states, that the solution of our internal problem has left us free to formulate a constructive policy for ourselves, and to give aid in solving the general problems of health and welfare of a public nature.

I move the adoption of this resolution.

Motion seconded and carried

Dr Winslow This committee calls to the attention of the House of Delegates that portion of the President's report referring to the increase in the provision of the budget for the Committee on Scientific Work.

I move the adoption of this resolution

Motion seconded and carried

Dr Winslow This committee appreciates the gravity of the situation embraced in that part of the President's report referring to the external relations of the Medical Society of the State of New York and this committee recommends that the matter be referred to the Public Relations Committee for further study.

I move its adoption

Motion seconded and carried

Dr Winslow This committee views with commendation the paragraph in the report referring to the valuable work of the chairman of the Legislative Committee, Dr. Aranow, and the Executive Officer, Dr. Lawrence. Both the chairman of the Legislative Committee and the Executive Officer constantly render invaluable service to the membership of this Society, and this committee here by acknowledges the value of these services.

I move its adoption

Motion seconded and carried

Dr Winslow The committee feels that the curtailment and concentration of committee work within the Society is worthy of thought and recommends that this matter be referred to the incoming administration.

I move its adoption

Motion seconded and carried

Dr Winslow Within recent years the pernicious effect of the power of wealth on the ideals of medicine has been a matter of debate within this Society. With constant study and observation it is the hope of this committee that a proper solution of this problem will be achieved.

I move its adoption.

Motion seconded and carried.

Dr. Winslow: The fact that the Committee on Public Relations of the Medical Society of the State of New York has detailed a member of its committee to address the graduating class of each medical college in New York State is evidence of the interest of the medical profession in the welfare and education of the undergraduate medical students, and this committee approves the efforts of this committee in this direction.

I move its adoption.

Motion seconded and carried.

Dr. Winslow: This committee approves the consideration of outstanding medical problems by joint meetings of certain standing committees of this Society.

I move its adoption.

Motion seconded and carried.

Dr. Winslow: This committee recommends that the Medical Society of the State of New York defines the proper limits of the sphere of public health. It furthermore recommends that the treatment of private diseases, and the management of general hospitals, supported by public funds, be supervised by the Medical Society of the State of New York, or its component county societies. This committee again emphasizes the importance of the study of this problem by a joint committee of the Society. The problem of the State aid in general should be referred to the Committees on Public Relations and Medical Economics.

I move its adoption.

Motion seconded and carried.

Dr. Winslow: In summary, this committee recognizes that the efforts and judgment of Dr. William D. Johnson have furnished a distinguished contribution to the welfare of the Medical Society of the State of New York, and therefore, we extend to him a vote of appreciation and gratitude for services rendered to this Society, as President-elect and President.

For holy offices I have a time; a time
To think upon the part of business, which
I bear i' the state; and nature does require
Her times of preservation, which, perforce,
I, her frail son, amongst my brethren mortal,
Must give my 'tendance to.

I move the adoption of the resolution.

Motion seconded and carried.

Dr. Winslow: I move the adoption of this report as a whole.

Motion seconded and carried.

The Speaker: Are there any other committees ready to report?

Report of the Reference Committee on reports of Secretary, Council and Councilors.

27. SECRETARY'S REPORT

(Journal, May 1, page 517)

Dr. Betts of Westchester: Your Reference Committee on the reports of the Secretary, Council and Councilors, reports as follows:

We wish to compliment the Secretary, Dr. Dougherty, on his years of devotion and services rendered to the Society, particularly in these trying times.

We recommend the approval and adoption of his report and the recommendations therein contained, with special reference to the acquisition of an additional room for the Society's offices.

We recommend the adoption of the suggestion by the Secretary that the Special Committee on Periodic Health Examination and the Special Committee on Physical Therapy be abolished and that their work be made a part of that of the Committee on Public Health and Medical Education, and that further consolidation of

other special committees be recommended to the Executive Committee for study and their recommendation.

We recommend that the chairman of the Insurance Committee be authorized to continue his talks before the District Branch meetings.

We recommend that the conferences of the County Secretaries be continued. We commend the work of Dr. Lawrence, our Executive Officer. We feel that he deserves an expression of appreciation on the part of the House of Delegates for his extremely vigilant watch on the legislature, and his tactful handling of many difficult situations.

I move that the report be adopted.

Motion seconded and carried.

28. REPORT OF THE COUNCIL

(Journal, May 1, page 519)

Dr. Betts: We recommend the approval and adoption of the report of the Council as a whole, and wish to especially stress that portion which deals with the publication of the NEW YORK STATE JOURNAL OF MEDICINE. This committee feels that the Journal is of real value to the individual members of the Society. Not only does it keep the medical man in touch with activities in different parts of the State and of adjacent states, but the scientific material published therein deals with medical topics of approved value.

I move its adoption.

Motion seconded and carried.

29. REPORT ON DISTRICT BRANCHES

(Journal, May 1, page 543)

Dr. Betts: We have read with interest the reports of the Presidents of each District Branch, and note the increasing success of efforts in each district. We wish to compliment the respective branches on the excellent programs offered at their annual meetings.

I move its adoption.

Motion seconded and carried.

I move the adoption of the report as a whole.

Motion seconded and carried.

30. INSURANCE RATES

The Speaker: Members of the House of Delegates, I have a rather important announcement to make at this time.

As a result of negotiations which have just been completed by our Indemnity Representative with the Aetna Life Insurance Company, a change has been worked out in our operating agreement with the Company which will permit a decrease in malpractice insurance rates under the Group Plan of the Society.

The rate for the minimum policy will be reduced from \$32 to \$30, with a proportionate reduction in the rates for higher limits. This reduction will apply to both general and x-ray therapy policies, and will become effective on all new and renewal policies dated on or after July 1st of this year.

31. REPORT OF THE LEGAL COUNSEL

(Journal, April 15, page 455)

Dr. Hambrook of Rensselaer: The Reference Committee on the report of the legal counsel begs to submit the following:

We are conscious of the increasing duties that confront the counsel of the State Medical Society and appreciate the necessity of having in that office one who has the interest of the profession at heart and the ability to satisfactorily carry on the work assigned to him. We are especially fortunate in this respect in having as our counsel Mr. Brosnan, who has been intimately associated with the State Medical Society for over ten years. The perplexing problems of preparing a case for trial

and the presentation of the evidence to a lay jury requires unusual ability and an intimate knowledge of the relationship between the medical profession and the public.

The book, *Court and Doctors*, by Lloyd Paul Stryker has received universal approval from the medical profession as well as the members of the Bar. This book is so filled with valuable information that every doctor should procure one. It is especially useful to men who are appearing as expert witnesses in the courts. The committee wishes to thank Mr Stryker for this most valuable addition to our library on the subject of malpractice and legal procedure.

The editorials during the year have been of high standard, very instructive, and are attracting increasing interest on the part of Journal readers. The committee wishes to take this opportunity to thank these authors for their contributions to medical literature and their effort to establish a better understanding of the physician's position in the community and the economic problems confronting the medical profession.

The committee wishes to emphasize that portion of the report dealing with the *Group Plan of Insurance*, more malpractice actions are being instituted each year against members of the profession and it is surprising that any member of the medical profession would leave himself liable and without the protection afforded by some form of insurance. The chairman of the Insurance Committee, Dr John A. Card, has done splendid work, both in his efforts to keep the amount of the premium at a minimum and to educate the members of the Medical Society to the great need of being protected against malpractice actions.

During the year 1931-32, 292 suits were instituted against members of the State Medical Society, of this number 227 were disposed of. It will be noted that although 68 more cases were disposed of this year than last, the number of settlements have remained the same and among these only 3 cases resulted in judgments for the plaintiff and one of these is now up for appeal. Of 11 appeals argued and in which decisions have been rendered in the past year, 10 resulted in judgments for the defendants. Four more appeal cases were argued than during the preceding year. This brief summary indicates the amount of work being done by our legal counsel and the efficient manner in which it is being accomplished.

In conclusion the committee wishes this year again to encourage through its delegates, members of the County Medical Societies to take up the Group Form of Insurance for their own protection. Under the able leadership of our counsel the medical profession can be assured of the best legal advice possible as Mr Brosnan and his associate, Mr Clearwater, are in every way worthy of our confidence.

I move the adoption of this report
Motion was seconded and carried

32 REPORT OF THE COMMITTEES ON SCIENTIFIC WORK AND ARRANGEMENTS

(Journal, May 1, pages 525 and 530)

Dr Maslon of Warren We, the members of this committee have carefully considered the reports submitted by the two committees, and have only words of highest commendation for their efforts.

We feel that the local society should be congratulated upon the arrangements made by them, for the deliberations and entertainment of the members of the House of Delegates and the members of the Medical Society of the State of New York.

We especially commend and congratulate the Committee on Scientific Work for the establishing of the clinics in the local hospitals and the wonderful exhibits presented at this session.

The committee feels that these scientific exhibits arranged by the various local medical organizations and the

New York State Department of Health, such as the syphilis demonstration, the study of the circulation of the kidney in the living animal, the study of cortin, and the other various exhibits, are of such high caliber as to warrant the close study by all the members of this Society.

I move the adoption of the report
Motion seconded and carried

33 HOSPITAL ABUSES (Par 12)

Dr Cole of New York Chairman of the Reference Committee on New Business A. With reference to the resolution presented by the Medical Society of the County of Erie WHEREAS, the Medical Society of the County of Erie has received information that hospitals operating under the general municipal law are receiving not only the indigent sick but also patients on the free or on a part pay basis who are financially able to pay the usual hospital charges and the fees of a private physician, and

WHEREAS, the visiting staffs of such institutions usually are composed of physicians who serve without pay, and

WHEREAS, physicians in the majority of cases are taxpayers and under these conditions not only are giving their services free but actually are being taxed to provide buildings and equipment for patients able to pay for private service, and

WHEREAS, the receiving of such patients by these publicly owned general hospitals makes it necessary at frequent intervals to expand such institutions at the expense of the taxpayers, and

WHEREAS patients who are able to pay for private treatment have been encouraged by newspaper articles obviously inspired by the authorities of such publicly owned hospitals to seek free or part pay treatment, and

WHEREAS, such newspaper articles have violated the spirit of medical ethics by extolling great cures and even mentioning the names of doctors,

THEREFORE BE IT RESOLVED, that the Medical Society of the County of Erie in meeting assembled April 18 1932, condemns such practices and instructs its Delegates to present this resolution at the annual meeting in 1932 of the House of Delegates of the Medical Society of the State of New York together with the request that the House of Delegates instruct its Committee on Legislation to draft and introduce in the New York Legislature a bill to remedy such abuses.

We recommend the adoption of the resolution
Motion seconded and carried

34 STATUS OF PATIENTS PAYING PART OF HOSPITAL COSTS

Dr Cole of New York AND, BE IT FURTHER RESOLVED, that the Medical Society of the County of Erie circularize the county medical societies of the State with a petition to the effect that no hospital supported wholly or partly at public expense shall admit a patient for diagnosis or treatment on the free or part pay basis, if such patient upon investigation is found to be financially able to pay for medical care and necessary hospital charges and that such patient shall be attended by a physician or surgeon of his own choice, except in case of emergency. In case of a minor or one of legal incompetency the patient shall be received and the nearest relative or guardian shall be required to choose a physician for him. The bill to apply to all cases except patients afflicted with tuberculosis malignancy or insanity (Par 12)

We recommend the rejection of this resolution

Motion seconded and carried

Dr Cole I move the adoption of the report as a whole
Motion seconded and carried
On motion duly seconded and carried the meeting thereupon adjourned until 8 p m

Evening Session

The meeting was called to order by the Speaker at 8 P.M.

The Speaker: We will proceed with the business of the House. Are there any resolutions to be offered?

35. STATE FUNDS IN COMPETITION WITH FAMILY PHYSICIAN

Dr. Kopetzky of New York: WHEREAS, the State Fund is a public institution operating under the direction of the Department of Labor; and

WHEREAS, the Woolf Industrial Service is a private corporation practicing medicine in the City of New York; and

WHEREAS, the State Fund has advised its assured in a certain zone in New York to send their injured employees to the Woolf Industrial Service for treatment for such industrial accidents; and

WHEREAS, the fact of a State Institution making arrangements with a private commercial concern for the care of injured workmen and thus taking the treatment of industrial accidents away from the private doctor is inimical to the best interests of the patients and the doctors; therefore,

BE IT RESOLVED: That this House of Delegates of the Medical Society of the State of New York express its disapproval of the action of the State Fund; and be it

FURTHER RESOLVED, that this action on the part of the State Fund, together with a summary of the harm done to the community and the private physicians, and the opinion of this House of Delegates on the matter be forwarded to the Governor of the State of New York, the Commissioner of Labor of the State of New York, and be it

FURTHER RESOLVED, that our Counsel be requested to investigate the legality of such action by the State Fund, and if this action is illegal, then be it still

FURTHER RESOLVED, that the Medical Society of the State of New York take such legal steps as shall be necessary to end this practice.

The Speaker: Referred to Reference Committee on New Business A. (Action par. 47.)

36. HOSPITALS FOR WORLD WAR VETERANS

Dr. Howland of Chemung presented the following resolutions:

WHEREAS, the Federal Government is contemplating the expenditure of large sums of money for the building of additional hospitals to care for veterans of the World War and other ex-service men, and

WHEREAS, civilian hospitals in the United States are filled on an average of not more than 75% of their capacity, and

WHEREAS, economy is essential to an extraordinary degree at the present time, therefore

BE IT RESOLVED, that the Chemung County Medical Society place itself on record as being opposed to the policy of the Federal Government in erecting further hospitals for the care of World War Veterans and other ex-service men until the facilities of the civilian hospitals shall have been exhausted and, further

BE IT RESOLVED, that a copy of this resolution be forwarded to the House of Delegates of the Medical Society of the State of New York and to the House of Delegates of the American Medical Association and, further

BE IT RESOLVED, that a copy of this resolution be forwarded to the United States Senators from New York State and to the Representative in Congress from the 37th District of New York State.

The Speaker: Referred to Reference Committee on New Business B. (Action, par. 53.)

37. CONSTITUTION AND BY-LAWS

Dr. Heyd of New York, Chairman of the Committee on Revision of the Constitution and By-Laws: Mr. Chairman, the Committee on the Revision of the Constitution and By-Laws begs to make the following supplementary report. There were four items referred for reconsideration.

By-Laws Chapter 2, House of Delegates, Section 2. At the end of 6th line, after the words "House of Delegates," there be added "and said County Society has been duly notified of such default."

The section will then read: "A delegate to this Society shall not be considered in good standing or entitled to vote in the House of Delegates if the component county medical society by which he was elected is in default of the payment of any dues or assessments imposed by the House of Delegates, and said county society has been duly notified of such default." The remainder is as printed. I move its adoption.

Motion seconded and carried.

Dr. Heyd: Chapter 2, House of Delegates: That re-numbered section 8 be amended as follows: Subdivision No. 5 be changed to "Report of the President." Subdivision No. 6 be stricken out and in its place be substituted "Address by the President-elect."

I move the adoption of this amendment.

Motion seconded and carried.

Dr. Heyd: Chapter 12, Second 3: The last word "afternoon" be deleted and the word "first" substituted.

The section will then read as follows: "The election of officers of sections shall be the first order of business of the first session of the second day of the Annual Meeting." I move this be adopted.

Motion seconded and carried.

Dr. Heyd: Chapter 14, Section 1: Be amended by adding the words "reside and" after "cease to." The section will then read:

"When a member in good standing ceases to reside and practice in the State of New York he shall ipso facto cease to be a member of this Society and of his component medical society." The point being that the two are inclusive. A man may reside out of the state and still practice, or he may reside in the state and still maintain his membership. If he both moved out and ceased to practice he would ipso facto not be a member of this Society. I move its adoption.

Motion seconded and carried.

Dr. Heyd: Section 3, be amended by deleting all the words after the word "members" third line—"and of all other registered physicians of such county."

Second line from the end of paragraph, after the word "death" add "or change of name."

I move its adoption.

Motion seconded and carried.

38. GOVERNOR'S HEALTH COMMISSION, JOINT COMMITTEE'S REPORT

Dr. Farmer of Onondaga: Your Joint Committee, consisting of the Committee on Public Health and Medical Education and the Committee on Public Relations, was directed by the House of Delegates at its special meeting held in Albany January 14th, 1932, to continue its study of the subject of State Aid. While it is the belief that your direction implies the matter of State Aid as regards Public Health, it is the opinion of the Joint Committee that this study cannot be made without the consideration of State Aid in general.

Your Joint Committee has considered this matter at two meetings, on January 14th, 1932, immediately following the special meeting of the House of Delegates and on March 23rd, 1932, at a meeting of both committees.

Your Joint Committee has not obtained enough necessary information to make any definite recommendations or suggestions on this subject. In view of the changing opinions regarding the question of taxation and appropriation, and the mixed public interest in these subjects at the present time, your Joint Committee believes that more time should be given to this study.

The Speaker Referred to the Reference Committee on the Report of the Committee on Public Health and Medical Education.

Are there any Reference Committees ready to report?

39 NURSE PROBLEM (Journal, May 1, page 541)

Dr Thomson of Kings Your Reference Committee commends the Committee to study the Nurse Problem for its presentation and approves its recommendations regarding the extension of Visiting Nurse Service and also the extension of hourly and appointment nursing in private practice, as well as group nursing.

The Reference Committee approves the recommendation that—This House of Delegates request a complete review of nurse education by the Board of Regents of the State of New York.

The Reference Committee believes that action on the recommendation regarding the training of nurse midwives, trained ward attendants, transfer of basic nurse education, and the establishment of nurse internships be deferred for the present and made a part of that study, and further suggests to the House of Delegates that the State Society offer its services to the State Board of Regents in conducting its review.

I move its adoption.

Motion seconded and carried.

40 COMMITTEE ON PHYSICAL THERAPY (Journal, May 1, page 528)

Dr Thomson of Kings Your Reference Committee heartily approves the whole report of the Committee on Physical Therapy. The efficiency of physical therapy measures in proper cases has been definitely established. The indications for these, and the when and how of their administrations are medical questions and belong to the therapeutic armamentarium of the educated physician.

We recommend that the Committee on Physical Therapy be continued under the able leadership of the present Chairman that further and future teaching of this subject to the doctors be continued as outlined in the Report of this Committee.

The Secretary How can we now pass or adopt a resolution continuing a committee when two or three hours ago we adopted a resolution to the contrary? My recommendation was that the Physical Therapy Committee be continued as a part of the Committee on Education as it was really an educative measure. The Chairman of that committee agreed with me before I put in that report, the Reference Committee recommended it to the House and the House adopted it. My recommendation was not to abolish that committee as a whole but merely to put its work under the educative head.

The Speaker I will refer this report back to the Committee for further report. (Par 54)

41 REPORT OF THE TRUSTEES (Journal, May 1, page 524)

Dr Flaherty of Onondaga The Report of the Trustees was approved by your committee. The committee especially commend the following portion of the report.

"It is earnestly recommended to the House and through it to the Council and the Executive Committee that in all of its proposals involving the expenditure of funds for the ensuing year most careful consideration be given to an appraisal of the value to be obtained by the proposed measure against the actual possible expenditure for carrying it into effect. It seems to the

Board that the present time is one to consider the expenditure of funds for the most urgent purposes only and for the most careful conservation of invested monies."

We commend the Board of Trustees in their good judgment in the investment of the funds of the Medical Society of the State of New York. The report shows a remarkable valuation of the invested funds in consideration of the large depreciation of funds in general. I move the adoption of the report.

Motion seconded and carried.

42 REPORT OF THE TREASURER (Journal, May 1, page 522)

Dr Flaherty of Onondaga The Treasurer's Report was carefully examined by your Committee studying in detail that portion of the report which deals with the cost of the Journal and the Directory. After this careful study, the report was unanimously approved.

I move its adoption.

Motion seconded and carried.

43 MEDICAL RESEARCH (Journal, May 1, page 526)

Dr Stetten of New York Your Reference Committee on the Report of the Committee on Medical Research, has studied the Report and heartily endorses the earnest efforts of the Committee in combating antivivisection legislation, and congratulates the Committee on the successful outcome of these efforts.

Your Reference Committee recommends that the Report be approved.

Your Reference Committee has also studied the Supplementary Report and Pledge in connection with the vivisection problem presented before the House of Delegates at this afternoon's session by Dr Frederic E. Sondern. It also endorses both of these most heartily, and recommends their approval.

I move its adoption.

Motion seconded and carried.

44 PERIODIC HEALTH EXAMINATION (Journal, May 1, page 536)

Dr Flaherty of Onondaga Your Reference Committee on the Report of the Committee on Periodic Health Examination has carefully studied the Report and desires to express its commendation of the splendid work done by this committee in bringing to the attention of the public and the profession the great importance of periodic health examination. It particularly wishes to congratulate the Committee on the enormous amount of work it has done in this direction through its collaboration with the various National lay organizations, and through its extensive radio broadcasting program.

Your Reference Committee recommends that the Report as a whole be approved.

Your Reference Committee further recommends as recommended in the Report, that the House of Delegates pass a resolution to be spread upon its minutes, expressing its appreciation of the great public service that has been rendered by the Columbia Broadcasting Company, its President, William S. Paley, its First Vice-President, Edward Klauber, and its Director of Program Operations, Julius Seebach, and that copies of this resolution be transmitted to the above mentioned company and individuals.

Your Reference Committee further recommends that similar action be taken in respect to the Secretary of the Department of Commerce Ray Lynn Wilbur, and President of the National Radio Homemakers' Club, Mrs. Ida Bailey Allen, both of whom contributed largely to the success of this program.

Your Reference Committee further recommends the approval of the majority recommendation of the Com-

mittee on Periodic Health Examination; that the Committee on Periodic Health Examination be discontinued, and that its function be distributed as outlined in the Report to the three following standing Committees: The Committee on Press Publicity, the Committee on Public Relations, and the Committee on Public Health and Medical Education.

I move the adoption of this report.

Motion seconded and carried.

Dr. Flaherty: In connection with this last report, I have three resolutions prepared which I will present with the approval of the House.

The Speaker: Proceed.

Dr. Flaherty: WHEREAS, the Columbia Broadcasting Company, its President, William S. Paley; its First Vice-President, Edward Klauber, and its Director of Program Operation, Julius Seebach, have rendered a great public service in graciously donating their time and facilities to make possible the broadcast of the radio program of the Committee on Periodic Health Examination of the Medical Society of the State of New York.

BE IT RESOLVED, that the House of Delegates of the Medical Society of the State of New York express its sincere appreciation of this generous gift; that this resolution be spread upon its minutes, and that a copy thereof be transmitted to the Columbia Broadcasting Company and its above-mentioned officers.

I move its adoption.

Motion seconded and carried.

Dr. Flaherty: WHEREAS, the Secretary of the Department of Commerce, Ray Lyman Wilbur, generously cooperated in establishing the radio program of the Committee on Periodic Health Examination of the Medical Society of the State of New York;

BE IT RESOLVED, that the House of Delegates of the Medical Society of the State of New York express its sincere appreciation of his generous cooperation; that this resolution be spread upon its minutes, and that a copy thereof be transmitted to Dr. Wilbur.

I move its adoption.

Motion seconded.

Dr. Rooney of Albany: I would like to know just exactly in what way this contribution of the latter named gentleman was made. I have heard many of his talks over the radio and I have seen much of his printed comment. I am wondering just how much of all of that I have heard is helping the profession of organized medicine in these United States. I am seriously doubtful about its help in relation to what I have heard, and I raise the question as to whether or not any action by this House would not be in effect a ratification of many of the things that have been said by this gentleman that are not beneficial to medicine, in my opinion. I move as a substitute in order to excite discussion that this resolution proposed by the committee be laid on the table.

Motion seconded.

A vote was thereupon taken and the Speaker declared the motion to be lost.

Dr. Crampton of New York: Mr. Speaker, in order to clarify the situation, may I rise first to a point of information? May I ask that the resolution be read?

The Speaker: The resolution will be re-read.

Dr. Flaherty: WHEREAS, the Secretary of the Department of Commerce, Ray Lyman Wilbur, generously cooperated in establishing the radio program of the Committee on Periodic Health Examination of the Medical Society of the State of New York;

BE IT RESOLVED, that the House of Delegates of the Medical Society of the State of New York express its sincere appreciation of his generous cooperation, that this resolution be spread upon its minutes, and that a copy thereof be transmitted to Dr. Wilbur.

Dr. Crampton: It is clear that the recommendation of the House of Delegates is asked not for the person of the Secretary of the Department, nor for any

of his acts or any of his words, but only for the cooperation that his department has given to the work of the committee of this organization as authorized by this House of Delegates and carried out in accordance with its instructions. It is a courtesy which the committee recommended should be extended to a public official who, however deleterious his acts may have been or his words may have been in other particulars, yet his department did a fine, understanding, generous and co-operative thing in helping through these extended periods of public instruction which were undertaken by the Medical Society of the State of New York and carried through and which you have been good enough now to commend. I move the resolution be adopted.

Motion seconded and carried.

Dr. Flaherty: WHEREAS, Mrs. Ida Bailey Allen, President of the National Radio Homemakers' Club, graciously placed her studio and facilities at the disposal of the Committee on Periodic Health Examination of the Medical Society of the State of New York, for the broadcasting of its radio program;

BE IT RESOLVED, that the House of Delegates of the Medical Society of the State of New York express its sincere appreciation of her courtesy and aid in this work; that this resolution be spread upon its minutes, and that a copy thereof be transmitted to Mrs. Allen.

I move the adoption of this resolution.

Motion seconded and carried.

45. PRESS PUBLICITY

(Journal, May 1, page 527)

The Speaker: I will ask Reference Committee on New Business A to consider the report of the Press Publicity Committee as printed in the report of committees and make a subsequent report. (Par. 52.)

46. PRIZE ESSAY

The Speaker: Mr. Secretary, you have a communication from the Committee on Prize Essays.

The Secretary: "The Committee on Prize Essays of the Medical Society of the State of New York begs leave to report as follows:

"During the year we have answered numerous inquiries regarding prize essays but this correspondence resulted in only one paper being submitted. It was the unanimous consensus of opinion that this essay was not of sufficient merit to allow its being considered for the prize."

Referred to Committee on New Business A. (Action, Par. 51.)

47. STATE FUND IN COMPETITION WITH FAMILY PHYSICIAN

(Par. 35)

Dr. Colic of New York: Reference Committee on New Business A.

WHEREAS, the State Fund is a public institution operating under the direction of the Department of Labor; and

WHEREAS, the Woolf Industrial Service is a private corporation practicing medicine in the City of New York; and

WHEREAS, the State Fund has advised its assured in a certain zone in New York to send their injured employees to the Woolf Industrial Service for treatment for such industrial accidents; and

WHEREAS, the fact of a State Institution making arrangements with a private commercial concern for the care of injured workmen and thus taking the treatment of industrial accidents away from the private doctor is inimical to the best interests of the patients and the doctors; therefore

BE IT RESOLVED, that this House of Delegates of the

Medical Society of the State of New York express its disapproval of the action of the State Fund, and be it

FURTHER RESOLVED, that this action on the part of the State Fund, together with a summary of the harm done to the community and the private physicians, and the opinion of this House of Delegates on the matter be forwarded to the Governor of the State of New York, the Commissioner of Labor of the State of New York, and also to the public press, and be it

FURTHER RESOLVED, that our Council be requested to investigate the legality of such action by the State Fund, and if this action is illegal, then be it still

FURTHER RESOLVED that the Medical Society of the State of New York take such legal steps as are necessary to end this practice

We recommend the adoption of this resolution

Motion seconded and carried

48 GOVERNOR'S COMMITTEE TO INVESTIGATE MEDICAL AND HOSPITAL PROBLEMS UNDER WORKMAN'S COMPENSATION ACT

(Par 8)

Dr Townsend of New York Your Committee on Reference on the Committee on Medical Economics has had referred to it the Resolutions presented by Dr Aronow of the Bronx (Par 8) Inasmuch as the contents of this resolution are all contained in the report of the Committee on Medical Economics we feel that no further action is necessary by this House of Delegates than that which they may take on your Reference Committee's report

I move you, sir, the adoption of this Reference Committee's report

Motion was seconded and carried

49 STATE CLINICS FOR INJURED WORKMEN

(Pars 9 and 60)

Dr Townsend The second portion of the Reference Committee's report is on the resolutions as presented by Dr Elliott (Par 9) Mr Speaker, is it necessary to read these resolutions?

The Speaker What is the pleasure of the House?

The Speaker There seems to be a division of the House. Kindly read the resolutions

Dr Townsend WHEREAS, Howard S Cullman Chairman of a committee appointed by Governor Franklin Roosevelt to review Medical and Hospital problems in connection with Workmen's Compensation Law made a report last February in which appeared a recommendation for the establishment of State Clinics for care of injured workmen, and

WHEREAS in rebuttal to criticism of such recommendation Mr Cullman in a written statement published in the *New York Times* Tuesday, May 17, 1932, page 17, says "The committee's plan was formulated by group of physicians and surgeons of unquestioned integrity and ability, after mature study and deliberation," and

WHEREAS on May 21st of this month, Dr Adrian V S Lambert Chairman of the Medical Sub Committee, in a communication to the Economics Committee of this Society, says

"This plan was proposed by a sub committee on Departmental Procedure of the General Committee. There was no physician a member of this sub committee. The plan was placed in the report by majority vote of the General Committee," and

WHEREAS on the 20th of this month, Dr James Alexander Miller in a communication to the Economics Committee of this Society says "The majority of the medical members of the committee however, thought that the problem should be met in another way, and consequently a supplementary statement—was prepared—

although not incorporated in the body of the report, as such"

THEREFORE BE IT RESOLVED, that these repudiations of Mr Cullman's statement be spread upon the minutes of this meeting and that the Secretary be instructed to send a copy of this resolution to the Governor, the Honorable Franklin D Roosevelt, and that a copy of this resolution be released to the Press

Your committee moves the adoption of these resolutions

Motion seconded

Dr Rooney of Albany I feel that we would make ourselves ridiculous by saying the medical members of this committee repudiated Mr Cullman's statement I think that the proper course for us to take is to—so to speak—repudiate the repudiators I move you, as a substitute, sir, that the Medical Society of the State of New York declare that the position taken in the Governor's report in relation to the establishment of State aided clinics for the administration of the Workmen's Compensation Law and their denial of the right of free choice of physicians is not the opinion of organized medicine in this state as announced repeatedly by their representatives, this House of Delegates

Motion seconded

Dr Schiff of Clinton It seems to me that this is too important a matter for the House of Delegates to decide like that It would be a much wiser procedure to refer this back to this committee Personally I approve Dr Rooney's attitude It is up to this House of Delegates to state the position of the Medical Society and to accept at its face value unless more definite proof can be given by the mention of names For that reason I make a motion that the resolution be referred back to the committee and that they will give us a better resolution when it is brought back on the floor

Motion seconded

The Speaker A motion is made and seconded it be referred back to the committee for further consideration

Motion was carried

50 COMMITTEE ON MEDICAL ECONOMICS

(Journal, April 15, page 474)

Dr Townsend of New York Your Reference Committee has studied the voluminous report of the Committee on Economics It has received opinions and suggestions from members of this house, and has conferred with Drs Goodrich and Elliott of the Committee on Economics

At the outset your Reference Committee desires to register its admiration of the breadth of the study made and of the far reaching implications contained therein, and we congratulate the committee in this house on the activity, alertness and breadth of view of the committee There is so much in the Report that it would obviously be impossible to discuss it in detail, to enumerate the factors behind each proposition and paragraph, for your Reference Committee has gone into the details of each paragraph In order to facilitate action for this house we should present the resolutions of our deliberations in the numerical sequence in which the report appears in the printed Annual Reports of this house for 1932, in detail as follows

Your Reference Committee approves the adoption of paragraphs 14A and 14B (Journal, page 475)

I move their adoption

Motion seconded and carried

Dr Townsend Your Reference Committee does not approve paragraph 14C, believing such consideration unnecessary We recommend that the matter contained in paragraph C be referred back to the Committee on Economics for further study

I move the adoption of that section

Motion seconded and carried

Dr. Townsend: We recommend that the matter in paragraph 14D be referred back to the Committee on Economics for further study.

In referring matters back to the Committee on Economics, your Reference Committee does so without opinion and without prejudice, leaving the matter entirely as if it had not been presented. This is necessary because the problems in themselves are interesting and not enough work has been done upon them to produce tangible results; and your committee hopes that the house, in order to concentrate upon paragraphs which can be acted upon, will likewise refer such paragraphs as we recommend to recommit, and that the house do so without prejudice.

(Journal, page 476)

In regard to paragraph 21A the Reference Committee recommends that the recommendation of the Committee on Economics be disapproved, and recommends that the Committee on Economics be authorized to make contacts with the Committees on Economics of the different societies—to obtain the information they desire.

I move the approval.

Motion seconded and carried.

Dr. Townsend: The Reference Committee recommends the adoption of the matter contained in paragraph 21B, provided the cost of such study be kept within the budgeting limit of the Committee on Economics, and that it make a report to the house of paragraphs, when it is finished.

I move the adoption.

Motion seconded and carried.

Dr. Townsend: The committee approves the matter contained in paragraph 21C with the addition—that said publication shall be with the approval of the Editor of the State Journal.

Dr. Rooney of Albany: I wonder just what that means. Does it mean this: if the Committee on Economics submits several articles for publication that it gives the right to the Editor of the Journal to refuse publication? I feel that would probably be an unwise course. I think it should have further study and some safeguards be placed about it. I move you that that portion relating to publication be re-referred to the Reference Committee.

The Speaker: I did not hear any second to Dr. Rooney's motion to re-refer.

The question now before the house is the adoption of the report of the Reference Committee.

The motion for the adoption of the report of the Reference Committee was seconded and carried.

Dr. Townsend: Paragraphs 22-23-25. Your Reference Committee approves the matter contained in Paragraph 22 and Paragraph 23; and in regard to Paragraph 25, your committee disapproves of the paragraph as written and recommends the following substitute: "Therefore, at least a substantial per cent of all Boards of Administration should be physicians representing if possible all of the types of medical service carried on in the institutions."

I move the adoption.

Motion seconded and carried.

Dr. Townsend: 26. The Reference Committee recommends that paragraphs 26, 27, 29, 30, 31, and 32 be referred back to the Committee on Economics for further study.

I move the adoption.

Motion seconded and carried.

Dr. Townsend: 33B and C. We recommend recommitment of paragraphs 33B and C to the committee for further study.

I move the adoption.

Motion seconded and carried.

Dr. Townsend: We recommend that paragraph 33D be approved by this house.

I move the adoption.

Motion seconded and carried.

Dr. Townsend: In regard to the suggestions in paragraph 45, your Reference Committee recommends that paragraphs 34, 37, 38, 39, 40, and 41 be referred back to the Committee on Economics for further study. (Jour., page 477.)

I move its adoption.

Motion seconded and carried.

Dr. Townsend: Your committee approves the recommendation in paragraph 45B.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: Your committee approves the recommendation in 45C with the addition, "That the joint consideration shall include the Committee on Nursing."

I move the adoption.

Motion seconded and carried.

Dr. Townsend: The Reference Committee approves the recommendation contained in paragraph 45D.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 56A. The Reference Committee recommends approval of the principle stated in paragraphs 46, 47 and 48. It disapproves the material contained in paragraphs 51 and 52.

I move the adoption of that portion of the report.

Motion seconded and carried.

Dr. Townsend: 56B. Your Reference Committee approves the material contained in paragraphs 49, 50, 53, 54, and 55.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 56C. Your committee approves material contained in paragraphs 46, 47, and 48; and recommends the recommitment of paragraph 49.

Your committee disapproves the material contained in paragraphs 50, 51, and 52, and recommends that it be not adopted.

I move the adoption of the report.

Motion seconded and carried.

Dr. Townsend: In regard to the suggestion in 61A, your Reference Committee approves the material presented in paragraphs 58, 59, and 60. It also approves the material contained in paragraph 61B.

I move the adoption of the report.

Motion seconded and carried.

Dr. Townsend: In regard to the suggestions in paragraph 75, we recommend the approval of material in paragraph 68, with the following amendment: "Where work of this kind is distributed under reasonable skilled supervision, it is liable to achieve an excellence not obtainable under average medical community facilities. Such a service as this is perfectly capable of being adequately controlled by being confined to the actual demands of industry. We believe that the laws of the traditional professional relationship between the patient and physician which naturally would follow and the exploitation of the physician to his economic social and scientific limitation are to be deplored."

We recommend the approval of the material contained in paragraph 69 with the deletion of all matter after the word—"unavailable."

I move its adoption.

Motion seconded and carried.

Dr. Townsend: Your Reference Committee recommends the approval of the matter contained in 81A provided it can be done within the budgetary limit of the money allowed to the Committee on Economics.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: Your committee approves the matter contained in paragraph 81B with the same provision.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: Your committee approves paragraphs 81C and D.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: Your Reference Committee recommends the recommitment of paragraph 81E to the Committee on Economics.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: Your Reference Committee disapproves the recommendations contained in paragraph 81F.

I move the adoption.

Motion seconded and carried.

Dr. Townsend: Your committee recommends recommitment of paragraph 81G to the Committee on Economics.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: Your Reference Committee approves the adoption of the recommendation in paragraph 81H.

I so move.

Motion seconded and carried.

Dr. Townsend: Your committee approves the adoption of the matter contained in paragraphs 90A, B, and C.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: Your committee approves the adoption of 90D, with the addition—after the words “to solicit”—“any person or any circular.” Thus amended, we approve 90D.

I move the adoption.

Motion seconded and carried.

Dr. Townsend: Your Reference Committee approves the adoption of material in paragraphs 90E, F, G, H, I, J, K, L, M, and N.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 97A, B, C, D, and E. Your committee recommends the adoption of the matter contained in these paragraphs.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 104A and B. Your committee recommends the adoption of the matter contained in these paragraphs.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 104C. We recommend the adoption of the material in this paragraph, provided the study can be made within the budgetary limit of the Committee on Economics.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 104D. We recommend the approval of the material contained in this paragraph.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 104E. We recommend adoption of the material of this paragraph be contingent upon the reception of an interpretation from the proper authorities as contained in D.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 104F. Your committee recommends approval of the matter contained in that paragraph provided action asked for under Section D is lost.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 115. We recommend that all matters contained in paragraphs 112, 113, 114, 116, and 117 be resubmitted to the Committee on Medical Economics that it may resubmit its recommendations to the Executive Committee after further study.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 119. We recommend approval of the matter contained in this paragraph.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 121. Your committee approves the matter contained in this paragraph.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 125. We recommend the matters contained in sub-sections A, B, C, D, and E be approved except as to paragraph 122. Your Reference Committee recommends adoption of the substitute and that the last paragraph read as follows: “In that vast majority of families where there is a limit of ability to compensate professional service if there has been a bona fide participating service and responsibility, then with the knowledge of the patient, the lump sum which is possible should be divided between the participants according to the respective bona fide service rendered by each.”

I move the adoption.

Motion seconded and carried.

Dr. Townsend: 140. Your Reference Committee disapproves the adoption of the matter contained in 140A.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 140B. Your Reference Committee approves the matter contained in this paragraph.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 140C. Your Reference Committee approves the matter contained in this paragraph with the deletion of all in that paragraph after the word “program.”

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 140D. Your Reference Committee recommends the following substitute for 140D—“That it is the opinion of organized medicine that a socialized and paternalized sick care conducted by political groups without regard to medical opinion is to be deprecated.”

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 148. Your Reference Committee recommends the re-submission of this material to the Executive Committee for consideration in view of additional information in the hands of the committee, which they desire to submit to the Executive Committee for its consideration.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 149. Your committee recommends the adoption of the material contained in special paragraphs A, B, C, D, and E.

I move the adoption.

Motion seconded.

Mr. Brosnan: Before these resolutions are put to a vote I would like the privilege of the floor.

The Speaker: Granted.

Mr. Brosnan: Mr. Speaker and gentlemen of the House of Delegates. Section 149, paragraph A of this report approves the principle of compulsory arbitration in automobile accident cases. This approval is based upon a recommendation by Judge Crane of the Court of Appeals that it would be a desirable thing for the congested calendars to have automobile accident cases decided by a board of arbitration. I desire to point out, however, that if the lawyers who are now handling automobile accident cases on behalf of the plaintiffs are deprived of this business by legislation, they will necessarily invade the field of malpractice on the plaintiffs' side. This, I think, should be taken into consideration in determining whether this recommendation of the Medical Economics Committee should be approved.

As to paragraph D of the same Section, I understand that the permanent committee appointed by the Appellate Division of the Second Department, referred to in said paragraph, has definitely taken the position that it will not appoint any lay person to this committee. It has definitely gone on record as stating that they will not appoint any lay person or lay body on that committee, nor will it permit such persons to participate in oral discussions.

The motion for the approval of paragraphs A, B, C,

D, and E of paragraph 149 was lost.

Dr. Townsend: 149F. Your committee recommends recommitment to the Committee on Economics.

I move its adoption.

The Speaker: I do not understand that myself. Will you please repeat it.

Dr. Townsend: We recommend that it be recommitted to the Committee on Economics for further consideration.

Motion seconded and carried.

Dr. Townsend: 154A. Your Reference Committee disapproves the adoption of the recommendation as printed, and recommends a substitute as follows: "In order to establish respect for the law of the State by all such corporations and to secure an authoritative decision which shall be sufficient to stop injustice to the people of the State and their physicians, the Medical Society of the State of New York, through its counsel, furnish the Department of Education evidence that might lead to the prosecution of some corporation that is practising medicine."

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 154B. Your Reference Committee approves the matter contained in this paragraph.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 158. Your Reference Committee approves the matter contained in this paragraph.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 161A and B. Your Reference Committee disapproves the matter contained in these two paragraphs, and offers the following substitution for adoption: "That the council be instructed to prepare for publication not later than December 15th, 1932, a program of action by the committees of the Society to further cooperation and co-ordination of activity; and to make the collective thought of the State Society effective and powerful; and to encourage the work of its committees, the said council shall bring the budgetary requirements of these committees to the attention of the Executive Committee."

I move its adoption.

Motion seconded and carried.

Dr. Townsend: 162. This paragraph embraces basic principles, and your Reference Committee agrees with every word stated in those principles. Your Reference Committee, on the other hand, feels that even these words limit what should be limitless. The length and breadth, height and distance of organized medicine and its idealism cannot be measured in words; and we therefore recommend that no such set of principles be written, and disapprove the adoption of such.

I move its adoption.

Motion seconded and carried.

Dr. Townsend: I move the acceptance of this report as a whole.

Motion seconded and carried.

51. PRIZE ESSAYS

(Par. 46)

The Speaker: Are there any more committees to come before the house?

Dr. Colie, Chairman of Reference Committee on New Business A: There was referred to this Committee a report of the Committee on Prize Essays:

WHEREAS, the Committee on Prize Essays of the Medical Society of the State of New York begs leave to report as follows:

That during the year we have answered numerous inquiries regarding prize essays, but this correspondence resulted in only one paper being submitted. It is the unanimous consensus of opinion that this essay was not of sufficient merit to allow it being considered for the prizes.

BE IT THEREFORE RESOLVED, that for the current term no award be made.

I move its adoption.

Motion seconded and carried.

52. PRESS PUBLICITY

(Journal, May 1, page 527)

Dr. Colie: There was referred to the Committee on New Business A, the report of the Committee on Press Publicity with certain recommendations. The first recommendation was that the Press Publicity Committee be continued as a Special Committee.

It is recommended that this recommendation be adopted.

Motion seconded and carried.

The second recommendation was that all publicity emanating from officers, committees, and officials of the Medical Society of the State of New York, with the exception of the publicity work of the Committee on Legislation and of the Executive Officer, go through the hands of the Press Public Committee.

It is recommended that this recommendation be rejected.

Dr. Rooney of Albany: I move to substitute for the resolution of the Reference Committee this resolution: "It is recommended that all publicity emanating from officers, committees and officials of the Medical Society of the State of New York which has been approved for publication by the Executive Committee with the exception of the publicity work of the Committee on Legislation and of the Executive Officer, shall be released to the desired agencies for publication only through the Press Publicity Committee."

That, gentlemen, provides for censorship. It follows the steady policy of this House by maintaining supervision of all its activities. It provides for the proper coordination of our desired efforts to inform the public intelligently upon our concerns and theirs, a "Utopian task," but it does not under any circumstances provide for any question of censorship which apparently has been to a degree in the minds of the House.

I move you my motion.

The Secretary: I second Dr. Rooney's motion.

The Speaker: You are voting on the substitute motion of Dr. Rooney.

Motion carried.

Dr. Colie: The third recommendation is that the Trustees be requested to make budgetary provision for the secretarial and other necessary expenses of the Press Publicity Committee. Your Reference Committee recommends this be referred to the Council.

The motion was seconded and carried.

53. HOSPITALS FOR WORLD WAR VETERANS

Dr. Fiske: Your Reference Committee on New Business B has considered the resolution of the Chemung Medical Society which reads: "Be it resolved that the Chemung Medical Society place itself on record as being opposed to the policy of the Federal Government in erecting further hospitals for the care of the World War Veterans and other ex-service men until the facilities of the civilian hospitals shall have been exhausted; and

"Further Be It Resolved, that a copy of this resolution be forwarded to the House of Delegates of the Medical Society of the State of New York and to the American Medical Association; and

"Further Be It Resolved, that a copy of this Resolution be forwarded to the United States Senators from New York State and to the Representatives in Congress from the thirty-seventh district of New York State."

This resolution directs the attention of this organization to many other abuses of hospital and medical service by veterans. For example, the treatment of veterans for injuries entirely distinct from their war disabilities

and illnesses. The Committee suggests that this problem be considered by the Council of this Society for further action.

I move its adoption.

Motion seconded and carried.

54. PHYSICAL THERAPY (Par. 40)

Dr. Thomson: This Reference Committee heartily approves the whole report of the Committee on Physical Therapy. The efficiency of physical therapy measures in proper cases has been definitely established. The indications for these, and the when and how of their administrations are medical questions and belong in the therapeutic armamentarium of the educated physician.

We recommend that the work of the Committee on Physical Therapy be continued under the Committee on Public Health and Medical Education and suggests that the able leadership of the present chairman be not lost with the end in view that future and further teaching of this subject to the doctors be continued as outlined in the present report of this committee.

I move the adoption of this report.

Motion seconded and carried.

The Speaker: Are there any other committees ready to report?

55. COMMITTEE ON SCIENTIFIC WORK (Journal, May 1, page 525)

Dr. Maslon: Your Committee notes with approval the change that has been made in the form of the program. The additional information contained therein, particularly the brief abstracts, of important papers to be delivered before the Scientific Program, will greatly increase the interest of this program.

Your committee recommends that the Scientific Committee continue this type of program.

I move the adoption of this report.

The motion was seconded and carried.

56. COMMITTEE ON PUBLIC HEALTH AND MEDICAL EDUCATION (Journal, April 15, page 493)

Dr. Howland of Chemung: We wish to commend the Committee for the large amount of work accomplished in the past year in graduate medical education and public health. We urge the continuation of cooperation between the County Society and the Chairman of the Committee on Public Health and Medical Education.

We call particular attention to the cooperation between this committee and the State Department of Health, in the problem of the control of the poliomyelitis outbreak last summer and the appointment of the special committee to advise with the State Commissioner of Health.

We trust that later the Joint Report of this Committee and Health Commissioner Parran will be received.

We heartily endorse the study of the Committee in respect to the lowering of maternal mortality.

We endorse the suggestion of the Committee that the county societies be urged to cooperate in the study of maternal mortality with the State Commissioner of Health.

We commend the committee for their suggestion in urging a more prompt reporting of cases of tuberculosis.

Your committee strongly recommends that the House of Delegates approve the action of the Committee on Public Health and Medical Education in opposing any ruling of the Public Health Council which would disqualify any competent physician from accepting appointment as a county or municipal health officer.

I move its adoption.

Motion seconded and carried.

Dr. Howland: Your committee endorses the principle of appointing qualified local men as health commission-

ers, as recommended by the Committee on Public Health and Medical Education.

I move its adoption.

Motion seconded and carried.

Dr. Howland: Your committee is of the opinion that in the appointment of a County Health Commissioner, preference should be given to qualified local physicians, and that the County Medical Society should nominate a list of physicians from which the County Board of Health may make its selection.

I move its adoption.

Motion seconded and carried.

Dr. Howland: The committee is of the opinion that a County Health Commissioner should be a physician licensed to practice in the State of New York.

I move its adoption.

Motion seconded and carried.

Dr. Howland: Your committee is also of the opinion that practical experience in public health work should be considered an important qualification in the appointment of a County Health Commissioner.

We strongly endorse the action of the Committee in protesting against the public hearings of the Public Health Council being always held in New York City, thereby working a hardship to those most affected by its action.

I move its adoption.

Motion seconded and carried.

Dr. Howland: We congratulate the committee on the work accomplished and the keeping within their appropriations despite the large amount of extra work in connection with the Governors' Special Health Commission. We endorse the request of the Chairman of the Joint Committee for more time to consider State Aid.

I move its adoption.

Motion seconded and carried.

The Speaker: Is there anything further to come before the House?

57. RETIRED MEMBERSHIP

The Secretary: I have on my desk the names of a number of physicians that have been recommended to the State Society by their respective County Societies for election to retired membership.

Samuel T. Armstrong, Katonah; Louis E. Blair, Albany; Frank J. Blodgett, New York City; Ephraim W. Bogardus, Geneva; Albert H. Brundage, Woodhaven; Frank B. Carpenter, New York City; John Cotton, Burnt Hills; J. Clifton Edgar, New York City; Albert J. Frantz, Seneca Falls; Bern B. Gallaudet, New York City; William D. Garlock, Little Falls; Thomas F. Goodwin, Mount Vernon; Frank F. Gow, Schuylerville; Edwin A. Hatch, Brooklyn; Irving S. Haynes, Plattsburg; David John, Yonkers; Irving Le Roy, Utica; Benjamin G. Long, Buffalo; John F. McEncroe, Schenectady; Weldon K. McGowan, Conesus; Edward L. Meierhof, New York City; Robert C. Myles, New York City; John N. Shumway, Painted Post; Thomas S. Southworth, New York City; Ira Otis Tracy, Brooklyn; Cadwallader C. Vinton, New York City; Howard L. Waldo, Troy; John B. Walker, New York City; Daniel H. Wiesner, Mamaroneck.

I move that these gentlemen be placed on the retired membership list.

Motion seconded and carried.

The Speaker: Is there anything further to come before the House of Delegates before adjournment: I am about to declare an adjournment of this House until tomorrow morning, at which time the first order of business will be the election of officers. I am ready to listen to suggestions as to the hour.

Dr. Bedell: I move you, sir, we adjourn until nine a.m. tomorrow morning.

Motion seconded and carried.

The Session thereupon adjourned until May 24th, 1932, at 9 a.m.

ADJOURNED SESSION OF THE HOUSE OF DELEGATES,
TUESDAY, MAY 24TH, 1932

The meeting was called to order by the Speaker at 9 a.m.

58. ROLL CALL

The Speaker: The Secretary will please call the roll. The Secretary called the roll and the following delegates responded:

Frederic C. Conway, Charles A. Perry, Edgar A. Vander Veer, Lyman C. Lewis, John E. Conboy, Harry Aranow, Edward R. Cuniffe, Cornelius J. Egan, Isaias A. Lehman, Vincent S. Hayward, William A. Klein, Samuel M. Allerton, Harry I. Johnston, Joseph P. Garen, Raymond F. Johnson, Edgar Bieber, DeForest W. Buckmaster, Reeve B. Howland, Earl W. Wilcox, Leo F. Schiff, Charles J. Kelley, Robert Brittain, C. Knight Deyo, William A. Krieger, Aaron Sobel, Robert E. De Ceu, James H. Donnelly, Albert A. Gartner, Mary J. Kazmierczak, Edward J. Lyons, Francis M. O'Gorman, Milton G. Potter, Herbert A. Smith, Charles C. Trembley, Sylvester C. Clemans, Peter J. Di Natale, T. B. O'Neil, Joseph D. Olin, Charles T. Graham-Rogers, Alec N. Thomson, Siegfried Block, Thomas M. Brennan, E. Jefferson Browder, Frederic E. Elliott, Edwin H. Fiske, John M. Schimmenti, Edwin A. Griffin, William Linder, J. Sturdivant Read, Simon Frucht, Walter D. Ludlum, Joseph W. Malone, John J. Masterson, Harvey B. Matthews, Harold R. Merwarth, Joseph Raphael, Charles E. Scofield, James Steele, Luther F. Warren, William T. Shanahan, Donald H. Conterman, Clarence A. Costello, Walter A. Calihan, William A. MacVay, Willard H. Veeder, Floyd S. Winslow, Horace M. Hicks, Henry B. Smith, Everett C. Jessup, Emily D. Barringer, Edward M. Colie, Jr., C. Ward Crampton, Adolph G. G. De Sanctis, Ten Eyck Elmendorf, Julius Ferber, Samuel Z. Freedman, B. Wallace Hamilton, David J. Kaliski, Samuel M. Kaufman, Frederick C. Keller, Samuel J. Kopetzky, Richard Kovacs, Otto H. Leber, William M. Patterson, Nathan Ratnoff, Morris Rosenthal, Newton T. Saxl, Morris Schoenfeld, DeWitt Stetten, Terry M. Townsend, Franklin Welker, Orrin S. Wightman, Frederick J. Schnell, Richard H. Sherwood, George M. Fisher, Dan Mellen, Andrew Sloan, Frederick H. Flaherty, William W. Street, Albert G. Swift, Claude C. Lytle, Joseph B. Hulett, Alexander F. Carson, Carl Boettiger, James M. Dobbins, James R. Reuling, Jr., Abraham W. Victor, Albert L. Voltz, Augustus J. Hambrook, John H. Reid, Eugene D. Scala, Stephen R. Monteith, W. Grant Cooper, Stanley W. Sayer, George S. Towne, Dudley R. Kathan, William C. Treder, David W. Beard, Allen W. Holmes, Leon M. Kysor, Herbert B. Smith, Charles C. Murphy, Albert E. Payne, Luther C. Payne, Guy S. Carpenter, Wilber G. Fish, Frederic W. Holcomb, Morris Maslon, Walter A. Leonard, Ralph Sheldon, Harrison Betts, Merwin E. Marsland, Romeo Roberto, Reginald A. Higgons, Lester H. Humphrey.

The following Officers, Trustees and Chairmen of Standing Committees were present:

William D. Johnson, Chas. Gordon Heyd, Charles C. Trembley, Harrison Betts, Daniel S. Dougherty, Peter Irving, Frederic E. Sondern, James Pederson, John A. Card, George W. Cottis, James F. Rooney, Arthur W. Booth, Nathan B. Van Etten, Grant C. Madill, Harry R. Trick, Harry Aranow, Thomas P. Farmer, Herbert A. Smith, Arthur J. Bedell, Charles H. Goodrich, James E. Sadlier, Stanhope Bayne-Jones, Charles D. Kline, Louis A. Van Kleec, Herbert L. Odell, George M. Cady, E. Carlton Foster, W. Ross Thomson.

The following Ex-Presidents were present: Grant C. Madill, James F. Rooney, Arthur W. Booth, Orrin Sage Wightman, Nathan B. Van Etten, George M. Fisher, James E. Sadlier, Harry R. Trick, James N. Vander Veer, William H. Ross.

59. ELECTION OF OFFICERS

The Speaker announced that the meeting would proceed to the election of officers.

The Secretary announced the following tellers: Edward M. Colie, Chairman, Aaron Sobel, Alec Thomson, Horace M. Hicks, Frederick J. Schnell, Carl Boettiger, Augustus J. Hambrook, Harrison Betts, David W. Beard, Edgar Bieber, Vincent S. Hayward, and Andrew Sloan.

Dr. Bedell: I move that the election of the Chairman of the Committee on Arrangements be referred to the Council. Motion seconded and carried.

The following officers were elected:

President-Elect: Frederick H. Flaherty; First Vice-President: Arthur S. Chittenden; Second Vice-President: W. Ross Thomson; Secretary: Daniel S. Dougherty; Assistant Secretary: Peter Irving; Treasurer: Frederic E. Sondern; Assistant Treasurer: James J. Pedersen; Speaker: John A. Card; Vice-Speaker: George W. Cottis; Trustee: James F. Rooney; Chairman of the Committee on Scientific Work: Arthur J. Bedell; Chairman of the Committee on Public Health and Medical Education: Thomas P. Farmer; Chairman of the Committee on Legislation: Harry Aranow; Chairman of the Committee on Medical Economics: Charles H. Goodrich; Chairman of the Committee on Public Relations: James E. Sadlier.

The following were elected Delegates to the American Medical Association: Drs. Charles H. Goodrich, Frederic E. Sondern, William D. Johnson, Arthur J. Bedell, Harry R. Trick, John A. Card, Edward R. Cuniffe, Grant C. Madill, Floyd S. Winslow and Thomas M. Brennan.

The following were elected Alternates to the American Medical Association: Drs. Thomas P. Farmer, Walter D. Ludlum, Terry M. Townsend, Edward M. Colie, Jr., Andrew Sloan, Carl Boettiger, David J. Kaliski, DeWitt Stetten, Albert G. Swift and George S. Towne.

The Speaker: Is there any further business to come before the house?

60. STATE CLINICS FOR INJURED WORKMEN

(Par. 9 and 49)

Dr. Townsend of New York: Mr. Speaker and members of the House of Delegates, the Committee on Medical Economics presents the following:

WHEREAS, Mr. Howard S. Cullman, chairman of a committee appointed by Governor Franklin Roosevelt to review Medical and Hospital problems in connection with workmen's compensation law made a report last February in which appeared a recommendation for the establishment of State Clinics for care of injured workmen; and

WHEREAS, in rebuttal to criticism of such recommendation, Mr. Cullman in a written statement published in the *New York Times* Tuesday, May 17th, 1932, says: "The Committee's plan was formulated by group of physicians and surgeons of unquestioned integrity and ability, after mature study and deliberation," and

WHEREAS, on May 21st of this month, Dr. Adrian V. S. Lambert, Chairman of the Medical Sub-Committee, in a communication to the Economics Committee of this Society, says:

"This plan was proposed by a sub-committee on Departmental Procedure of the General Committee. There was no physician a member of this sub-committee—The plan was placed in the report by majority vote of the General Committee." And

WHEREAS, on the 20th of this month, Dr. James Alexander Miller, in a communication to the Economics Committee of this Society says: "The majority of the medical members of the committee, however, thought that the problem should be met in another way, and

consequently a supplementary statement—was prepared—although not incorporated in the body of the report, as such."

Your Reference Committee on the Report of the Committee on Medical Economics, to whom has been referred the Resolutions presented by Dr. F. E. Elliott, recommends the adoption of those Resolutions together with their recommendations.

1. The Medical Society of the State of New York declares that the statements of Mr. Howard S. Cullman were either made upon the basis of insufficient information as to the facts, or purposefully to attempt to bolster up a position taken on false premises.

2. That organized medicine and its principles were represented by only one of the four medical members of the Governor's Commission.

3. That the Medical Society of the State of New

York reaffirms its position in support of the public welfare in opposition to the institutional State Clinics for the care of injured workmen.

I move the adoption of this report.

Motion seconded and carried.

61. ADJOURNMENT

The Speaker: Mr. Secretary, is there anything on your desk that needs attention?

The Secretary: There is not.

The Speaker: Have Reference Committees A, B, and C on new business anything to report?

On motion duly seconded and carried the House of Delegates adjourned sine die.

JOHN A. CARD, *Speaker.*

DANIEL S. DOUGHERTY, *Secretary.*

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NEWS NOTES



SECOND DISTRICT BRANCH

An outing meeting of the Second District Branch of the Medical Society of the State of New York was held on the afternoon and evening of Wednesday, June 8, 1932, in the Lawrence Country Club on the Rockaway Peninsula, overlooking the eastern end of Jamaica Bay. The total attendance was eighty. The President of the Branch, Dr. L. A. Van Kleeck, of Manhasset, and the Secretary, Dr. Alec N. Thomson, of Brooklyn, had arranged the outing in cooperation with the Queens County Medical Society, which acted as host to the Branch. The events were under the immediate supervision of Dr. A. W. Victor, Far Rockaway, President of the Queens County Society and Dr. M. L. Soners, Chairman of the Committee on Arrangements.

The afternoon program consisted of a golf tournament, in which fifty contestants were entered. A Prize given to the County Society whose members made the highest average score, went to Kings County. Eleven individual prizes, each consisting of a box of golf balls, were awarded to individual contestants.

Sixty members sat down to supper, after which the toastmaster, Dr. Victor, President of the County Society that was entertaining the Branch, introduced six speakers. It had been planned that the meeting should be purely recreational; but the good-fellowship and satisfying supper reacted

to produce receptive minds on part of the members. The speaking was, therefore, in a serious vein, and revealed the deep interest of the members in the activities of the Branch.

The field of the Second District was described by Dr. L. A. Van Kleeck, its President. The Medical Society of the State of New York was represented on the speakers' list by the following officers:

Dr. Chas. Gordon Heyd, President.

Dr. D. S. Dougherty, Secretary.

Dr. Charles H. Goodrich, Chairman of the Committee on Economics.

The greetings of the Medical Society of the County of Kings, the second largest in the state, were extended by its President, Dr. W. Linder, of Brooklyn.

The speaking was closed with a vein of humor expressed by Dr. Joseph Baum of Far Rockaway.

All the speakers emphasized the importance of personal acquaintance and good fellowship, both of which characteristics were in full evidence during the afternoon and evening.

The regular meeting of the Second District Branch will be held in November, after plans which were carried out last November with unusual success. (See this JOURNAL, December 1, 1931, page 1471.)

WOMEN'S MEDICAL SOCIETY

The Twenty-sixth annual meeting of the Women's Medical Society of New York State was held in the Town Club, Buffalo, on May 23, 1932, with the President, Dr. Marion S. Morse, of Binghamton, presiding. As is the custom of the Society, the women physicians meet on the first day of the House of Delegates, and then attend the meetings of the State Society. The Women members number about 125, and carry out a program which will do credit to their professional brothers.

A feature of the work of the Women's society is its support of from two to six Chinese girls while they are in training in Shanghai for the medical missionary field. This is done through the Committee on Medical Education, of which Dr. Mary A. Greene, of Wyoming County, is chairman.

The women doctors prepared a pageant on "Medicine from Early Times"; and had given it first in the Rochester meeting in 1930. The

pageant, in an amplified form, was repeated in Buffalo. Its author was Dr. Mary Newman Sloan, of Buffalo.

The scientific program was as follows:—

Invocation: Dr. Mary T. Greene, Castile, N. Y.

Greetings from the New York State Medical Society, Dr. William D. Johnson, of Batavia, N. Y.

Women in Medicine, Dr. Louise Beamish-Hood, Buffalo, N. Y.

Cancer of the Spine, Case Report, Dr. Louise M. Hurrell, Rochester, N. Y.

Ascariasis, Case Report, Dr. Alta Sager Green, Williamsville, N. Y.

Ear Conditions in Childhood, Dr. Rosaria B. Rossell, Buffalo, N. Y.

Bronchopneumonia in Newborn Infants, Dr. Margaret Warwick, Buffalo, N. Y.

The newly elected president is Dr. Mary J. Kazmierczak of Buffalo.

GRADUATE FORTNIGHT

The fifth annual Graduate Fortnight of the New York Academy of Medicine is announced for the two weeks beginning October 17, 1932.

The subject of the Fortnight will be "Tumors, benign and malignant."

The plan of the Fortnight will be similar to that of the four preceding years, and will consist of the following features:

1. An exhibition of specimens, both anatomical and pathological, in the building of the Academy, 2 East 103rd Street, New York. About 3,000 specimens are expected.

2. Evening lectures on tumor growths during ten days of the Fortnight.

3. Thirty clinical meetings and demonstrations to be held in eighteen hospitals.

Physicians generally are cordially invited to attend the Fortnight. There will be no charge for any feature of the Fortnight, but experience has shown the necessity that admissions to the clinics shall be by card.

Information may be obtained from the Academy, either by personal call, or letter, or by telephone, Atwater 9-4700.

KINGS COUNTY

The regular stated meeting of the Medical Society of the County of Kings was held on Tuesday, May 17, 1932, in the MacNaughton Auditorium of the Library Building, 1313 Bedford Avenue, Brooklyn, N. Y.

The following Scientific program was carried out:

1. Address, "Gall Bladder Disease—End Results in a Study of One Thousand Cases," Russell S. Fowler, M.D., F.A.C.S., Brooklyn.

2. Address, "Experiences with Encephalography and its Evaluation in Clinical Neurology," Emanuel D. Friedman, M.D., New York City.

The Director of Medical Activities reported to the Council of the Society that the volume of work due to the activities of the various committees of the Society has steadily increased and consumes a great deal of the time of the staff.

The home relief plan of the city, as far as medical care is concerned, has had generous support from the profession, although only a small amount of service has been authorized to the acutely ill in their homes. Unless greater appropriations are made, no funds will be available to continue the medical work and even other phases of relief.

The Milk Commission and the Special Committee appointed by the Council have been particularly active during the month. The profession is again requested to consider the use of Certified Milk because during the present period of stringency ordinary market milk may become of lesser nutritional value. The Director of Medical Activities reported that he had visited all of our Certified farms during the month of April.

The Society continues to receive inquiries from the laity regarding problems of relationship between the physician and the patient. The Director stated that the information service of the County Society endeavors to give advice and guidance to those seeking our aid. Some of the inquiries indicate a lack of tact and diplomacy in

explaining medical procedures to patients or those responsible for their welfare.

The Brooklyn Cancer Committee, which is identical in its professional representation with the Sub-committee on Cancer of the Committee on Public Health, has met and reviewed the work for the year. The committee determined to continue the policy of a minimum of publicity propaganda to the laity with a maximum of work with the medical profession. It is endeavoring to evolve a cooperative plan that will make possible the employing of a person to assist in a factual study of the cancer situation in Brooklyn. This fact finding is to include the social, economic, diagnostic and treatment phases of the problem as it confronts the physician and the community.

The Co-ordinating Committee of the Five County Medical Societies held its regular meeting on April 27th. The Committee on Illegal Practice received but few complaints during the month and verbal reports were received from the authorities concerning complaints in process of investigation. The Sub-committee on Radio Broadcasting of the Committee on Public Health continues to further the educational activities of the Society in preparing and supervising programs of interest to the laity.

The Director received a report that the special diphtheria program of the Health Department in the Red Hook area of Brooklyn had been completed; that the next area to be covered will be the Fort Greene District; that the social service agencies, the churches, the unions, and the hospitals had agreed to cooperate; and that the physicians of the district will be visited by a representative of the Health Department.

The Committee on Legislation suggests that state-wide groups of laymen concerned with maintaining the interests of medicine and medical progress be formed to show the public that their own best interests lie in opposing legislation

that would shackle scientific research and hinder the promotion of public health.

The committee feels that lay leaders such as school teachers, ministers, merchants, and the like, should be banded together in an intelligent

and vital effort to combat inimical and fanatical legislation. These groups would serve no interests but their own and make their presence felt by militant measures to defend their rights against the onslaughts of quacks and charlatans.

MONROE COUNTY

A special meeting of the membership of the Medical Society of the County of Monroe was held on April 19th under the auspices of the Tuberculosis Sub-Committee of the Society. Those present included an especially invited group of hospital social workers, public health nurses, and representatives of the County Tuberculosis and Health Association. The meeting was arranged as part of the program devoted to the commemoration of the fiftieth anniversary of the discovery of the tubercle bacillus by Dr. Robert Koch.

The program consisted of ten-minute talks as follows:

"The discovery of the tubercle bacillus by Dr. Koch," by Dr. Konrad Birkhaug, of the Rochester University Medical School.

"Diagnosis of Tuberculosis," by Dr. John J. Lloyd, chairman of the subcommittee on Tuberculosis and chairman of the County Tuberculosis and Health Association.

"Contact Cases," by Dr. E. G. Whipple, chairman of the Public Health Committee of the County Society.

"Education in Tuberculosis," by Dr. Ezra Bridge, Superintendent of the Monroe County Tuberculosis Sanatorium.

"The Family in the Spread of Tuberculosis," by Dr. E. K. Richard, Medical Consultant of the County Tuberculosis and Health Association.

"Community Control," by Dr. R. E. Plunkett, Director of the Division of Tuberculosis of the State Department of Health.

"Medical Leadership," by Dr. Thomas Parran, Jr., State Health Commissioner.

The regular meeting of the Medical Society of the County of Monroe was held in the Academy of Medicine Building, Rochester, N. Y., on May 17, 1932.

The meeting was called to order by the President, Dr. B. J. Slater.

Drs. Vida Matthews, R. N. Ritchie, E. H. Vail and Meyer Gerin were elected to membership.

The following resolution presented by Dr. A. S. Miller was adopted:

"WHEREAS, The State Medical Societies of several of the States are preparing and publishing valuable histories of medicine in their respective states, and

"WHEREAS, The Medical Society of the State

of New York has not undertaken any such publication recently, and

"WHEREAS, There exists among the membership of the Medical Society of the State of New York, men who have shown a real interest and aptitude to engage in historical study, be it therefore

"Resolved, That delegates from the Medical Society of the County of Monroe present at the annual meeting of the House of Delegates the matter of considering the appointment of a Committee to undertake the preparation of a History of Medicine in the State of New York."

The secretary announced that the following letter has been forwarded to all of the town boards and other appropriating bodies in the County.

"At the last meeting of the Comitia Minora (governing Board) of the Medical Society of the County of Monroe, on the recommendation of the Public Health Committee, it was voted to urge the appropriate bodies of town, city and county, and the Rochester Community Chest, to make every effort to maintain unimpaired health objectives, and to retain qualified and trained personnel and services which have proved their worth in safeguarding the first wealth of every community—the health of its people.

"We would appreciate it if you would read this resolution at the next meeting of the Town Board, with the added word that specifically the intent of this resolution as it refers to your Board is to urge that every effort be made to avoid the reduction in appropriation for health protective services and those for the care of the indigent sick, including particularly provision for nursing service and for immunization against diphtheria of preschool age children, and the control of communicable diseases.

"It is a recognized fact that priceless as is the power to cure disease, power to prevent it is worth far more to the community."

The personnel of the Periodic Health Examination Committee was announced as follows: Dr. Sol. J. Appelbaum, Chairman; Drs. Faxon, Kaiser, Morris, Sawyer, Slater and Whipple.

The speaker of the evening was Dr. Royd Ray Sayers, Chief Surgeon U. S. Bureau of Mines, Washington, D.C., on the subject "Physical examinations of workers engaged in hazardous occupations."

The meeting adjourned at 10.15 p.m.

WILLIAM A. MACVAY, M.D., *Secretary.*

DUTCHESS-PUTNAM COUNTY SOCIETY

A regular meeting of the Dutchess-Putnam Medical Society was held Wednesday, May 18th, 1932, at St. Francis Hospital, Poughkeepsie, N. Y. The meeting was called to order by the President, Doctor William A. Krieger at 9:00 P.M.

The minutes of the previous meeting were read and approved.

Doctor Roberts offered the following resolution which was adopted.

Your Committee on the Blind has taken into consideration the letter dated March 11, 1932, from Grace S. Harper, Executive Secretary of the Commission for the Blind and wishes to present the following resolution:

WHEREAS it is believed that the recent recommendations of the Commission for the Blind are of great importance for the prevention of blindness in infants, BE IT RESOLVED

1. That the members of the Dutchess-Putnam Medical Society are hereby urged to adopt the following procedure in all cases of ophthalmia neonatorum irrespective of whether or not such cases appear to be gonorrheal in origin:

a. Prompt hospitalization.

b. Isolation with the mother to assure breast feeding, this isolation to be continued until two specimens of exudate from the eye, taken two days apart, are reported negative for gonorrhea.

c. Supervision and treatment of the mother, if infected with gonorrhea, to safeguard the baby at any future pregnancy.

d. Prompt reporting to the health officer of all cases.

2. That the members of this Society take cognizance of the fact that delay in making hospital arrangements because of financial difficulties is unnecessary, due to the fact that the State Commission for the Blind, 80 Center St., New York City, has a revolving fund by which means it is possible to underwrite hospital expenses temporarily, pending arrangements for local funds; that hospital arrangements may be made in such cases with the Commission by long distance telephone or by telegram; and that if cases require hospitalization at times when the Commission office is closed, they may be sent at once to a hospital on the responsibility of the Commission, providing notification of such action is forwarded immediately to the Commission office.

3. That the Secretary of the Society transmit a copy of this resolution and the action of this Society thereon, to the Commission.

A communication from Doctor Bloodgood was read and ordered filed with the Cancer Committee. It was also voted to invite Doctor Bloodgood to visit the Society at the Fall meeting if possible.

The scientific program consisted of a paper by Dr. LeRoy W. Hubbard, Director of Extension, Georgia Warm Spring Foundation, "After-Care Treatment of Poliomyelitis," illustrated with motion pictures.

H. P. CARPENTER, *Secretary*.

BRONX COUNTY

A regular meeting of the Bronx County Medical Society, held at Elsmere Hall on May 18, 1932, was called to order at 9 P.M. with the President, Dr. Smiley, in the Chair.

Drs. Abraham Bellwin, Vincent P. Casey, Julius Kavee, William Levine, Sigmund Nagel and Henry A. Wahn were elected members.

Dr. Projector, Chairman of the Arbitration Committee in Compensation Cases, reminded the members of the proper procedure in connection with the work of the committee.

The secretary read the report of the subcommittee criticizing the majority report of the Governor's Committee to Investigate Medical and Hospital Problems under the Workmen's Compensation Law. The Comitia Minora recommended that the report of the subcommittee be adopted. The President announced that it has

already been approved by the other County Medical Societies of Greater New York. It was then moved and carried that it be adopted by the Bronx County Medical Society and presented at the annual meeting of the State Society in Buffalo.

The Society adopted resolutions on the death of Dr. Charles S. Bumstead, an honored member.

Dr. Benjamin H. Archer, Chairman of our Committee on Medical Economics, presented a paper on "A Plan to Establish Private Group Clinics in the County of The Bronx."

Dr. Lewellys F. Barker, Emeritus Professor of Medicine, Johns Hopkins, Baltimore, read a paper on "The Evolution of Group Practice, Retrospect and Prospect."

I. J. LANDSMAN, M.D., *Secretary*.

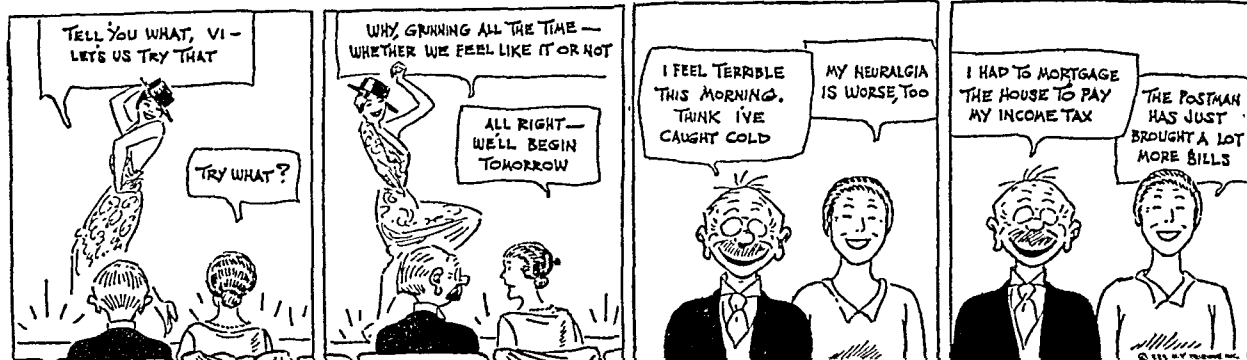


THE DAILY PRESS



Mr. and Mrs.—

Applying Stage Manners to the Home



From New York Herald Tribune, April 6, 1932

DESTINY OF MAN

Shakespeare commented on the final destiny of man's body by saying:

"Imperial Caesar, dead and turned to clay
May stop a hole to keep the cold away."

It is common to call a man a "poor fish," but one of the European nations has officially classified his body as "dried fish," according to an editorial in the *New York Sun* of May 4.

After describing the normal life of an Egyptian whose mummy was recently sent to Europe, the *Sun* says:

"One day he died and was buried with elaborate funeral ceremonies. He was entombed in a vault furnished with all the accoutrements, ornaments, utensils, weapons, servants, food and statuary customarily prepared for the use of the dead

so that their future destiny would be quite as happy as the worldly life they left behind when they died.

"Centuries passed before archæologists dug in the sand and found the tomb of the man of ancient Egypt. Eventually his mummy was sent northward on a long journey out of Egypt and across the Mediterranean Sea to Poland, where it was to become one of the treasures in the Warsaw Museum. But to the customs officials of Poland the body of the man from Egypt was only imported merchandise on which a duty had to be collected. The Polish tariff had no provision covering imported mummies. After some perplexity the customs officials finally decided this week to admit the man from Egypt, but they classified his mummy as 'dried fish.'"

THE CRY-BABY

Angelo Patri, the Principal of one of the Public Schools of Brooklyn, writing his "Know Your Child" column in the *Brooklyn Daily Eagle* of April 29, gives the following practical advice about the cry-baby:

"The little child is soon trained. If you say 'No' and stick to it, tears or no tears, and use plenty of cool water to wash away the tears, he soon learns not to cry. But the older child who has formed the habit is harder to cure. Make it a rule that he gets nothing for crying but a good face washing. Every time he weeps he is to go to the bathroom and wash his face and hands. He is not to appear before others with signs of tears. Crying is a purely private matter.

"If you enforce this idea and insist that crying be done privately, half the fun of the weeping has departed. An audience lends spice to tears and temper. Take that away and there is little left.

"Never tease a cry-baby. Let him alone. Do not mention his weakness to other people, and be more than careful not to speak of it in his presence to other people. Such children are unusually sensitive. They are carrying a heavy burden of self-consciousness, self, self, and only self, fills their minds. This is not their fault, but it is their misfortune. Treat them for that and help them.

"Always give the cry-baby something to do. Give him some light task that makes him move about, do something that he rather likes to do. That takes him out of the presence of other people, which is desirable. It takes his mind off himself and directs it away from himself, which is essential to his mental health. If he breaks down and cries, send him, with a gesture, to wash himself free of tears.

"Before treating a cry-baby have him examined by a responsible children's specialist."

TOAD PRODUCTS

People have forgotten the jewel that lay in the toad's head, but they still remember the warts that it brings one handling it according to popular belief. The New York *Sun* of May 9 has the following editorial description of some of the therapeutic products that are actually secreted by the toad.

"Modern science shows that the ancients, in ascribing valuable properties to the squat amphibian, were right; they simply lacked the ability to determine what these properties were. The discovery that toad poisons are a promising source of powerful medicines was reported the other day to the Federated Societies for Experimental Biology. Adrenalin was yielded by the poison glands of twelve species of toads from five continents. Powerful chemicals called bu-

fogins and bufotoxins, with medicinal effects resembling those of digitalis, were found, in addition to seven kinds of bufotenines, potent substances that stimulate the heart. The toads also supplied ergosterol, the mother of vitamin D. Placed under ultra-violet light, this chemical produced enough vitamin D to cure rickets in rats.

For centuries the Chinese have used for sinus trouble, inflammatory pains and nose bleed a toad poison medicine called ch'an su. Occidental science has now shown why the Oriental essence was efficacious. The extracts are the results of several years' work by Dr. K. K. Chen and Dr. A. Chen, of the Lilly Research Laboratories, Indianapolis, and Dr. H. Jensen of Johns Hopkins University."

ANTI-VIVISECTION

The New York *Herald Tribune* of May 31 contains the following editorial on anti-vivisection:

"The New York State Medical Society has passed, unanimously, a resolution calling upon its members to resist the danger of anti-vivisectionist agitation and legislation. It appears that this battle is so far from won that it may have to be fought all over again; that the threat of laws which may stop all experiments upon live animals is serious; that the professed ideal of the anti-vivisectionists is high enough, their voices loud enough and their endowment large enough to make determined opposition necessary.

"Anti-vivisection may be described as elephantiasis of the instincts of mercy and justice. The anti-vivisectionist does not state that the sufferings of laboratory animals (which he grossly exaggerates) are too great a price to pay for human health; he goes much farther and, blinded by his sense of mercy, denies that the experiments or the remedies derived from them are useful to health at all.

"A study of the pamphlets circulated by the New York Anti-Vivisection Society is instructive. Here we find, in language bordering on

hysteria, statements to the effect that if the muzzel is abolished and dogs are given water 'Pasteurism will die a natural death'; that anti-rabic inoculations are dangerous in any case, murderous in some, and give hydrophobia instead of curing it; that there is no such disease as hydrophobia, anyhow, and that both hydrophobia and lockjaw may be cured by taking a very hot bath; that a cure for cancer is 'within reach of all'; that germs are the result, not the cause, of disease, and 'may be inhaled or ingested without harm'; that parents should refuse to let their children be inoculated against diphtheria; that it is the 'passionate cruelty' of the 'lustful vivisection' that 'occasions the sacrifice of millions of sentient beings on the altar of the false god—science'; that 'smallpox probably would be as extinct as the black plague but for the efforts of the vaccinators and the serum manufacturers to keep it alive as a matter of business'; that 'vaccination sows the seed of erysipelas, scrofula, cancer, leprosy, consumption, eczema, syphilis, etc.'

"What sows the seeds of anti-vivisection, that pathetic disease of one of our highest centers, that hypertrophy of the human heart?"

HARD TIMES FOR PRISONERS

The New York *Times* of May 16 suggests one excellent result of hard times in the following editorial:

"Speaking about the ill wind that blows nobody any good, there is the finding of the secretary of the State Commission of Correction that the depression has made prisoners more tractable.

"They have food and clothing and a roof over their heads—elemental necessities which some of

their freer brethren are finding it increasingly difficult to obtain these days. But that is not all. If they were to escape in the midst of hard times, the lack of available jobs might force them to apply for public relief. That would be likely to result in their prompt apprehension, with an added prison sentence. Mr. Tremain goes so far as to predict that there will be no more riots until the depression ends."



BOOK REVIEWS



MIDWIFERY. By Ten Teachers, under the direction of COMYNS BERKELEY, M.A., M.D. Edited by COMYNS BERKELEY, J. S. FAIRBAIRN and CLIFFORD WHITE. Fourth edition. Octavo of 740 pages, illustrated. New York, William Wood & Company, 1931. Cloth, \$7.50.

The authors of this text book are all teachers in London medical schools, and represent the thought and teaching in eight general hospitals, and in three large lying-in hospitals in London. The whole corps of authors has acted in an editorial and revisional capacity on each chapter of the book, so it has acquired more uniform characteristics than is generally possible with collective authorship.

The first edition was published in 1917. This new, fourth edition has been extensively revised, and brought down to date. The Physiology of Ovulation and Menstruation, Toxaemia of Pregnancy, Abortion, Puerperal Sepsis, and Anesthesia in Labor, have been almost completely rewritten, and new matter has been added on Medical Induction of Labor and Blood Transfusion.

This book was written for students, and it is certainly an excellent text book. It is clearly written, practical, and well arranged. As a reference book, too, it has much to commend it, and the volume should find a place in the libraries of obstetricians and other medical men who may occasionally wish to refresh their memory on the subject of normal or abnormal pregnancy.

W. S. S.

THE FUNDUS OF THE HUMAN EYE. An illustrated atlas for the physician. By ERNEST CLARKE, C.V.O., M.D. Octavo of 51 plates. New York, Oxford University Press, 1931. Cloth, 18/. (Oxford Medical Publications.)

An effort to meet the requirements of the general practitioner and interest in a compact atlas of fundus paintings has been attempted by a number of authors. The accurate reproduction of proper tints and shades to give a realistic effect is difficult. The creation of the effect of relief of various details is practically impossible except by the use of the stereoscope. This relief is obtained by the ophthalmoscopist through the phenomenon of parallax. The slight unconscious movements of the examiner's head and the patient's eye give the impression of depth. It might be possible to attain a similar effect by embossing the elevated portions of the pictures. The authors of such atlases would do well to impress upon the reader that the pictures presented are idealistic representations, that they are composites of numerous views of disc shaped areas of observation and that it is from these smaller pictures of various entities from which the observer creates a mental picture similar to that depicted by the artist. These smaller atlases certainly have a place in the necessary reference literature, and the volume under discussion supplies a beautiful and useful source. One might feel that the refinements of color do not exactly meet his idea of the actual appearances but after all the variation of tint and shade is very great from case to case and different observers do not see them under the same conditions. The minor deficiencies of our color sense are very common. The preface of this volume stresses the value of the pictures as an aid to interpretation. It has become an axiom that our errors of diagnosis are more commonly through our overlooking the details of the presented evidence. If this is so, one would feel that the descriptive matter with the plates is inadequate. It would have been well to

call the student's attention to the features of the many details making up the whole. Perhaps an introduction dealing with the analysis of the findings observed would supply the want and enable the student to develop a logical method of putting together his findings so as to assure it a true interpretation.

The addition of a few pages for this purpose would not render the work too cumbersome. The reviewer would warn the student that too much should not be expected from a volume of this type, and he feels that he can recommend it as well worthwhile.

JOHN N. EVANS.

PHANTASTICA NARCOTIC AND STIMULATING DRUGS. Their Use and Abuse. By LOUIS LEWIN. Octavo of 335 pages. New York, E. P. Dutton & Company, 1931. Cloth, \$3.75.

The writer of this book, a German authority on drugs, has made an exhaustive study of this branch of the drug kingdom and has chosen to include many more substances than we are accustomed to consider. Moreover, he has also introduced us to a new title—"Phantastica"—to cover this vast field of unrelated chemicals.

From the standpoint of the physician reader this new coined word will convey a definite but an entirely different meaning, inasmuch as the author tells us things which should make us gasp with amazement. He tells us that "the Americans consume twelve times as much opium as any other people in the world." If that be true then we must modify our suspicions of obscure cases to include dope fiends as well as luctics. Furthermore, he warns us to suspect our confreres of being morphine habitues and he accuses 40% of doctors and 10% of doctors' wives of indulging in such practices.

There are many more statements which would even awaken a morphine addict out of his lethargic state. Were it not for the fact that the author of this book has made a profound study of this subject, such remarks as he has made would immediately be laughed off. However, we may choose to disagree with him we must realize that even though such statistics as he has offered appear sensational there may be some truth in his presentation and that he may possibly have erred in exaggerating facts than in stating an untruth.

EMANUEL KRIMSKY.

ANNALS OF THE PICKETT-THOMSON RESEARCH LABORATORY. Vol. VII. The Pathogenic streptococci: The Role of the Streptococci in Erysipelas Skin Diseases, and Measles. Quarto of 441 pages, illustrated. Baltimore, Williams & Wilkins Company, 1931. Paper \$10.00.

This book is the fifth volume of a series devoted to the streptococci, which have been prepared under the auspices of the Pickett-Thomson Research Laboratory of London.

These volumes are in the nature of an Encyclopaedia of bacteriological research in which the authors have carried out a plan of collection and classification of the thousands of papers published by research workers all over the world on this question of the relation of the streptococci to certain diseases.

The authors have accomplished a work of the utmost importance for the progress of medical science of today, and the research worker of tomorrow will be everlastingly grateful to them, for the time that they have saved him by their own patient toil. Despite the enormous

labor required they succeeded in this stupendous undertaking, and the present volume like its predecessors, represents a product containing the most complete study of the literature on the streptococci which has ever been published. Despite an unpretentious paper binding, it nevertheless represents a literary jewel for the medical reference library.

JOSIPH C. REGAN

CLINICAL ROENTGEN PATHOLOGY OF THORACIC LESIONS By WILLIAM H. MEYER, M.D. Octavo of 272 pages, illustrated. Philadelphia, Lea & Febiger, 1932. Cloth, \$6.00.

The first of a series in preparation dealing with Roentgen Diagnosis. The author in excellent teacher, presents the subject of Thoracic Roentgenology in a didactic, concise manner following his fashion of instruction as instituted at the Post Graduate Medical School. There are no references, the book being written to initiate proper Roentgen procedure and evaluation.

The physical, anatomic and pathologic factors are discussed especially as influenced by posture, exposure, technique, hydrostatic and other physical principles, following which a section is given to Roentgen Pathology, describing the various appearances of pathologic states as silhouetted by the Ray.

Diseases of the thoracic cage—lungs—pleura—mediastinum and heart complete the book, a final small chapter being given to oesophageal and subphrenic lesions insofar as intrathoracic differential diagnosis may be involved.

There are many reproductions including 113 original line drawings illustrating varying pathologic states. This alone is sufficient reason for its success. All students should profit richly by its perusal and to those engaged in teaching this specialty, the book comes as a most welcome addition to the family.

MILTON G. WACHT

MENTAL HEALERS Franz Anton Mesmer, Mary Baker Eddy, Sigmund Freud. By STEFAN ZWEIF. Translated by Eden and Cedar Paul. Octavo of 363 pages. New York, The Viking Press, 1932. Cloth \$3.50.

What a treat!

To those familiar with the previous writings of Stefan Zweig a work of this character needs no introduction and certainly no apology. In a style hypnotic in its free, soothing, flow and matchless charm the author presents proven historical facts colored by his own interpretation of their social significance. The word paintings of Franz Mesmer, Mary Baker Eddy and Sigmund Freud can not fail to impress, inform and entertain.

A spirit of tolerance pervades the entire book.

Few physicians are apt to recall that Franz Mesmer was a well known Medico established and socially prominent early in his career. Also a scholarly person with a scientific approach to problems. Today his name connotes a sort of hocus pocus. The author polishes our critical lenses and by placing them in a modern setting enables us to view a much damned physician with a new respect.

The author's description of the life and personality of Mary Baker Eddy is perhaps the most vivid and interesting. To a psychiatrist she is very real and quite human. Zweig emphasizes that her followers in attempting to gloss over the early not so pleasing life of this woman in an official rose coloured biography "have erred in submerging her very human qualities." The author's story of the harnessing of this iron will the persistent force of her hysteria making her a powerful force at fifty, makes an amazing and interesting modern romance.

Freud is treated in the same interesting fashion.

One is impressed with the tremendous labor involved in producing this book.

H. R. MERWARTH

CONTROL OF CONCEPTION An illustrated medical manual. By ROBERT L. DICKINSON and LOUISE S. BRYANT. Octavo of 290 pages, illustrated. Baltimore, The Williams & Wilkins Company, 1931. Cloth, \$4.50. (Medical Aspects of Human Fertility Series issued by the National Committee on Maternal Health, Inc.)

The scientific and sociological premises upon which the practice of contraception are based are sufficiently set forth so that the reader is readily guided as to when advice to the patient is justified and as to the method applicable in a given case.

Dr. Dickinson's wide experience as a gynecologist and as a teacher, his talent for original illustrations and special aptitude for gathering medical data, are predominantly evident in this manual which he and his co-worker, Dr. Bryant, have written.

It is readily understandable that under such auspices the manual will appeal to the Medical Profession.

ADOLPH BONNER

HEALTH PROTECTION FOR THE PRESCHOOL CHILD A National Survey of the Use of Preventive Medical and Dental Service for Children under Six. Report to the Section on Medical Service, George Truman Palmer, Dr. P. H., Chairman Subcommittee on Statistics, etc. White House Conference on Child Health and Protection. Octavo of 275 pages, illustrated. New York, The Century Co., (c 1932). Cloth, \$2.50.

Another publication on the further report on the White House Conference on Child Health. Largely the statistical data gathered from all the states in the Union except six, concerning four major health preventive measures, namely:

- 1 Health examinations
- 2 Dental examinations
- 3 Vaccination against small pox
- 4 Immunization against diphtheria

The committee entrusted with this work has taken great pains to obtain as near authentic figures as possible both in rural and urban communities. The larger centers have given a better account of themselves owing to their more thorough organization.

This work was very ably conducted by the chairman of the sub committee, Dr. G. T. Palmer, of the United States Public Health Department who reported his findings in person during the conference in Washington.

Health authorities city and rural administrations and other interested in Child Health measures will find useful information in this publication.

HARRY APPEL

A HANDBOOK OF OCULAR THERAPEUTICS By SANFORD R. GIFFORD. M.A. M.D. 12mo of 272 pages, illustrated. Philadelphia, Lea & Febiger, 1932. Cloth, \$3.25.

It is truly a pleasure to review this concise practical work on ocular therapeutics. In the first place it does not discuss a great variety of agents which are new and untried. This does not mean that the most modern preparations are neglected. In fact, their consideration is very well developed.

Not only are modern drugs discussed but biological preparations are described and the technique for their use carefully outlined.

Various physical agents are also described. These include radium, ultra violet light, massage, diathermy and related procedures. Not only are the various agents discussed, but methods of management of various ocular diseases and special lesions are discussed. The oldest and most experienced ophthalmologist as well as the medical student would do well to secure this work at his earliest convenience. The reviewer predicts many editions for this real contribution to American ophthalmic literature.

JOHN N. EVANS



OUR NEIGHBORS



MEDICAL ECONOMICS IN WASHINGTON STATE

The April issue of *Northwest Medicine* contains the report of the Committee on Economics appointed by the House of Delegates of the Washington State Medical Association last August. The report begins as follows:

"The Committee on Economics elected by this body, begs to present to you the following report of its study of the economic conditions of the practice of medicine in the state of Washington. There are registered in this state:

"Doctors of Medicine	1920
"Osteopaths	375
"Chiropractors	450
"Drugless Healers	325

"The membership of the State Medical Association is 1368. The population of the State of Washington is 1,563,396 giving one licensed practitioner to each 508 of population. This does not take into account the Christian Science practitioners.

"A questionnaire was sent to each registered doctor of medicine in the state, of which there were 825 returned. The purpose of this was to get a cross section of the doctors of the state."

The questionnaire contained fourteen items, as follows:

1. Is your practice medical, surgical, special, or general?
2. Location of practice?
3. Are contracts prevalent in your community?
4. Are you in favor of industrial contracts?
5. Are you in favor of supplemental health contracts?
6. In your opinion are contracts advantageous?
7. Do you favor lodge practice?
8. Do you have any contracts?
9. Do you favor free choice of physicians?
10. Are you in sympathy with the complete state control of medicine?
11. Do you favor the panel system as practiced in England?
12. Do you favor voluntary or compulsory insurance for wage earners whose income is under \$2,000 per year?
13. Do you believe in paid solicitors or managers for doctors?
14. Do you believe in a minimum fee for contracts set by the state?

The purpose of the questionnaire was stated as follows:

"The chief purpose of the questionnaire was to call attention to the individual members of the association, the various economic problems that are confronting the sick and the various medical services. It is surprising to find how poorly informed the average doctor is, especially in reference to wage scales, incomes, general costs of living, insurance plans for the sick, what other countries are doing and what are his legal rights. Transplanted from hospital and medical school to a community, city or country, he is so busy with clinical practice, digging in and holding on, that he cannot see beyond his own circle, until he suddenly realizes that his income is falling off and he wonders what is the matter. Then he questions and looks around."

A discussion of the answers covers five pages of the Journal.

Compulsory insurance for wage earners whose income is under \$2,000 per year (Question 12) was discussed as follows:

"Sixteen per cent were in favor of voluntary insurance; fourteen per cent for compulsory and sixty per cent for insurance, type not specified, thus making ninety per cent who believe that some form of sickness insurance would be a good plan. In conferences with the county societies we found that most doctors were doing a large amount of charity work which could largely be taken care of through sickness insurance.

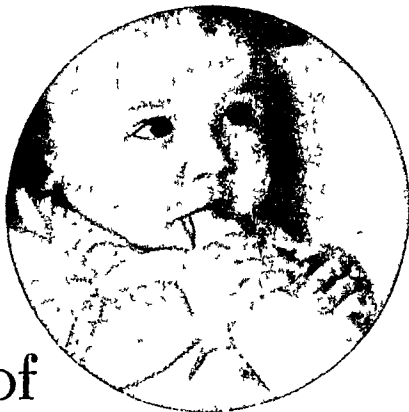
"Those favoring insurance argued that most families failed to, or could not budget their incomes to take care of sickness; it enables the workman to pay for medical care out of his own earnings; it distributes the cost of sickness over the many and is founded on solid insurance principles, and it assures the doctor of his fee. Others feared that it would be abused and lead to the dole system."

Question 13, on paid solicitors for doctors, will surprise the doctors of New York State. The discussion of the answers was as follows:

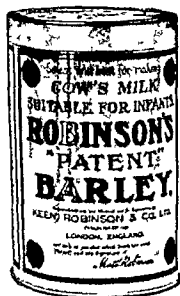
"Ninety per cent of the doctors were emphatically opposed to solicitors, while ten per cent believed that industrial clinics, hospital associations and those holding contracts absolutely need lay managers.

"Those who approved of managers and solicitors stated that a doctor's service is mostly scientific, that he has little inclination or ability to attend to the financial phase of practice and a manager would be a great help. Many clinics and hospital associations openly employ solicitors in

(Continued on page 766—Adv. xii)



..and in cases of
Infantile Gastro-Enteritis



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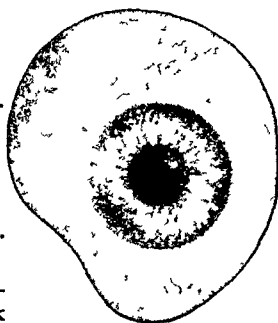
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(Continued from page 764)

express defiance of the ethics of the American Medical Association. They claim they cannot obtain contracts, adjust claims and differences and conduct their affairs on a paying basis without solicitors. A few years ago a doctor was sued for six thousand dollars by his solicitor as his portion of an eighteen thousand dollar contract; the judgment was sustained by the supreme court and is a matter of court record. Our ethics are either right or wrong; if right, they should be sustained, and if wrong, they should be changed.

"The abolishing of solicitors is essential to maintain the ideals and standards of practice. It is expressly forbidden in our code of ethics but has not been enforced. Solicitation on the part of lawyers is sufficient grounds to revoke their licenses to practice and is so dealt with by the Washington Bar Association. The evils of solicitation are apparent to all; it constitutes an unfair method of obtaining practice, is often conducted through graft and is not very different from the methods of advertising doctors and institutions. Under the proposed new medical practice act it can be abolished through the board of medical examiners."

Graded fee schedules are discussed, as follows:

"A series of graded fee schedules for the different brackets of wage earners has also been suggested. According to a test case in the Supreme Court of Texas, 'a sliding scale for the costs of medical care is customary and fair. Patient and physician must concur in regard to the patient's ability to pay as a matter to be properly taken into consideration in fixing, by express contract, fair medical fees.' There could be one scale for incomes up to \$1,200 per annum, a second one for incomes from \$1,200 to \$2,400, a third one for \$2,400 to \$3,600, and above that fair medical fees.

"This would require no machinery, involve no laws and would be the offer of organized medicine to take care of the low wage earners at a schedule of fees within their incomes. These graded schedules should be determined by each county medical society, conforming to the differences in practices found in each community. Each county group of doctors has its own problems."

The report was presented to a special meeting of the House of Delegates on April third.

PUBLIC RELATIONS IN CALIFORNIA

This Journal of December 15, 1931, page 1554, printed an abstract of an account of a proposed Department of Public Relations in the California Medical Association, in accordance with the action of the House of Delegates on April 30, 1931. *California and Western Medicine* of February contains the minutes of a meeting of the

(Continued on page 767—Adv. xiii)

(Continued from page 766—Adv. xii)

Council held on January 16, 1932, which adopted the following resolution establishing the Department:

"Resolved, That a Department of Public Relations of the California Medical Association be and hereby is established, to consist of a director, an Advisory Committee, and those standing committees or commissions of the California Medical Association whose present functions deal with Public Relations, Public Health or Public Education. It is further

"Resolved, That the structure and function of the Department of Public Relations be as follows:

"1. The function of the Department shall be to promote the leadership of the medical profession in public health activities, public health education, legislation dealing with public health and medicine, and in the distribution of adequate medical care.

2. The actions, policy and budget of the Department shall be authorized by and subject to the approval of the Council of the California Medical Association or the Executive Committee, under authorization of the Council.

"3. The director of the Department shall also have the title of 'executive secretary' as provided by the Constitution of the California Medical Association. He shall be appointed annually by the Council at its reorganization meeting and his salary and duties shall be fixed by the Council. He shall be a graduate doctor of medicine but need not necessarily be a member of the California Medical Association.

"4. The director shall, with the cooperation of the Advisory Committee, assist the component committees of the Department in carrying out their respective duties as designated in the Constitution of the California Medical Association or as defined by the Council or House of Delegates.

"5. The Advisory Committee shall consist of the chairmen of the component committees or commissions together with the president, the secretary and the general counsel of the California Medical Association. The Advisory Committee shall be known as the Committee on Public Relations and shall assist the director in coordinating the work of the component committees. This committee shall select its own chairman and secretary (who shall also be the chairman and secretary of the Department at meetings thereof) and be governed by the provisions of Chapter V of the By-Laws of the California Medical Association regarding standing committees.

"The component committees of the Department of Public Relations at present shall be the Committee on Public Policy and Legislation, the Committee on Health and Public Instruction, the Committee on Medical Economics, the Committee on Hospitals, Dispensaries and Clinics, and the Cancer Commission. The Council at its dis-

(Continued on page 768—Adv. xiv)



by the American Medical Association

Committee on Foods

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This delicious chocolate flavor food-drink is unusually high in caloric value—yet easily digested and readily assimilated. Children love it. Invalids and convalescents drink it eagerly. And every glass of Cocomalt is equal to almost two glasses of plain milk in caloric value; for by actual test Cocomalt adds 110 extra calories to a glass of milk and contains not less than 300 ADMA (30 Steenbeck) units of Vitamin D per ounce—the quantity recommended for one drink.



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Maltcao

BUILDS FOR THE YEARS AHEAD

(Continued from page 767—Adv. xiii)

cretion may add other committees to the Department."

The committee consists of certain officers of the California State Medical Association, and the Chairmen of certain committees. Its present personnel, as printed on advertising page 2 of the March issue of *California and Western Medicine*, is as follows:

John H. Groves, M.D., Chairman of the Committee on Medical Economics, Chairman.

Emma W. Pope, M.D., Secretary-Treasurer of the State Association, Secretary.

Junnis B. Harris, M.D., President.

Joseph M. King, M.D., President-Elect.

Harley F. Peart, General Counsel.

Fred B. Clarke, M.D., Chairman Committee on Public Instruction.

John C. Ruddock, Chairman of Committee on Hospitals, Dispensaries and Clinics.

Charles A. Dukes, M.D., Chairman of the State Cancer Commission.

The Council has chosen as Director of the Department Dr. Walter M. Dickie, former Director of the California State Board of Health, whose office will be at Room 2039, Four Fifty Sutter Building, San Francisco.

The Department plans to publish a special page in each issue of the Journal. That in the March Journal is a reprint of an article on Medical Insurance, by Michael M. Davis, Ph.D.

EXORBITANT MEDICAL FEES IN CALIFORNIA

The leading editorial in the March issue of *California and Western Medicine* is on the subject of exorbitant medical fees.

It opens:

"In an editorial printed in the January, 1926, number of *California and Western Medicine*, the last William E. Musgrave, former editor, discussed some of the evil effects which result to the prestige of the entire non-sectarian medical profession, through exorbitant charges by a comparatively small number of members of the profession.

"When the other day the present editor received a copy of an itemized statement for services rendered by a physician in a moderate-sized city in a mid-west state, to an elderly patient to whom he had been called to give treatment for a fractured neck of the demur, the editorial above referred to was called."

The itemized bill was as follows:

"February 2, 1930—Physical examination, diagnosis application of splint, etc.	\$ 250.00
"February 3, 1930—Operation, reduction of fracture, application of body cast, etc.	1,500.00

(Continued on page 769—Adv. xv)

(Continued from page 768—Adv. xiv)

"February 3 to April 15, 1930—145 hospital visits, including treatment of fracture and intravenous injection for chronic arthritis, and treatment of ulcers at \$10 per visit (Editor's note: A period of 70 days)	1,450.00
"March 10, 1930—Operation, removal of cast, reapplication of bivalved cast, curettement of ulcers and treatment of ulcers	850.00
"April 15 to May 4, 1930—Forty home visits, including treatment of fracture, intravenous injections for arthritis, treatment of ulcers at \$15	600.00
"May 4, 1930—Night house visit, five hours' detention with patient, injection of stimulants, artificial respiration, etc.; attempting to save patient from death, at \$50 per hour	250.00
"Total for professional services rendered	\$4,900.00
"Paid on account—Feb. 9, 1930, \$85; Feb. 17, 1930, \$35; Feb. 25, \$35; Mar. 1, \$35; Mar. 8, \$35; Mar. 15, \$35; Mar. 22, \$35; Mar. 29, \$15.	310.00
"Total paid on account	310.00
"Amount due	\$4,590.00

"Readers of *California and Western Medicine* can come to their own conclusions as to the justice of charges such as the above; and can estimate for themselves the effect which publicity of such charges will have in that particular community, in forming lay opinions on the local medical profession's standards of fair dealing."

The editor comments as follows:

"When it is realized that the small group of exorbitant fee chargers, more than almost any other factor, have in recent years destroyed much of the reputation formerly possessed by the medical profession for humanitarian and honorable dealing, it naturally follows that aloofness or non-discussion of deplorable exorbitant fee facts will only make matters worse, instead of better."

"It is the viewpoint of many physicians that this small number of exorbitant fee chargers who are scattered through the profession have in recent years brought more disgrace to a noble guild than did the shysters or out-and-out quacks of days gone by, who in that time were supposed to be part of us."

"If their misdeeds in the way of extortion reacted only upon themselves, then the profession would have little need to give them further thought. Unfortunately, however, every outrageous example of exorbitant fee charging is passed from lay person to lay person, until even

(Continued on page 770—Adv. xvi)

SARATOGA NATURAL MINERAL WATERS

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STATE OWNED AND STATE BOTTLED

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Saratoga Geyser is a naturally carbonated alkaline water which has proven to be very beneficial as an aid in the treatment of many acid conditions including: acidosis accompanying gout, rheumatism, neuritis and diabetes, acid dyspepsia and hyperacidity.

Saratoga Hathorn No. 2, mildly purgative, and Saratoga Coesa, mildly laxative, are naturally carbonated saline waters possessing valuable catalytic activity. They have proven beneficial in hyperacidity occurring in cases of acid catarrh of the stomach and atony of the stomach, and in cases of dyspepsia due to mental over-exertion. Because of the sodium chlorid in these waters they are not recommended for patients with nephritis.



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COMMITTEE ON PUBLICATION.

(Continued from page 769—Adv. xv)

well and kindly thinking members of the lay public are tempted to believe that nearly all members of the medical profession suffer from the same grasping dollar taint; except that some of the profession are more daring than others in the nefarious game. And because the stories of their excessive fees become a topic of general lay and professional conversation, these extortion specialists become powerful agents in seducing recent graduates from the profession's traditions of efficient service at decent compensation, to embark on careers of practice in which the sordidness of base monetary acquisitiveness becomes paramount to the doctrine of real service."

The editorial closes with excerpts from the editorials of 1926, citing instances of excessive medical charges.

JOURNAL IN NEBRASKA

The financial report of the *Nebraska State Medical Journal* is contained in the March issue of the Journal, and is as follows:

Direct Journal Receipts:	1931	1930
Advertising Space	\$5,044.63	\$4,926.88
Cuts	122.69	148.00
Copies Sold	8.05	14.22
Subscriptions to Journal	25.00	47.00
Dividend Cooperative		
Adv.	380.66	308.71
Dr. E. R. Hays, for print ing	5.00	
Total Direct Receipts	\$5,586.03	\$5,444.81
Share Dues Rec'd—Gen- eral Fund	1,773.00	1,761.00
Total Receipts—All Sources	\$7,359.03	\$7,205.81
Direct Journal Disburse- ments:		
Salaries:		
Dr. F. A. Long	\$1,200.00	\$1,200.00
Dr. R. B. Adams	1,300.00	1,300.00
	\$2,500.00	\$2,500.00
Publication Expense:		
Hulse Publishing Co.	\$4,519.72	\$4,373.71
Baker Bros. Eng. Co.	181.89	623.59
Bank Charge	3.95	3.43
Uni. Press	42.00	42.00
Total Direct Disburse- ments	\$7,247.56	\$7,542.73
Excess Disbursements over Cash		336.92
Excess Cash over Dis- bursements	111.47	
Cash on Hand, January 1.	433.03	769.95
Total Cash on Hand	544.50	433.03

STUDENT LOAN IN COLORADO

The March number of *Colorado Medicine* contains the following article on a loan fund for medical students:

"It has become an annual custom for the Voman's Auxiliary to the Denver County Medical Society to replace the regular February meeting with a subscription bridge party usually held at the Daniels and Fisher Tea room.

"This party is a benefit to raise funds for the Medical Student Loan Fund for the University of Colorado School of Medicine. At the regular meeting in December, 1928, largely as the result of the efforts of Mrs. T. Mitchell Burns who was then president, a motion was passed that the funds of the Auxiliary be used for some educational or philanthropic purpose, and a committee was appointed to take charge of the benevolent fund, as it was called. This committee recommended that at least \$100.00 be given annually to the Board of Regents of the University of Colorado Medical School to establish a student loan fund to be limited to junior and senior students.

"With the depression hitting the medical students as much as any one else, there has been a greater demand and far greater need

for loans. Dr. Maurice H. Rees, Dean of the University of Colorado Medical School, reports that there were fourteen loans made this year; he definitely knew of the need of five more and did not know how many were obtained outside of the institution—though he knew there were some. Because of the increased demand, each loan was limited for the first time to \$100.00 per student instead of allowing him the full sum needed as heretofore.

"This may give our county auxiliaries a suggestion for philanthropic work. If they have money at hand and so desire, they could contribute it directly to the Medical School or give (if they have not enough to start their own fund) through the Denver Auxiliary, thereby increasing this fund—full credit of course being given to the donating auxiliary. In this way, an auxiliary loan fund could be established to help our own profession; and who among us does not know of many outstanding and leading physicians today who struggled through great hardships, or who had to take years off at intervals between their courses in order to earn money with which to carry on toward the noble title of Doctor of Medicine?"

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ARLINGTON, New Jersey, 211 Stewart Av.—Attractive 7-room house; plot 120x103; oil burner; 2-car garage; 8 miles from New York City; 5 minutes' walk from station and bus lines; rent \$100 month or sell, easy terms, at a bargain price. Owner, Box 5, Care N. Y. State Journal of Medicine.

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HANOVIA CHEMICAL AND MANUFACTURING CO.

At the Annual Meeting of the Medical Society of the State of New York, recently held in Buffalo, the Hanovia Chemical and Manufacturing Company, Newark, N. J., had an excellent exhibit of their new super-intense ultraviolet lamps for general irradiation and for contact use with and without applicators. There were also shown the smaller and less intense Kromayer Oral Therapy Lamp designed especially for dental use, and the Physicians' Model Sollux Radiant Heat Lamp, which operates either with a 1,000-watt incandescent tungsten bulb or a 1,500-watt non-metallic resistor. These heat elements are interchangeable.

The outstanding features of the display, however, were the Super Self-contained Kromayer Lamp, affording an intensity capable of producing a first-degree erythema on contact in five seconds, and the handsome New Super Alpine Sun Lamp, announced as the most intense source of ultraviolet energy for therapeutic application, not requiring special wiring.

Among the many exclusive and valuable new features of this Super Alpine Lamp, perhaps the most important is the unique design parabolic reflector hood, whose reflecting surfaces are so placed as not only to multiply the effectiveness of the high-intensity burner to the equivalent of four unreflected burners operating

simultaneously, but also to project the rays so evenly over the field of irradiation that the distribution 30 inches from the burner is relatively uniform over an area 5 x 2 feet.

Several other innovations in the design of this lamp are of an importance warranting writing the company for further and detailed information.—*Adv.*

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"WHEN, AS AND IF"

the bottle-fed baby exhibits symptoms indicating partial vitamin B deficiency—described by Hoobler as (1) anorexia, (2) loss of weight, (3) spasticity of arms and legs, (4) restlessness, fretfulness, (5) pallor, low hemoglobin, etc.—

Dextri-Maltose with Vitamin B may be used in adequate amounts (up to 71 Chick-Roscoe units) without causing digestive disturbance. This ethically advertised product derives its vitamin B complex from an extract of wheat germ rich in B and brewers yeast rich in G. Physicians who have attempted to make vitamin B additions to the infant's formula but who have been obliged to abandon same due to diarrheas or other unfortunate nutritional upsets, will welcome Mead's Dextri-Maltose with Vitamin B. This is a tested product with rich laboratory and clinical background and is made by Mead Johnson & Company, a house specializing in infant diet materials.

Not all infants require vitamin B supplements, but when the infant needs additional vitamin B, this product supplies it together with carbohydrate. In other cases, the carbohydrate of choice is Dextri-Maltose No. 1, 2, or 3. See page xxii.—*Adv.*

ELIXIR MEDINAL

There are frequent occasions when the physician finds it desirable to administer sedative and hypnotic medication in fluid form rather than in tablets,

capsules, or powder. Many patients prefer taking liquids and appear to have greater confidence in the remedy when given in this way.

To meet this frequently expressed preference, Schering & Glatz, Inc., have introduced Elixir Medinal in addition to the powder, tablets and suppositories in which Medinal, the well known hypnotic, has always been supplied.

Elixir Medinal affords all the therapeutic effects of Medinal—quick absorption, prompt action, rapid elimination and freedom from depressant effects. It is pleasingly flavored, completely disguising the rather persistent taste of the medication. Each teaspoonful contains two grains of Medinal. The sedative dose is one or two teaspoonfuls, repeated as may be necessary; as a hypnotic, two to four teaspoonfuls should be given a half hour before bedtime. The trade package contains six fluid ounces. See page ix.—*Adv.*

FRENCH VICHY AT THE N. Y. STATE MEETING

An instructive, as well as attractive, exhibit at the meeting of the Medical Society of the State of New York in May, was the one made in behalf of the Compagnie Fermière de l'Etablissement Thermal de Vichy, of Paris.

To those physicians who had visited Vichy, France, it was especially pleasant to renew their associations by a visit to the French Vichy booth at the Buffalo meeting.

Many of the doctors availed themselves of the opportunity of learning about the latest improvements that have recently been made at the Thermal Establishment of Vichy for the comfort and convenience of the patients at this famous Spa this season.

French Vichy water has been known to the medical profession for many generations and is shipped to all parts of the world.

The term "French Vichy" has become a common form of expression to indicate the famous Vichy Célestins, so widely known to all physicians, who absolutely rely upon this ideal alkaline water for home treatment.

It is just as agreeable to drink Vichy Célestins in bottled form after its long journey from Vichy, France, and it is just as effective in this form as if the patient had gone to Vichy and taken the water at the Spring.

In view of the marked differences in the therapeutic properties of various mineral waters, it is well to specify "Célestins" in prescribing or recommending Vichy; otherwise, an inferior or artificial form of "vichy" or one possessing different properties from those of Vichy Célestins may be substituted.

The American distribution of Vichy Célestins and the other products of Vichy Etat is in the hands of American Agency of French Vichy, Inc., 503 Fifth Avenue, New York. See page v.—*Adv.*

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HERPES ZOSTER· REPORT OF A CASE OF THE PALM AND TWO FINGERS, AND FIFTEEN OTHER CASES, TREATED WITH PITUITRIN*

By HENRY D NILES, M D, NEW YORK, N Y

IN 1923, Vandell¹ was the first to report the results of injections of pituitrin in herpes zoster. He stated that the pain disappeared within a few hours after one injection and that the eruption involuted in several days. In a careful review of the literature I could find no further articles on this subject until 1930, when Sidlick² reported a series of fifty four cases of herpes zoster treated with pituitrin. Twenty of these patients were women and thirty four were men. The duration of the eruption varied from twenty four hours to five weeks. He was impressed by the marked relief from pain often occurring in even the most severe cases after only one or two injections, but he did not state the effect on the lesions nor how many patients, if any, failed to obtain relief.

Since the appearance of Sidlick's report, I have learned from several physicians that they have obtained equally good results and from a few others that they have not been so fortunate, but neither group could give a definite percentage of cures or failures. In order to obtain data on this subject and because of the inadequacy of other methods of treatment for the relief of the excruciating pain so often occurring in this disease, I decided to try this form of therapy. Sixteen patients with herpes zoster were given a total of thirty eight injections of pituitrin averaging 24 injections per patient. The average duration of the disease was 88 days. The results were as follows:

- 11 patients were well in an average of 85 days after the first injection
- 1 patient had some relief after 1 injection, final result unknown
- 1 patient was worse 2 days after first injection, final result unknown
- 1 patient had improved 2 days after one injection, final result unknown

2 patients showed no improvement after three and two injections, respectively

(See Table I)

Comment It is strikingly evident that the value of these injections varies inversely as the duration of the disease. The most brilliant results were obtained in the very early cases. The only failures occurred in the two cases of post herpetic neuralgia, in which there had been no eruption for eleven months and seven weeks respectively (the two longest durations in the series).

Technique The injections were given intramuscularly every other day. With the exception of one case, three injections were sufficient. 0.5 cc of pituitrin was given to elderly patients for the first injection and 1 cc to the middle-aged and younger. All except four patients received 1 cc at the time of the second and third injection. I used both surgical and obstetrical pituitrin. Although the former is considered to be stronger than the latter, I could notice no difference in the results obtained. None of the patients experienced any unfavorable local or general reaction, although several were elderly and suffered from intercurrent diseases. This treatment can be given safely to senile patients and to those suffering from hypertension, cardiac disease or diabetes. It is not necessary to delay or discontinue the injections because of menstruation but they should never be given during pregnancy.

As a control I compiled the histories of sixteen patients with herpes zoster who were treated in various other ways. The average duration of the disease was eight days. The results were as follows:

- 5 patients were well in an average of 11 days
- 1 patient was improved but the pain continued
- 4 patients were no better
- 6 patients did not return after the first visit, result unknown

(See Table II)

* From the Department of Dermatology and Syphilology, Cornell University Medical School Clinic, service of Dr. H. J. Schwartz.

TABLE I
REPORT OF 16 CASES OF HERPES ZOSTER TREATED WITH PITUITRIN

Sex	Age	Duration	Location	Description	Number of Injections	Result	Additional Treatment
M.	41	5 days	8th right intercostal.	Typical vesicles. Very little pain.	2 (0.5 c.c. and 0.75 c.c.) in 3 days.	Two days after first injection, no pain. Few vesicles showed dry necrosis. Most vesicles almost entirely dry. Two days after second injection, no pain, vesicles completely dry with a few remaining necrotic areas.	None.
F.	60	2 weeks (pain) 1 week (vesicles)	Back of ear, scalp, side of neck.	Typical vesicles. Severe pain.	5 (0.5 c.c.) every 3 days.	Vesicles dried up at once but pain lasted 5 weeks.	Lotion calamine and zinc oxide with 1% phenol.
M.	33	3 days	Left cheek, temple, ear, scalp.	Early, red, non-vesicular lesions, soreness but no pain.	3 (0.5 c.c., 1 c.c. and 1 c.c.) every 2 days.	Much better after first injection. Lesions dry with only very slight congestion after second injection.	Soothing lotion.
M.	70	11 months	Left side of scalp and neck and left shoulder.	No lesions for 11 months but severe continual pain when sitting up and at times when lying down.	3 (0.5 c.c., 1 c.c. and 1 c.c.) every 2 days.	No better.	Before injection, had 4 X-R skin unit $\frac{1}{4}$, filtered with 3 m.m. aluminum, without relief, as well as many topical remedies.
M.	23	3 days	Left side of neck, back of scalp.	Typical early lesions and large, slightly tender submental and cervical lymph glands.	2 (both 1 c.c.) in 3 days.	No pain and no new lesions after 1 injection. Entirely well after second injection.	Soothing lotion.
F.	25	4 days	Left side of jaw.	Deep, gangrenous ulceration. Submental and left cervical lymph glands large and painful.	3 (0.5 c.c., 1 c.c. and 1 c.c.) in 6 days.	No better after 1 injection. Lesions drier and glands smaller and less painful after second injection. Pain and swelling of glands gone and lesions dry after third injection.	2 X-R skin unit $\frac{1}{4}$, 1 week apart, healing salve and drying lotion.
M.	42	10 days	Left side of neck and back of scalp.	Typical lesions, left cervical glands enlarged and painful.	2 (1 c.c. and $\frac{3}{4}$ c.c.) in 4 days.	Marked relief from pain and itching. Glands small and painless after 1 injection. Final result unknown.	Drying lotion.
F.	75	7 weeks	Left side of face, scalp and left eye.	Severe eruption with pitted scars, intense pain. No active lesions for several weeks.	2 (1 c.c.) 1 day apart.	No relief.	None.
F.	26	1 week	Ulnar side of right palm and ring finger and little finger.	Typical vesicles. Moderate pain.	3 (1 c.c.) in 5 days.	Pain much less and lesions fading after first injection. No pain and lesions barely visible after second injection.	None.
M.	44	2 days	Right side of neck.	Round, red, edematous, vesicular patch, size of a quarter.	1 (1 c.c.)	Well in a week.	Calamine lotion with 1% phenol, and heat.
M.	18	3 days	Left hip and left side of sacrum and pubis.	Vesicular patches along course of 5th lumbar and 1st sacral nerve.	2 (0.5 c.c. and 0.75 c.c.) 1 day apart.	Some relief after first injection. Final result unknown.	Calamine and zinc oxide lotion with 1% phenol.

F. C.	F.	28	1 week	Right thigh and hip and right side of lower abdomen.	Many groups of vesicles.	3 (1 c.c.) every other day.	2 days	Relief in a few hours after first injection. Well after third injection.	Calamine and zinc oxide lotion with 1% phenol. Rest and heat.
C. S.	M.	42	1 week	Left side of forehead along course of ophthalmic nerve.	Vesicles on inflamed base.	2 (1 c.c.) apart.	2 days	Improved 2 days after first injection.	Calamine and zinc oxide lotion.
E. S.	M.	39	2 days	Right upper eyelid, right side of forehead and scalp.	Marked edema.	2 (1 c.c.) apart.	2 days	Worse 2 days after first injection. Final result unknown.	Boric acid wet dressings.
E. K.	F.	43	2 weeks	Along 3rd left intercostal nerve under shoulder.	Burning pain, grouped vesicles.	2 (1 c.c.) apart.	2 days	Pain much less 2 days after first injection. No pain and lesions gone 7 days after second injection.	Calamine lotion, atophan gr. 7½, q.4.h.
M. L.	M.	28	2 days	Shaft of penis.	Typical group of vesicles, itching and soreness.	1 (1 c.c.)		No soreness or itching and vesicles dried 2 days after injection.	Calamine and zinc oxide lotion.

TABLE II

REPORT OF 16 CASES OF HERPES ZOSTER NOT TREATED WITH PITUITRIN

Name	Sex	Age	Duration	Location	Description	Treatment	Result
M. D.	F.	51	5 days	Scalp and face.	Typical lesions and much pain.	Aspirin, heat, calamine lotion.	Improved in 1 week but pain persisted.
W. G.	M.	69	10 days	Back.	Typical lesions.	Atophan, calamine lotion with phenol (2%).	Well in 3 weeks.
J. H.	M.	67	3 weeks	Left supra-orbital.	Typical lesions.	Atophan and baume analgesique.	No better. Pain after 1 month.
L. T.	F.	54	3 days	11th right thoracic on abdomen.	Typical lesions.	Atophan.	Well in 11 days.
J. K.	M.	18	2 days	Right side of chest.	Typical grouped vesicles.	Calamine and zinc lotion.	Well in 6 days.
J. Z.	F.	38	10 days	Right axilla.	Typical patch with itching.	Calamine and zinc lotion with 1% phenol.	Itching present 12 days later.
J. L.	M.	38	3 days	Scalp, face and neck.	Edema and pain.	None. Care of teeth advised.	Bad pain 4 days later.
M. A.	F.	?	5 days	Right side of neck.	Typical lesions with burrowing.	Soothing lotion and rest.	?
W. B.	M.	39	2 days	Left side of neck, back and chest.	Many typical vesicles and superimposed dermatitis.	3 weekly X-R skin unit ¼.	Much improved in 1 week, almost well in 2 weeks.
M. D.	F.	22	1 week	Right buttock.	Dime-sized patch of vesicles.	Calamine and zinc lotion and oil of cade salve.	?
E. F.	M.	50	3 days	Left side of neck and face.	Typical lesions and pain.	Aristol powder, internal medication, diet.	Pain present after 16 days.
A. G.	M.	42	2 days	Right buttock.	Typical lesions and slight pain.	Dusting powder, calamine and zinc lotion.	?
E. H.	F.	36	2 days	Anterior part of left shoulder	Typical lesions and aching.	Mist. R. & S. with sodium salicylate.	Lesions dry. No pain in 4 days.
E. M.	F.	35	1 week	Right arm and hand.	Typical lesions and aching.	None. X-R teeth.	?
V. M.	M.	30	1 day	Pubis.	Occasional pain. Typical lesions. Bad itching.	Ichthylol in collodion and Mist. R. & S. with sodium salicylate.	?
T. R.	M.	37	7 weeks	Right side of abdomen.	Typical lesions. Severe pain.	Lotion and salve.	?

Comparison of the Two Series:

	Pituitrin	Other Methods (v. table)
Average duration before treatment..	88 days*	8 days
Number of patients well.	11	5
Average length of recovery.....	8.5 days	11 days
Number of patients improved.....	2	1
Number of patients unimproved.....	2	4
Result unknown	1	6

* This does not include patient A. R. who was treated for post-herpetic neuralgia of eleven months duration.

From the above comparison it can be seen that, although the duration of the disease before treatment was approximately the same, over twice as many of the patients treated with pituitrin were well in an average of two and one-half days less time than those treated otherwise. The number of unimproved cases in the series treated with pituitrin was one-half as great as in the other series.

REPORT OF A CASE

V. M., a housewife, aged twenty-six, born in England, entered the Dermatological Department of the Cornell Clinic on March 16, 1931. Eight days previously she had taken setting-up exercises and the next day had painful joints and muscles, as well as burning pain in her right thumb and index finger. In three days, the pain gradually extended across the right hand to the little finger and was followed by small, red spots on the inner side of the palmar surface. These

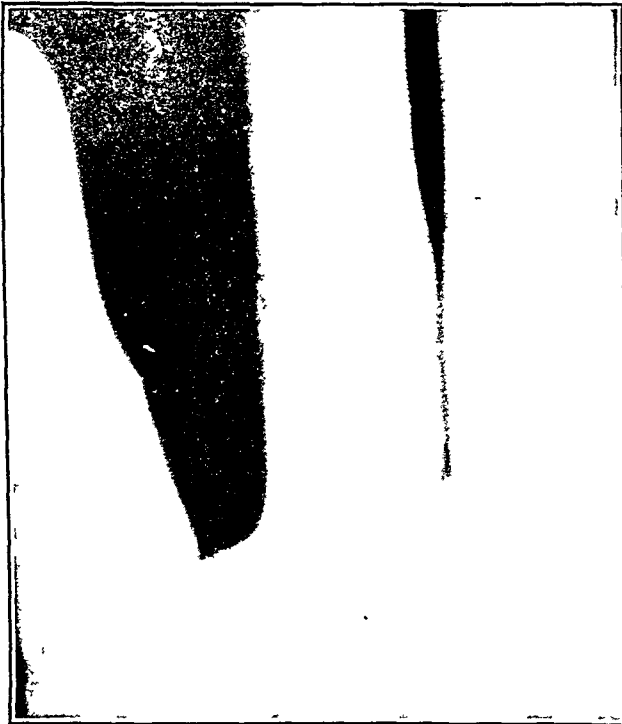


FIGURE 1

Before treatment. Group of vesicles on inner side of little finger. Deep vesicles on the palm and the ring finger show faintly.

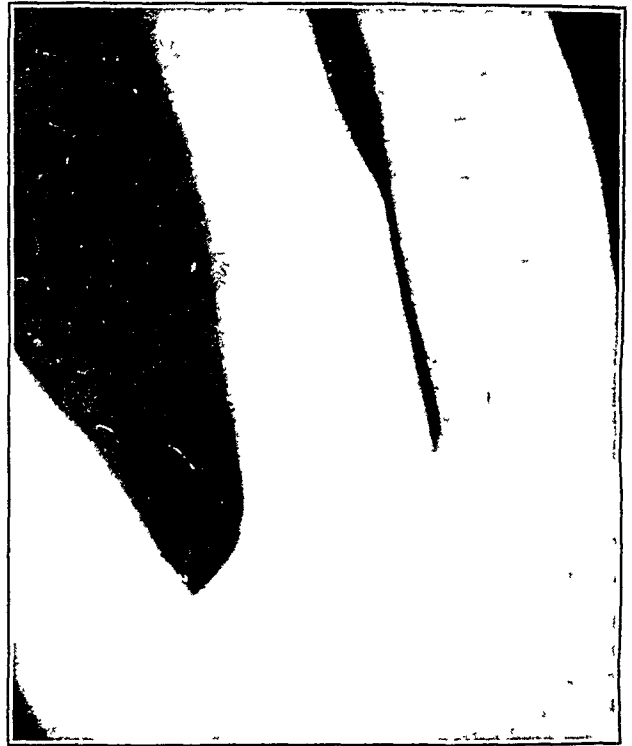


FIGURE 2

After treatment. Remains of vesicles on little finger are just visible. Other lesions have completely disappeared.

spots were painful to touch only. On the fourth day, several painful, red lumps, the size of a lentil, appeared on the outer half of the palmar surface of the right ring finger and on the middle and outer side of the right palm. The lumps persisted and became more painful during the next three days and for this reason the patient came to the clinic for relief. By this time, the discomfort in the joints and muscles and the pain in the thumb and index finger had disappeared.

The patient's family and past history were irrelevant. She had had varicella when six years old and had no knowledge of recent exposure. Her general health was excellent; her teeth were in good condition; and she had no nervous or gastro-intestinal disturbances.

The physical examination was essentially negative except for the local condition. The patient presented several typical vesicles on an erythematous base on the palmar surface of the inner side of the right little finger and the outer side of the right ring finger. Deep, painful, erythematous vesicles were present on the outer side of the right palm. All the lesions were in a roughly linear arrangement (Fig. 1), which corresponded to the distribution of the distal branch of the ulnar nerve. There was no edema or increased local temperature in the hand and no lesions were on the inner side of the palm, arm, wrist, thumb, or first two fingers.

The patient was given 1 c.c. of obstetrical pit-

uitrin intramuscularly, on March 16th, and within two days the pain was much less and the lesions were fading. The above injection was repeated on March 18th and on March 20th. On the latter date the pain had entirely disappeared and the lesions were barely visible (Fig. 2). She was to return for observation in one week but reported that this visit was not necessary as she was entirely well.

This case was of special interest and was described in detail because of the rarity of herpes zoster involving the hand. Montgomery³ stated that "76% of cases of herpes zoster are of the trunk. Zoster attacks of the extremities are rarest of all." In a review of the literature I found only two cases reported. Pernet⁴ reported a case of herpes zoster of three days' duration occurring, two months after a severe attack of measles, in a baby eighteen months of age. The eruption consisted of three characteristic groups of vesicles on the lower part of the flexor surface of the left arm and forearm and many bullae on the left hand and fingers, chiefly on the palm. André and Amyot⁵ presented before the Neurological Society of Paris, a man 45 years of age, who had trophic and sympathetic disturbances in his left arm with loss of muscular power and edema, as well as typical herpes zoster vesicles on the arm, palm, and fingers. The vesicles lasted for two months. One patient in my series of untreated cases had herpes zoster of the arm which extended to the hand, and involved the last two

fingers. I am unable to give further details concerning this case as she did not return after the first visit.

SUMMARY

1. Of the sixteen patients treated with pituitrin, eleven were well in an average of eight and one-half days; two were improved; two were unimproved; and in one the result was unknown. Of the same number of patients treated by other methods, five were well in an average of eleven days; one was improved; four were unimproved; and in six the result was unknown.

2. Herpes zoster is a self-limited disease, but its course is shortened and the severe pain, so often accompanying it, is usually rapidly relieved by pituitrin injections.

3. A case of herpes zoster of the outer side of the palm and two fingers is reported, together with a summary of two similar cases found in the literature and one other seen by the author.

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AN UNCLASSIFIED ACUTE ANEMIA WITH RECOVERY *

By NATHAN N. STARK, M.D., and NORMAN STRAUSS, M.D., NEW YORK, N. Y.

WE ARE presenting this case firstly because it falls into no known classification of anemias, secondly because it taxed the diagnostic ingenuity of our entire hospital staff, and thirdly because of the very dramatic recovery.

Case—L. S. Female—aged 16—high school student—was admitted to our hospital on October 21, 1931—she was brought in by ambulance.

Chief Complaint: Weakness, faintness, and fever. Duration: Three days.

Present illness: On October 18, while visiting a museum, patient was suddenly seized with an attack of dizziness and became very faint. She was taken home and put to bed for two days, without showing any improvement. Her temperature during these two days varied be-

tween 102 and 104 degrees. A physician was called, and after examining the patient advised hospitalization. On the day of admission she had a nose bleed. On direct questioning, patient claims that for a few weeks prior to the onset of the present illness she had not been feeling as well as she might have felt. She had been on a "reducing diet" for the past two months and had succeeded in losing sixteen pounds. For the past two months patient has not menstruated.

Past History:

Childhood—Mumps—Poliomyelitis at the age of sixteen months.

Surgical Operations on the right lower extremity at nine and twelve years, respectively for correction of residual paralysis of Poliomyelitis.

Systems:

Gastro-Intestinal—appetite fair. Bowels

* Read before the Clinical Society of the Jewish Memorial Hospital, December 2, 1931.

constipated. Otherwise negative.

Cardiac—negative.

Respiratory—States she is subject to nose bleeds. Otherwise negative.

Genito-urinary—negative.

Menstrual—began at 11½—regular, every 28 days—lasts 5 days. Last period—August 27, 1931. No period since.

Family History: Irrelevant. No history of constitutional diseases, anemias, or bleeders.

Physical Examination: Patient is a pale, pasty-looking adult female who appears apathetic and acutely ill, but does not appear toxic.

Temperature—104.4. Pulse—102. Respiration—28.

Skin is dry—with a greenish icteroid tinge—but no evidence of ecchymosis.

Eyes: Pupils are in mid-dilation—equal, regular, and react to light. The conjunctiva are almost colorless. The scleræ are icteric. The Fundi show recent capillary hemorrhages more marked, however, in the left fundus.

Ears and Nose—negative.

Tongue: was dry—but no glossitis or ulcerations.

Pharynx: slightly injected.

Tonsils: Hypertrophied—but do not appear diseased.

Neck: Negative. Thyroid not palpable.

Lungs: Clear and resonant throughout.

Heart: Negative except for a faint systolic blow at the base. (Hemic?)

Abdomen: Not distended—there was some deep tenderness in the right lower quadrant—but no rigidity or rebound tenderness.

Liver: Not palpable.

Spleen was palpable about 2-3 centimeters below the costal margin; was firm and not tender.

Extremities: Two long operative scars on the right leg.

Reflexes: Diminished but present.

Rectal: Negative.

Vaginal: Showed hymen intact.

Laboratory data on admission:

Blood Count: Hemoglobin 23% (Sahli). Red Blood Cells—1,640,000. White Blood Cells—5,900. Mature neutrophils 55%. Immatures 3%. Lymphocytes—42%. Platelets—240,000.

Smear showed the red blood cells to vary in size and shape (anisocytosis, poikilocytosis) and polychromatic stippling but no normoblasts or megaloblasts. Reticulocyte stain revealed one reticulocyte on the entire slide. Sedimentation time—24 minutes.

Blood Group: 1. (Jansky). Coagulation time—2 minutes.

Urine: Negative for albumin and sugar. Negative microscopically. Negative for urobilinogen.

Stool: Urobilinogen positive. Reaction for blood weakly positive. (Patient had a nose bleed on day of admission.)

Clinical course on the day of admission:

The patient was given a transfusion of 500 c.c. by the Unger method, following which the patient's temperature rose to 105.2. Her hemoglobin and red cell count rose on the following day but then began to steadily fall again. By the fifth day her hemoglobin dropped to 22% and the R.B.C. to 1,200,000 and the patient was in extremis. A second transfusion of 500 c.c. was given. There was an immediate reaction rise in temperature, following which the temperature began to rapidly fall and within three days was down to 99 degrees. Following the second transfusion there was a dramatic change for the better in both the clinical picture of the patient and in her hemoglobin and red cell count. The patient made an uneventful recovery within ten days. The spleen gradually increased in size up to the sixth day—when it was 6-7 cm. below the costal margin—and then began to shrink again.

Subsequent laboratory data:

The temperature, hemoglobin, and red cell count may be seen in Chart I.

The white cell count and differential count may be seen in Table II.

The urine is persistently negative for routine examination and urobilinogen.

The stool was negative after the first day for blood but remained positive for urobilinogen for several days.

Blood Cultures were negative on several occasions.

Widal and Wassermann were negative.

The Platelet Count on Oct. 22 was 240,000—Oct. 27, 245,000—Oct. 31, 280,000—on Nov. 5, 240,000.

The Reticulocyte Count on Oct. 22—one reticulocyte on entire slide. On Oct. 29—2%; Oct. 31—6%.

The Blood Chemistry was non-protein-nitrogen 26.0—Creatinin 1.2 and sugar 80.0.

The Icteric Index (normal 4-6) was 10.0. The Van den Bergh (1-25 normal) was 0.2 and the direct Van den Bergh was negative.

Fragility Test (normal 0.425—0.350) Oct. 31—0.575 to 0.325. Nov. 5—0.6—to 0.375.

Discussion of Case

Because of the sudden onset, the history of two months amenorrhea, and the deep tenderness in the right lower quadrant, the admission diagnosis of a ruptured ectopic pregnancy

TABLE I

Date	Hgb	RBC	WBC	Mature Neutro	Immature Neutro	Lympho	Reticu	Plat	Other Laboratory Data
10/22	23	1,640	5,900	55	3	42		240	Blood Group 1 (Jansky)
23	27	1,760	7,600	44	6	30	0		Coagulation Time 2 minutes
26	22	1,320	8,800	46	20	34			Sedimentation Time 24 minutes
27	22	1,200	6,600	48	2	50	1	245	Bi Chemistry—N P N 26.0
28	24	1,880							Creat 1.2
29	41	1,880							Sugar 80.0
31	39	2,360							10.0
11/2	50								0.2
5	54	3,240						280	Icteric Index
7	60	3,200	7,800	78		22		240	Van den Bergh
11	55	3,000	7,800	78		22	41		Van den Bergh Indirect
12	59	3,320							Fragility—10/31 0.575 0.325
									10/5 0.6 0.375
									Widal negative
									Wassermann negative
									Urobilinogen urine negative
									Stool positive

was considered most likely. However, this was soon ruled out by the negative sexual history—the intact hymen—the absence of more definite abdominal findings, the negative rectal examination, and the absence of shock. A bleeding duodenal ulcer was considered but was soon discarded because of the absence of a gastro intestinal history and the absence of tarry stools. Having ruled out all surgical possibilities we realized we were confronted with an "Acute Anemia" and the following differential possibilities were considered:

- 1 An acute aplastic anemia
- 2 An acute hemolytic icterus
- 3 An acute febrile anemia of Lederer

1 In the October, 1931 issue of the *Annals of Internal Medicine*, Carey and Taylor outlined the characteristic findings of an aplastic anemia. An aplastic anemia was ruled out in our case for the following reasons:

- a. The absence of hemorrhages into the skin and mucous membrane
- b. The absence of stomatitis or glossitis
- c. The normal white cell count
- d. The normal platelet count (a thrombocytopenia is considered an essential finding of aplastic anemia)
- e. The most important reason of all is the fact that this patient recovered (Aplastic anemia is 100% fatal)

2 Acute Hemolytic Jaundice (Icterus)

An acute hemolytic icterus was seriously considered. In favor of this diagnosis was the age of the patient, the history of onset, the icteric appearance of the patient, the anemia, the gradual increasing size of the spleen, and the most important was the distinct increase in the fragility of the red blood cells (Oct 31—0.575 to 0.325 Nov 5—0.6 to 0.375). Against this diagnosis, however, was the absence of the distinct splenomegaly, (our patient's spleen never increased beyond 6.7 cm below

the costal margin), the absence of any marked increase in the reticulocyte count, and the persistent absence of urobilinogen in the urine (which is a cardinal symptom of an acute crises of hemolytic jaundice).

3 A Hemolytic Anemia of Lederer

In the *American Journal of Medical Sciences*—Oct, 1925, Max Lederer reported three cases and subsequently, in February, 1930, he reported three additional cases of acute hemolytic (infectious?) anemia. The acute onset, the high fever, the severe anemia, and the spontaneous recovery after two transfusions are all points in favor of grouping our case with those of Lederer. There is, however, one very important differential point, namely, the absence of a leucocytosis in our patient. All Lederer's cases presented a distinct leucocytosis ranging from 22,000 to 52,000, while our repeated white counts were within normal limits—or even showed a slight tendency to leucopenia.

Treatment

Aside from the two transfusions this patient received no medication. This is an important point for, had we used iron, liver, ventriculin, or any other drugs, we would have given full credit to specific medication rather than realized the possibility of a spontaneous cure.

Summary

We have here presented a case of profound anemia with an acute onset and with recovery after two transfusions. This case differs from an aplastic anemia because of the absence of leucopenia, thrombocytopenia, and death, and differs from hemolytic icterus because of the absence of a reticulocytosis, splenomegaly and urobilinuria, and differs from an acute hemolytic anemia of Lederer because of the absence of leucocytosis.

This case, therefore, remains unclassified.

EFFECT OF PREGNANCY UPON SUGAR TOLERANCE OF DIABETICS*

By WILLIAM S. COLLENS, M.D., and I. EDWIN SHACK, M.D., BROOKLYN, N.Y.

MANY reports have appeared in the past few years on the study of the sugar tolerance of pregnant diabetic women. A review of this literature reveals a marked difference of opinion on the influence of pregnancy upon the diabetic tolerance. Lawrence¹ maintains that there is an improvement in the carbohydrate tolerance during the latter months of pregnancy. An analysis of his case report, however, does not necessarily prove his point. He shows that the patient was maintained on five to fifteen units of insulin per day before pregnancy, while it was necessary to give the patient forty-four units of insulin a day in the latter months on approximately the same diet. In addition, however, he observed that the patient regularly excreted ketone substances (one gram a day in the latter months). Stander and Peckham² also think that diabetes improves during the latter half of pregnancy. It is difficult from the study of their case reports to draw such conclusion, since the diabetic data seems incomplete. Parsons, Randall and Wilder³ present two cases in which they confirm these observations. These authors explain this supposed improvement in sugar tolerance on the theory that the fetal pancreas is capable of furnishing an additional increment of insulin to increase the mother's carbohydrate tolerance. They find support in their view from the experimental studies of Carlson and Drennan⁴ who were unable to produce experimental diabetes in pregnant bitches until the uterine contents were delivered. They find further support of their view in histological studies of the islands of Langerhans from fetuses of both diabetic mothers and experimentally produced diabetic dogs. There seems to be evidence of hypertrophy and hyperplasia of these islands. Other observers have found a decrease in carbohydrate tolerance in the latter period of pregnancy. Wiener⁵ presents a case of a young diabetic woman whose tolerance became progressively worse as pregnancy advanced. Lambie,⁶ in an article containing a very exhaustive review of the literature, presents one case with a similar course. Bowen⁷ shows a diminished tolerance in three pregnant diabetic women as these patients approached term. Experimental studies of Allen⁸ reveal no influence of the fetus upon the tolerance of partially pancreatectomized dogs. He believes the contrary results of Carlson and Drennan to be due to the marked cachexia that follows removal of the pancreas in dogs.

This confusion in the literature exists because of the lack of sufficient criteria for the determination of the sugar tolerance in the diabetic state. The present method for establishing a patient's

tolerance consists in determining the degree of glycosuria on a stated test diet, the degree of acidosis, the height of blood sugar content during fasting in the postabsorptive period, and the nature of the blood sugar response to the oral administration of a definite amount of carbohydrate. On the basis of this difficulty, Collens and Grayzel⁹ devised a clinical method for establishing diabetic tolerance which was found to be a singularly successful criterion and apparently superior to methods previously described. When a patient ingests a stated amount of available dextrose in the diet and excretes a definite amount of dextrose in the urine, then the difference between the two figures represents the amount consumed, whether oxidized or stored. This is a measure of the patient's ability to utilize sugar. When, however, the patient requires a certain amount of insulin to aid in the utilization of the sugar, a more accurate index of the patient's tolerance would seem to be established by determining the ratio of the dextrose utilized to the amount of insulin administered. This ratio they designated the dextrose-insulin quotient. Thus, if a patient utilized one hundred and fifty grams of dextrose with the aid of the ten units of insulin a day, it becomes apparent that this tolerance is far greater than that of a patient who utilizes the same amount of dextrose with the aid of fifty units of insulin. This can be seen more clearly from the dextrose-insulin quotient, which is an arbitrary figure and a more concise index. Thus, in the former case, the dextrose-insulin quotient is fifteen, while in the latter case it is three. This figure does not necessarily indicate the dextrose equivalent of one unit of insulin, but it does represent the degree of assistance that the patient needs from exogenous insulin.

We employed this method of establishing the sugar tolerance of the two diabetic women whom we studied for approximately one year prior to pregnancy and observed frequently through gestation and the postpartum period. This study disclosed clear evidence of the fact that these two patients developed a progressively diminishing sugar tolerance as pregnancy advanced up to the time of delivery.

Case 1. T. K., age 24, was admitted to the hospital on February 9, 1928, with the following history: Seven months prior to admission she was delivered of a normal baby. Three months later, during her lactating period, i.e., four months before admission, she complained of marked weakness. This symptom became progressively worse and she began to lose weight. Two months before admission, she began to complain of polydipsia, polyuria, and polyphagia. Examination revealed all the clinical and chemical evidence of diabetes mellitus. There was no family history

*Read before East New York Medical Society, Brooklyn, N. Y.

of diabetes or any other metabolic disorder. Her past history disclosed attacks of measles, whooping cough, and mumps in childhood. In 1918 she had influenza with a complicating purulent left otitis media. She has had frequent colds and attacks of tonsillitis since that time. She was married three and one-half years, and delivered a normal full term child seven months before admission. There were no miscarriages, abortions or stillbirths. She began to menstruate at thirteen, regularly every twenty-six days, and with a seven day habit. She has not menstruated since the conception of the recent pregnancy.

On admission, examination revealed a white female of slight build, with otherwise negative physical findings. Urine on admission contained two percent sugar, and four plus acetone and diacetic acid. The fasting blood contained 300 mgms percent of sugar. The CO_2 combining power of plasma was thirty-eight and one-tenth volumes percent. The patient was given a diet containing carbohydrate 70 grams, protein 50 grams, fat 120 grams, and 40 units of insulin a day in divided doses. Under this therapy she was rapidly desugarized and ketosis was immediately controlled. She was discharged from the hospital in eleven days and subsequently followed as an ambulant patient. Her further course is seen in Table 1. She was followed for nine months during which time she was kept on a maintenance diet of approximately twenty-six hundred calories and an average of 175 to 200 grams of available glucose. She required between twenty-five and thirty-five units of insulin a day to maintain her in a normal physiological state. She was almost constantly sugar-free. It will be noted that her glucose insulin quotient ranged between 5.7 and 6.0. Menstruation returned in December, 1928, and continued regularly as to type and habit until April 22, 1929, after which she became pregnant. Her subsequent diabetic tolerance is also seen in Table 1. It will be noted that her available glucose intake remained relatively constant during her entire pregnancy. Although we found it necessary to increase her insulin first to 50 units a day, and in her later months to 65 units a day, her urinary excretion continued to mount. At the same time she showed the presence of acetone bodies in her urine on fairly frequent occasions. Her glucose-insulin quotient definitely dropped so that it ranged between 3.0 and 3.6. On January 8, 1930, she was admitted to the hospital in labor and delivered a normal male child weighing nine pounds eleven ounces. The blood was uncomplicated. She was given a diet of carbohydrate 150 grams, protein 60 grams and fat 100 grams, available glucose 196 grams and 60 units of insulin a day in divided doses. The patient was sugar-free for the first three days after delivery and then she experienced a severe attack of hypoglycemia. It was necessary to administer 400 cc

TABLE I

Date	Avail Glucose in Diet	Total Insulin 24 hrs	Sugar Excretion in Urine Gms / 24 hrs	Blood Sugar Mgms / 100 c.c.	Glucose Consumed = Available Glucose Minus Glucose Excretion	G — I Quo- tient
1928						
2 26	161	25	0	300	161	
3-11	156	25	8.8		147.2	5.8
3 25	205	30	0	255	205	
4 15	205	35	12.0		193	5.8
4 29	203	35	0		203	
5 27	177	25	0		177	
10 22	197	30	27.0	222	170	5.7
1929						
1 20	199	30	18.8		180.2	6.0
	Last menstrual period April 2, 1929					
5 11	188	50	19.8		168.2	3.6
6 23	194	50	31.2	200	162.8	3.1
7 24	180	50	2.2		177.8	3.6
9 4	182	50	11.0		171.0	3.4
10 16	202	50	43.6		158.4	3.4
10 28	215	65	21.6		193.4	3.0
	Admitted to hospital Jan 8, 1930					
	3 00 P M in labor					
	Delivered normal baby male wt, 9 lbs 11 oz,					
	Jan 9 1930					
	Normal uneventful labor—Para II					
1930						
1 9	196	60	0		196	
1 10	196	60	0		196	
1 11	196	60	0		196	
1-12	196	60	1.3			
					Attack of insulin shock at 6 P M Relieved by 250 cc orange juice and 400 cc 10% glucose intravenously	
1 13	196	30	6.8		189.2	6.3
1 14	196	30	34.0		162.0	5.4
1 15	196	35	82.5		113.5	3.3
1 16	196	45	49.3		146.7	3.3
1 17	196	45	50.4		145.6	3.3
1 18	196	60	57.5		138.5	2.3
1 19	196	60	54.0		142.0	2.4
1 20	196	60	55.0	500	141.0	2.4
1 21	196	75	56.0		140.0	1.9
1 22	196	75	39.0		157.0	2.0
1 23	196	60	0			
1 24	196	60	0			
1 25	196	45	0			
1 26	196	45	4.8		191.2	4.2
1 27	196	45	0			
	Discharged from hospital Jan 28, 1930					
2 16	224	45	12.0	317		4.7
4 6	133	55	0			4.2
11 5	252	55	16.0	267		4.3

of ten percent dextrose intravenously in addition to a glass of orange juice. The following day she received no insulin and she excreted 0.2% sugar in the urine. Her tolerance was again diminished and it was necessary in the next ten days to increase her insulin to seventy-five units a day in order to control the urinary excretion of sugar. She was discharged from the hospital three weeks after admission on the same diet with an available glucose intake of 196 grams and

forty-five units of insulin a day, with her urine free from sugar. Eleven days postpartum her blood sugar rose to 500 milligrams. She has been followed for ten months since delivery. It will be observed that she now requires more insulin than before pregnancy and that her glucose-insulin quotient is between 4.2 and 4.7. It appears quite obvious that the experience of pregnancy has definitely reduced this patient's tolerance.

Case 2. S. G., twenty-seven years old, was first seen June 14, 1929, with a history of diabetes mellitus of one and a half year's duration. Onset occurred with classical clinical symptoms of polydipsia, polyuria, polyphagia, weakness and weight loss. Her mother and one sister died of diabetes. Her menstrual history began at fifteen, established itself with regularity, recurring every thirty days, and lasting three days. The patient was married two and one-half years, and had one pregnancy which resulted in a spontaneously delivered stillbirth six months previously. Thus it is estimated that she conceived three months after she became diabetic. There is no record as to the type of treatment she received during that pregnancy. At the time she came under our care she presented the picture of a well-nourished young individual, with no abnormal physical findings except a slight diffuse thyroid enlargement of the adolescent type. She was then spilling thirteen grams of sugar in her urine, and there was no evidence of ketosis. The fasting blood sugar was 200 milligrams percent. She was maintained on a diet containing an average caloric value of 2,400 calories. Her available glucose intake ranged between 200 and 250 grams. She was easily controlled with fifteen to twenty units of insulin daily, and her glucose-insulin quotient ranged between 12.1 and 14.2. (See Table 2.) The patient felt well, and gained eleven pounds in three months. On January 20, 1930, the patient menstruated the usual three days, following which she conceived. The patient was not seen again until July 29, 1930, when she was in the sixth month of gestation. She was then taking thirty units of insulin a day on the same diet as given prior to pregnancy, and she excreted five percent sugar which represented 100 grams. Her fasting blood sugar had risen to 304 mgms. percent. Her actual glucose consumption had dropped approximately 100 grams, in spite of increased insulin dosage. Her glucose-insulin quotient fell from an average of 12.9 before pregnancy to 5.3. Her insulin dose was increased to forty units a day in divided doses, and her diet was maintained at a constant level. By the eighth month it was necessary to give her fifty units a day and yet her quotient continued to drop progressively to 3.3. By the beginning of the ninth month it was necessary to administer sixty-five units of insulin a day, and her quotient dropped to 2.7. On October 28, 1930, after a short labor she delivered a normal male

TABLE II

Date	Avail. Glucose in Diet	Total Insulin 24 Hrs.	Sugar Excretion in Urine Gms./ 24 Hrs.	Blood Sugar Mgms./ 100 c.c.	Glucose Consumed= Available Glucose Minus Excretion	G — I Quo- tient
1929						
6-30	226	15	13.0	200	213	14.2
7-10	206	15	20.0		186	12.4
9-29	249	20	8.0		241	12.1
Last menstrual period Jan. 20, 1930.						
1930						
7-29	259	30	100.0	304	159	5.3
8-13	232	40	90.0		142	3.6
8-27	219	50	55.0		164	3.3
9-4	256	65	88.0		168	2.9
9-30	201	60	40.0		161	2.7
Delivered 10-28-30.						
10-28	1000	c.c. 5% 20 U. Insulin	glucose hypodermic clysis with			
10-29	265	75	0		57	
10-30	265	40	0		58	
10-31	240	0	0			
11-1	240	0	0			
11-2	240	0	0			
11-3	240	30	13.8		149	7.6
11-4	240	30	10.5			7.6
11-5	240	30	3.4		120	7.9
12-24	343	35	28.5		244	9.8

child weighing eight pounds, four ounces. Immediately after the delivery the patient was given 1,000 c.c. of five percent dextrose in saline by clysis. At the same time she was given twenty units of insulin. She spilled one percent sugar in the urine after the dextrose administration. The following day the patient was placed on a diet containing carbohydrate 225 grams, protein 50 grams, and fat 100 grams. The caloric value was 2,000 and the available glucose was 265. She was given twenty-five units of insulin three times a day with this diet, as a result of which the patient became sugar-free. That afternoon she experienced a hypoglycemic attack from which she was relieved by fifty grams of glucose in the form of orange juice. Her insulin was then cut down to twenty units twice a day, making a total of forty units a day. Her fasting blood sugar was then 57 mgms. percent. Insulin was then stopped completely and although on the same diet she remained sugar-free, the blood sugar, sixteen hours after the last dose of insulin, was 58 mgms. percent. The patient remained sugar-free for three more days, during which time she was given no insulin at all, and the available glucose intake in her diet was kept at 240 grams. On the sixth day postpartum she spilled 13.8 grams of sugar in the urine and it was necessary to give her thirty units of insulin a day. Her fasting blood sugar had risen to 149 mgms. percent, and the glucose-insulin quotient was 7.6; i.e., an obvious increase in tolerance as compared with the latter half of gestation. She was seen again two months after delivery at which time

she was receiving 343 grams of available glucose in her diet and thirty-five units of insulin a day. She spilled 28.5 grams. Her fasting blood sugar rose to 244 mgms. percent, and her glucose-insulin quotient was 9.8. Although her tolerance was much better than during pregnancy it was lower than the pre-pregnant level. This again illustrates that pregnancy has definitely lowered the sugar tolerance.

DISCUSSION

Our study of these two patients indicates that diabetic tolerance for sugar becomes progressively diminished with advancing pregnancy. Although in both cases the same diet was maintained during pregnancy as during the long period preceding pregnancy, the insulin requirement in case 1 was doubled and in case 2 was tripled. In spite of these large increases in insulin dosage, the total urinary excretion of sugar could not be maintained at the pre-pregnant level. The fasting blood sugars were definitely higher during the latter months of pregnancy. The glucose-insulin quotient became steadily lower so that close to term these patients behaved very much like total diabetics. We cannot, on the basis of these observations, reconcile ourselves to the conception of some observers that the diabetic state improves with the advancement of pregnancy. Their explanation that there is an additional increment of fetal insulin which improves the deranged maternal carbohydrate metabolic function is based upon the fact that the pancreas of a fetus born by a diabetic mother shows hypertrophy and hyperplasia of the Islands of Langerhans. That there is hypertrophy and hyperplasia of these islands is a well known fact, but we believe that this phenomenon can be differently interpreted. As a result of his studies, Staub¹⁰ believes that the insulin content of the blood is not maintained at a constant level, but is increased following a carbohydrate intake and is depressed during hunger. Our own recent unpublished experiments appear to confirm the observations of Staub that a plethora of glucose in the blood stimulates insulin function. It seems likely on the basis of these observations, that the high glucose concentration of the fetal blood, maintained as it is by its constant supply of maternal blood, has a stimulating effect on the islands of the fetal pancreas. It is reasonable to assume that the constant stimulation of the islands by a persistent hyperglycemia results in the hyperplastic picture. The experimental studies of Carlson and Drennan which show that diabetes does not develop in a pregnant pancreatectomized dog until the uterine contents have been emptied, would lead one to suspect that fetal insulin plays a large part in maintaining the maternal carbohydrate metabolism while functioning in utero. Carlson himself concludes

from these studies that experimental diabetes in the dog, produced by the removal of the pancreas is fundamentally not the same as the human metabolic derangement. There is sufficient evidence to corroborate this opinion in the observations of Baker, Dodds and Dickens,¹¹ and Best, Smith and Scott,¹² who showed that the blood and tissues of patients dying in diabetic coma contained almost a normal amount of insulin. This would seem to indicate that human diabetes does not result from the absence of insulin as occurs in pancreatectomized dogs, but from an ineffectiveness of insulin. If it were true that the human fetal pancreas is capable of supplementing the deranged function of maternal insulin, then we would expect our patients to show marked improvement in tolerance. That, however, was not the case.

A very striking episode in the life history of our patients occurred during the puerperium. We have observed in both cases that shortly following the delivery of the child the carbohydrate tolerance showed evidence of remarkable improvement. In Case 1, it will be recalled that the patient experienced a severe attack of hypoglycemia, and it was necessary to stop the insulin for a day. In Case 2, it was necessary to stop the insulin for three days, during which time the patient's urine was sugar-free, and the blood sugar levels were abnormally low. It is fair to conclude that during this period these patients were truly non-diabetic. After this period the tolerance again broke, and it was necessary to resume insulin therapy. This observation is not new with us, for it was observed by Lawrence, by Parsons, Randall and Wilder, by Lambie, and by Bowen. Surely, as Macleod¹³ feels, fetal insulin could hardly explain this improvement in tolerance. Macleod, however, maintains that this phenomenon is the result of the diversion of blood sugar to lactose in the breasts. If that were the case, one would expect that the improved diabetic tolerance would continue through the entire lactating period. Unfortunately, this improved state does not continue—it is only transitory. It is interesting to mention at this point that case 1 developed her diabetes in the third month of her lactating period of the previous gestation. We feel that there is another fundamental mechanism responsible for this remarkable, though transitory, disappearance of the diabetic state.

There appears adequate evidence in the literature that the pregnant state is associated with alterations of function in several glands of internal secretion. Erdheim and Stumme¹⁴ observed structural changes in the anterior pituitary lobe due to the proliferation of pregnancy cells which disappear almost entirely after pregnancy. The Aschheim-Zondek¹⁵ test for pregnancy depends upon the presence of anterior pituitary substance and represents a hyperfunction of the pituitary

body. Marek¹⁶ has pointed out the frequent development of acromegalic features during the later months of pregnancy and which are commonly noted to disappear during the puerperium. Löhlein¹⁷ showed that eighty percent of women approaching term have a narrowing of the lateral visual fields due to pressure on the optic chiasm. This finding disappears within ten days after delivery. It is reasonable to expect, therefore, on the basis of these observations, that pregnancy is attended with not only an anatomical enlargement but also a hyperfunction of the anterior pituitary body, and that during the puerperium there is a very rapid involution in hypophyseal function. Another gland that is commonly found to be hyperplastic during pregnancy is the thyroid. It is only necessary to mention that there occur numerous changes in the ovary during pregnancy. Goldzieher¹⁸ states that there is a marked hypertrophy of the adrenal cortex during pregnancy. This hypertrophy begins in the fasciculate zone and later appears in the reticular zone. That hyperfunction of these glands has an inactivating influence on insulin has frequently been experimentally demonstrated.¹⁹ The termination of pregnancy occasions the removal of the factor or factors responsible for the excitation of these glands. It is our feeling that the change in the function of these glands brings the diabetic to her pre-pregnant level, and that the temporary improvement after delivery represents a sudden change in the endocrine balance during which time a normal physiological state in carbohydrate utilization occurs.

A very important question that confronts the average physician in the case of diabetic women is whether she should be permitted to bear children. This problem, before the days of insulin, was easily answered. In part, nature provided for this contingency. In the first place, diabetics without insulin therapy frequently did not menstruate or were sterile, thus preventing the possibility of conception. On the other hand, conception having occurred, pregnancy usually terminated spontaneously between the sixth and eighth month, in one-third of those cases. Of those who were successful in carrying to term, fifty percent delivered stillbirths, and eighty percent of those children born alive succumbed in the first few days after birth. Furthermore, the mortality rate among the mothers has been estimated by various authors to be between twenty-five and fifty percent. Such a severe mortality rate resulted from the operative obstetric procedures necessitated by abnormally large fetuses, the increased susceptibility to infection in diabetics, and the frequency of diabetic acidosis and coma. Such unsatisfactory experiences naturally compelled the physician to strongly advise against conception in diabetic women, and if pregnancy occurred, to immediately encourage artificial ter-

mination. The present status of diabetic management has entirely changed this picture. The proper management of diabetes with insulin can effectively produce a practically normal physiological state. We can, therefore, say that there exists no other contraindication to pregnancy in the diabetic than can exist in the non-diabetic woman. In other words, a woman suffering from diabetes should be capable of going to term just as anybody else, provided that she at all times receives the treatment which corrects her deranged carbohydrate metabolism. The fact that we were able to demonstrate that the diabetic tolerance becomes worse as pregnancy advances, merely means that these patients must receive increased doses of insulin in their latter months in order to maintain them in a normal physiological state. This, in itself, does not appear to us to be a contraindication to pregnancy, for under such circumstances a diabetic if treated, can be clinically considered a non-diabetic. This conception calls for a close cooperation between the internist and the obstetrician in the management of the diabetic during pregnancy. There are only two considerations that need be mentioned as arguments against the encouragement of conception in diabetic women. The first, is the fact that the experience of pregnancy permanently reduces the subject's subsequent glucose tolerance. The second, is the consideration that diabetes is a familial disease and that children born of diabetic parents are stamped with the stigma of susceptibility to diabetes at some time in later life. This does not mean that the children are susceptible to the juvenile form of diabetes for only one-half of juvenile diabetics give a family history of the disease. We believe that a diabetic woman seeking information regarding the advisability of pregnancy need only be apprised of these three important facts; 1—that she subjects herself to a possible subsequent increase in the severity of her disease; 2—that diabetes is a familial disease, and 3—that it is of utmost importance that her diabetic state be carefully and intelligently managed during the period of pregnancy.

CONCLUSIONS

1. The glucose tolerance of a pregnant diabetic woman becomes progressively diminished with advancing pregnancy.
2. There occurs in the first few days of the puerperium a transitory period during which the sugar tolerance increases to such an extent that the patient can be considered non-diabetic. This period, in our experience, lasts only from one to three days.
3. The experience of pregnancy seems to permanently reduce the sugar tolerance of a diabetic.
4. Diabetes is no contraindication to pregnancy, per se, for under modern methods of manage-

ment, no complications occur which are intrinsically the result of the diabetic state

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TRENDS IN CHILDHOOD MORTALITY IN NEW YORK STATE (EXCLUSIVE OF NEW YORK CITY)

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From the Division of Vital Statistics New York State Department of Health Read before the Vital Statistics Section of the American Public Health Association at the Sixtieth Annual Meeting at Montreal on September 17 1931

THE remarkable decrease in the infant mortality in the brief space of a score of years is among the comparatively few events in organized public health work where well planned and intelligently directed methods of prevention have brought the wished for results Comparatively little attention has been given the immediately adjacent ages, one, two, three and four years, but here, too, there has been an improvement of outstanding degree The following table shows in brief what has happened in the original Birth Registration Area

	Deaths		Rates*	
	1915	1928	1915	1928
Under 1 year	77,572	48,878	99.9	66.7
1-4 Years	26,848	17,397	10.4	5.5

The infant mortality rate in 1928 was 33 per cent below the rate in 1915, while the drop in the rate of the 1-4 year group was considerably greater—47 per cent

The purpose of this paper is to analyze the trends of the total mortality and mortality from specified important causes among children of pre-school age (one to four years inclusive) during the thirty year period 1901-1930 in the territory under the jurisdiction of the New York State Department of Health—i.e., the State, exclusive of

New York City The mortality data for 1915-1931 are taken from the annual reports of the State Department of Health The figures for 1901-1914 are taken from the U S Mortality Reports, because the state tabulations according to age are not available for those years

Estimates of Population 1-4 years of Age The mortality rate at single years of life under 5 years, with the exception of infant mortality, which is based on the number of recorded births, has always been difficult to measure The federal census is taken once in ten years, and the farther removed from a census year, the more likely are the estimates of population to be erroneous This is particularly true of the ages under 5 years, since it is generally agreed that even the census count is below the actual number of children living Besides, inter- and post-censal estimates do not allow for fluctuations in the birth and death rates that affect the population at these early ages

In this paper we shall therefore, employ estimates of the population based upon the recorded births and deaths The method used is similar to that employed by Glover in the life tables of 1909-1911 to estimate the true number of births when birth registration was incomplete For the years 1901-1917 it was necessary to correct the recorded number of births for incompleteness of reporting This was done by assuming that the gen-

* Infant mortality per 1 000 live births other rates per 1 000 population

eral trend of the birth rate in Massachusetts, a state where registration has been practically complete for many years, was the same as the birth rate in New York State, exclusive of New York City.* For the years 1905-1910 these estimates were checked by computing the births from the populations at 2, 3, and 4 years of age (these being more completely enumerated than the populations under 2) as given in the census of 1910 and as estimated for 1909 and 1911. In all cases the difference between the two estimates was found to be less than 3 per cent.

The populations thus computed relate only to the native-born; the number of foreign-born under 5 years is, however, negligible. The chief source of error is the migration to and from New York City and other states. The rapid development of the suburbs of New York City in the last few years, particularly in Nassau and Westchester counties, has undoubtedly brought into the Upstate territory a considerable number of children whose births were recorded in New York City; our estimates are, therefore, probably below the actual numbers. In the census year, 1910, for example, the population 1-4 years estimated from births and deaths was 4.9 per cent more than the census count, and in 1920 1.3 per cent more, whereas in 1930 the estimated number was 2.4 per cent less than the census figure, although for the state as a whole it was 3 per cent more.

The Trend of Mortality, 1-4 Years of Age. In New York State mortality in early childhood began to decline after 1910. The average rate in the five year period 1926-1930, 5.1 per 1,000 population, was 55 per cent lower than the annual average in 1901-1910 (11.3). The principal cause of death since 1901 has been pneumonia, with the exception of the years 1905 to 1908, 1913 and 1921, when there were more deaths from diarrhea and enteritis, and 1918, when there were more deaths from influenza. From 1901 to 1923, with the exception of these seven years, and the year 1919 (when diphtheria took second place), diarrhea and enteritis was second in importance. Since 1926, accidents has been the second most important cause and diarrhea and enteritis third. In 1901-1910 pneumonia was responsible for 17.2 per cent of all deaths, diarrhea and enteritis 17.5 per cent, diphtheria 10.5 per cent, the other communicable diseases (measles, scarlet fever and whooping cough) 12.9 per cent, and accidents 6.1 per cent. In the quinquennium 1926-1930 the picture was quite different, pneumonia causing 21.3 per cent of all deaths, accidents 13.7 per cent, diarrhea and enteritis 10.8 per cent, diphtheria but 5.4 per cent, and the other communicable diseases 10.6 per cent.

Mortality at One Year of Age. The death

rate in the second year of life, though but a fraction of the infant mortality rate, is twice as high as the death rate in the third year, and higher still than the rates in the fourth and fifth years. It is at this age that the greatest decline in mortality has occurred. The annual average death rate in 1926-1930, 9.2 per 1,000 population, was 58.4 per cent below the average in 1901-1910 (22.1). The annual average per cent of decline in the rate from 1910 to 1930 was 4.9, while for infant mortality it was 3.2.

Diarrhea and enteritis was the leading cause of death from 1901 through 1915. Beginning with 1916, with the exception of the years 1918 (when influenza was first) and 1921 (when diarrhea was first), pneumonia was in first place and diarrhea and enteritis second. These two causes are responsible for more than 40 per cent of all deaths at this age, and this percentage has not changed materially since 1900.

Accidents, the third most important cause in 1926-1930, was of considerably smaller relative importance in 1901-1910, being preceded by bronchitis, tuberculosis, meningitis, measles, whooping cough, and diphtheria. The last three diseases and scarlet fever were responsible in 1926-1930 for the same proportion of all deaths as in 1901-1910—16 per cent. The death rate from measles dropped 53 per cent and from whooping cough 36 per cent, while the death rates from scarlet fever and diphtheria declined 78 per cent. The decline in mortality from measles and whooping cough has been less at one year than at the succeeding ages.

Mortality at Two Years of Age. The annual average death rate at two years of age in 1926-1930, 4.8 per 1,000 population, was 54 per cent below the average in 1901-1910 (10.4). The annual average per cent decline in the rate from 1910-1930 was 4.3. Pneumonia was the principal cause of death throughout this period, except 1918 (influenza first) and 1924 (accidents first). In 1901-1910, with an annual average rate of 174.8 per 100,000 population, it was responsible for 17 per cent of all deaths; in 1926-1930, with a rate of 96.3, for 20 per cent. Since 1922 (with the exception of 1924) accidents has been the second most important cause, followed in 1922 by diphtheria and from 1923 to 1930, by diarrhea and enteritis.

In the period 1901-1910, diphtheria, with a rate of 129.9 per 100,000 population was second in importance to pneumonia, and diarrhea and enteritis, with a rate of 121.2, third. In 1926-1930 the death rate from diphtheria was only 29.7, and was exceeded by the death rates from accidents (63.3), diarrhea and enteritis (48.1) and tuberculosis (33.4). Compared with the rate in 1901-1910, the diphtheria rate dropped 77 per cent, while the rate from scarlet fever dropped 82 per cent, from measles 69 per cent, from whooping

* For a discussion of this and other methods see "Correction of Birth Rates for Incomplete Reporting" by A. W. Hedrich, American Journal of Hygiene, Sept., 1929.

cough 57 per cent, from tuberculosis 40 per cent, from diarrhea and enteritis 60 per cent, and from pneumonia 45 per cent. The decline in the death rates of the four common communicable diseases, tuberculosis, and meningitis accounts for 55 per cent of the reduction in the death rate from all causes. In 1901-1910 they were responsible for 41 per cent of all deaths, in 1926-1930, for 25 per cent.

Mortality at Three Years of Age. The annual average death rate at three years of age in 1926-1930, 3.5 per 1,000 population, was 49 per cent below the average in 1901-1910 (6.8). The annual average per cent decline in the rate from 1910 to 1930 was 3.6 per cent. The decline in the death rates from measles, scarlet fever, whooping cough, diphtheria, tuberculosis and meningitis accounts for 72 per cent of this difference. In the decade 1901-1910 this group of causes was responsible for 47.8 per cent of all deaths, while in 1926-1930 the proportion was only 25.2. From 1901 to 1907 diphtheria was the leading cause of death with pneumonia second. From 1908 to 1922, with the exception of 1918, diphtheria was the leading cause in seven years and pneumonia in seven. From 1923 to 1930 accidents was the most important cause of death, followed by diphtheria in 1923, 1924 and 1927, and by pneumonia in the remaining years.

The death rate from diphtheria in 1926-1930 was 76 per cent below the rate in 1901-1910. In the same period the death rate from measles has dropped 64 per cent, from scarlet fever 82 per cent, and from whooping cough 59 per cent. Pneumonia has dropped 45 per cent and diarrhea 44 per cent, while the death rate from accidents was 19 per cent above the rate in the earlier period.

Mortality at Four Years of Age. The annual average death rate at four years of age in 1926-1930, 2.9 per 1,000 population, was 48 per cent below the average in 1901-1910 (5.2). The annual average per cent decline in the rate from 1910-1930 was 2.9. Diphtheria was the principal cause of death from 1901-1912, 1914, and again in 1920 and 1921. In 1913 the death rate from pneumonia equalled that from diphtheria, and in 1915 it was greater. Since 1916, with the exception of 1918, 1920 and 1921, accidental deaths were in first place. In 1926-1930 the death rate from accidents was greater by almost 50 per cent than in 1901-1910, and was greater than the sum of the pneumonia and diphtheria rates.

The decline in the death rates from measles, scarlet fever and whooping cough has also been marked. Together with diphtheria, tuberculosis and meningitis they account for 77 per cent of the drop in the total death rate.

Movement of Mortality at 1-4 Years of Age from Specified Causes. The mortality from diarrhea and enteritis has been declining steadily

since 1910. The reduction has been greatest at one year of age, the rate dropping on an average of 8 per cent each year as compared with 5.6 per cent at two years, 4.4 per cent at 3 years, and 4.5 per cent at 4 years. In the decade 1901-1910 diarrhea and enteritis was responsible for 26 per cent of all deaths at one year, 12 per cent at 2 years, 7 per cent at 3 years, and 5 per cent at 4 years. In 1926-1930 these percentages were 14, 10, 8 and 5.

In 1926-1930, pneumonia was the leading cause of death at one and two years; at 3 and 4 years it was second, accidents being first. Before 1918, there was no discernible trend in the death rates from pneumonia. In the last twelve years, however, the mortality has moved downward at all ages. The decline was less than in the death rate from all causes so that at present, at each age except 4 years, pneumonia forms a larger percentage of the total mortality than it did in 1901-1910.

The death rate from accidents at one and two years has declined since 1915. Fatal accidents at these ages are mostly burns, poisonings and falls. At 3 and 4 years automobile accidents form a larger part of accidental deaths, and the total death rate has declined only in the last five years and then but slightly. Now accidents is the principal cause of death at 3 and 4 years, and is second to pneumonia at 2 years. At one year it is preceded by both pneumonia and diarrhea and enteritis.

Mortality from measles has declined only in the last ten years. At 1-4 years the annual average death rate in 1926-1930 was 42 per cent below the rate for 1921-1925 which in turn was 33 per cent below the rate in the preceding quinquennium.

Mortality from whooping cough has also declined only in the last 10 years; the reduction has been less at one year than at any other age.

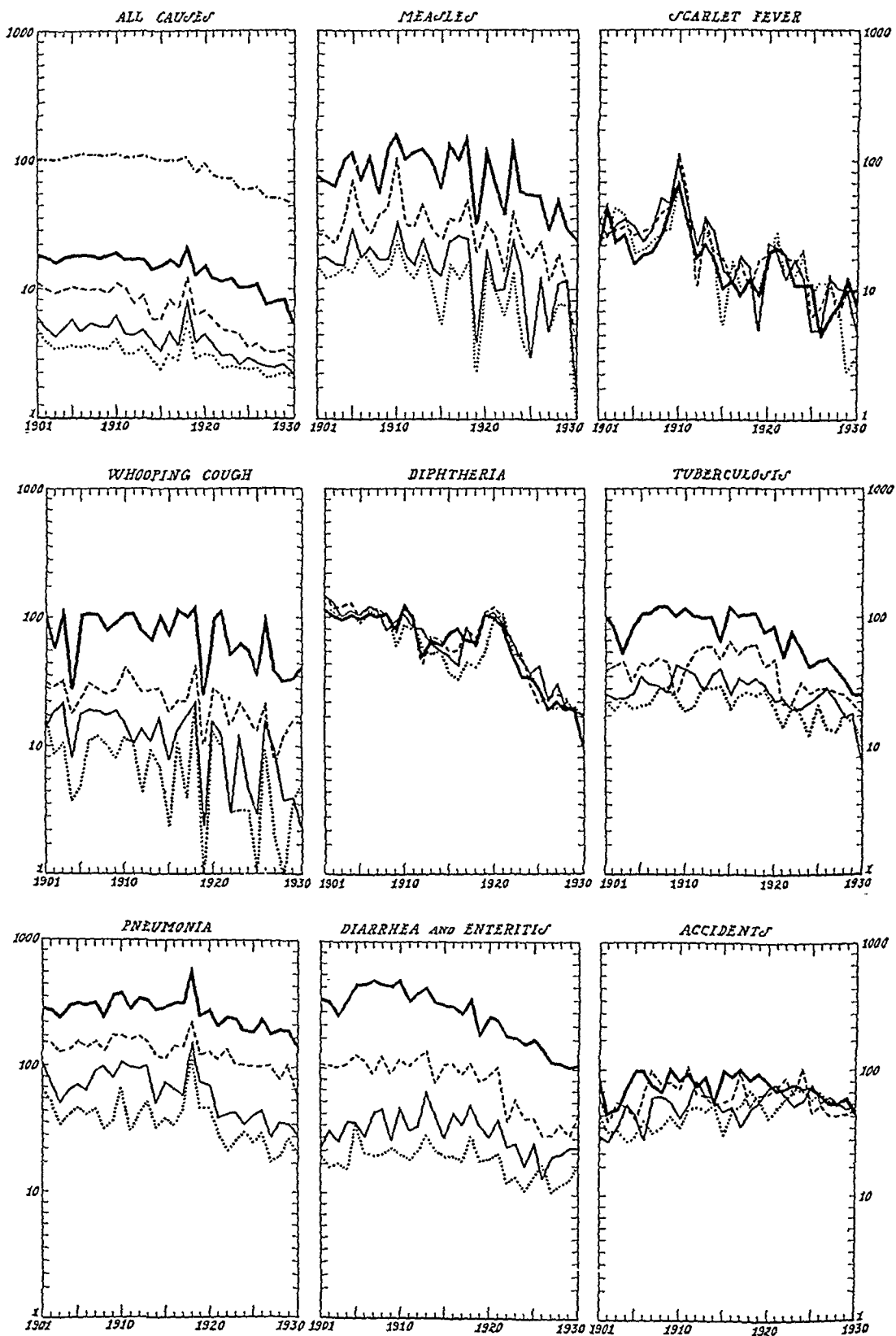
The death rate from scarlet fever has dropped relatively more than that from any other cause. The curve of mortality in 1901-1930 shows two cycles, but the peak of the first cycle in 1910 was 3 times as high as the peak of the second, in 1921, while the low point of the second is much below that of the first. The death rates at 1, 2, 3 and 4 years are very nearly the same, and the movement of the rates has been similar. Since 1901 the rate at 1-4 years has declined on an average of 5.5 per cent a year.

Mortality from diphtheria has also been declining since the beginning of the century, except for a rise between 1915 and 1920, which was followed by an even more rapid decline. For the whole period the rate has dropped on an average of 4.3 per cent a year. From being the most important cause of death at 3 and 4 years it has become third in 1926-1930.

Tuberculosis mortality at the early ages con-

DEATH RATES FROM ALL CAUSES PER 1,000 POPULATION, AND FROM CERTAIN IMPORTANT CAUSES PER 100,000 POPULATION, AT ONE TO FOUR YEARS OF AGE

New York State, exclusive of New York City: 1901-1930



Death Rates per 100,000 Population, from Important Causes, at One, Two, Three, and Four Years of Age
New York State, Exclusive of New York City, Quinquennial Averages, 1901-1930

One year of age	All Causes	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Tuberculosis (All Forms)	Meningitis	Bronchitis	Pneumonia	Diarrhea and Enteritis	Accidents
1901-1905	2148.0	96.2	37.8	91.9	112.8	19.6	97.0	188.1	103.0	412.5	504.2	80.8
1906-1910	2275.7	120.9	46.6	105.6	116.4	15.7	128.3	126.2	78.1	464.3	637.2	95.1
1911-1915	1902.6	111.5	26.7	96.3	103.8	15.2	107.3	59.5	55.3	453.1	521.9	91.9
1916-1920	2003.4	128.5	14.2	103.8	94.8	19.3	105.8	34.3	47.4	492.0	405.1	97.2
1921-1925	1254.7	89.3	17.6	78.6	60.6	37.3	71.1	24.4	28.1	302.0	239.9	85.5
1926-1930	919.7	51.3	9.2	63.0	24.7	46.0	48.9	16.6	16.1	258.7	129.6	72.4
Two years of age												
1901-1905	1040.1	47.7	46.6	37.3	141.2	11.4	56.2	104.4	29.8	166.9	118.2	65.0
1906-1910	1034.0	63.6	65.1	43.0	119.1	8.4	55.0	73.0	24.8	182.3	124.1	87.9
1911-1915	855.9	43.4	35.6	37.0	81.0	5.4	72.0	36.3	17.5	167.3	120.1	81.7
1916-1920	938.3	47.3	17.3	34.1	100.6	99.5	68.2	19.6	16.6	187.4	103.6	79.6
1921-1925	622.6	32.5	21.8	23.3	63.3	14.2	37.7	13.1	7.4	119.8	68.9	86.2
1926-1930	477.0	17.3	10.2	17.1	29.7	17.3	33.4	10.4	5.6	96.3	48.1	63.3
Three years of age												
1901-1905	674.7	24.1	45.6	19.4	131.4	5.5	37.8	67.4	11.3	83.9	44.6	53.0
1906-1910	687.9	28.1	62.2	21.8	110.9	6.5	47.9	55.2	8.5	96.1	54.5	64.7
1911-1915	578.9	21.4	39.5	13.2	79.4	3.0	47.2	17.7	5.6	90.4	54.6	75.5
1916-1920	641.0	27.5	18.1	17.5	91.7	67.2	43.4	14.0	5.0	100.8	68.5	75.5
1921-1925	443.1	14.7	16.5	8.6	70.4	8.3	30.3	8.3	3.9	55.9	36.4	79.2
1926-1930	352.6	9.5	9.5	8.5	29.5	13.7	24.5	7.4	3.3	49.5	27.6	70.5
Four years of age												
1901-1905	535.0	15.6	41.8	10.0	114.2	5.0	28.3	42.3	10.8	62.9	26.7	46.8
1906-1910	510.1	21.5	43.5	11.3	99.2	3.3	33.0	33.5	5.9	59.1	28.6	52.2
1911-1915	429.5	13.8	28.7	7.6	70.8	3.3	35.6	15.9	3.1	53.9	30.6	61.5
1916-1920	483.9	14.3	14.3	12.1	67.4	51.6	34.6	10.1	4.2	74.9	27.8	69.6
1921-1925	362.3	8.4	19.9	4.9	67.5	6.2	21.7	9.1	2.9	37.2	17.0	76.1
1926-1930	291.4	7.4	8.0	4.8	25.3	7.6	16.9	7.1	1.7	30.7	15.8	72.9
One to four years inclusive												
1901-1905	1111.1	46.5	42.9	40.3	124.8	10.5	55.5	101.6	39.4	184.1	176.9	61.6
1906-1910	1143.5	59.5	54.4	46.3	111.6	8.6	67.2	72.8	30.0	204.3	216.8	75.4
1911-1915	957.0	49.0	32.6	39.5	78.9	6.9	66.3	32.8	20.9	195.3	186.8	78.0
1916-1920	1021.9	54.7	16.0	42.2	88.7	103.3	60.3	19.6	18.5	215.2	149.0	78.9
1921-1925	674.7	36.6	18.9	29.2	65.4	16.5	43.4	13.8	10.7	130.0	91.6	81.8
1926-1930	509.5	21.3	9.2	23.3	27.3	21.1	30.9	10.4	6.7	108.5	55.1	69.8

Death Rates per 1,000 Population from All Causes,
by Single Years of Age Under 5. New York State,
Exclusive of New York City, 1901-1930

Year	Total under 5 years	Under 1 year*	1-2 years	2-3 years	3-4 years	4-5 years	Total 1-4 years
1901	31.8	103.4	22.8	11.6	7.4	6.4	12.2
1902	30.0	100.5	21.0	10.4	6.6	5.4	11.0
1903	29.7	102.8	19.2	9.6	5.9	4.9	10.0
1904	31.4	108.0	21.2	9.9	6.6	4.9	10.7
1905	33.5	114.4	23.2	10.5	7.3	5.1	11.7
1906	34.5	119.8	22.6	10.0	6.4	5.0	11.1
1907	34.5	117.7	23.0	9.9	7.0	5.1	11.4
1908	33.8	117.1	20.9	10.0	6.7	4.9	10.8
1909	33.3	113.9	22.7	9.6	6.7	4.9	11.2
1910	36.7	123.3	24.5	12.2	7.6	5.6	12.7
1911	31.7	109.0	20.0	10.0	6.1	4.5	10.3
1912	31.5	109.0	19.8	8.7	6.0	4.5	9.9
1913	33.3	116.9	19.8	9.5	6.5	5.0	10.4
1914	29.9	106.8	17.4	7.4	5.6	4.2	8.8
1915	28.9	103.2	18.1	7.3	4.8	3.4	8.5
1916	29.4	101.1	20.3	9.1	6.3	4.5	10.2
1917	28.2	101.4	17.5	8.3	5.2	4.0	8.8
1918	35.1	111.6	30.0	13.7	9.0	7.1	15.0
1919	24.4	89.3	14.6	7.7	5.5	4.2	8.0
1920	26.8	96.6	17.7	8.1	6.1	4.5	9.1
1921	24.7	86.9	14.3	7.3	5.3	4.4	7.8
1922	23.2	83.5	13.1	6.5	4.4	3.4	6.9
1923	23.2	84.0	14.0	6.4	4.5	3.5	7.2
1924	20.5	75.6	10.9	6.0	3.7	3.4	6.0
1925	19.9	74.1	10.5	5.0	4.2	3.3	5.8
1926	20.3	76.3	11.8	5.3	3.8	3.4	6.1
1927	17.5	67.0	8.8	4.7	3.6	2.7	5.0
1928	17.4	66.8	9.0	4.7	3.5	2.8	5.0
1929	17.0	65.1	9.2	4.8	3.7	3.0	5.2
1930	15.9	62.7	7.1	4.3	3.0	2.7	4.3

* The rates in this column are based upon the estimated populations under one year, not upon living births.

sists largely of deaths from tuberculous meningitis. The death rate from this cause rose considerably from 1900 to 1915, probably due to better diagnosis, or to the supplemental inquiries of certificates giving "meningitis" as a cause of death. Since 1915 the decline has been marked. At 1-4 years the death rate from tuberculosis,

all forms, in 1926-1930 was 24 per cent below the rate for 1921-1925, which in turn was 36 per cent below the rate for 1916-1920.

The decline in the death rate from meningitis, which was among the leading causes of death at the beginning of the century, is undoubtedly due in part at least to better diagnosis and to the greater care given by physicians to the certification of the cause of death. The death rate from congenital malformations, while very small after the first year of life, shows an increase paralleling the rise in the infant mortality from this cause.

The mortality from appendicitis and cancer, though of little numerical importance among young children, has been rising in the last 15 years; here, too, probably better diagnosis is very likely the main factor.

The death rate from diseases of the heart also increased up to 1920, but since then there was a gradual drop, so that the 1926-1930 rate was 37 per cent below that for 1921-1925.

Conclusion. It is doubtless a fact that while there has been an increase in public health activities among children of all ages, those in the preschool group are not receiving, relatively, as much care and attention as the infants under one and the children of school age. In the words of Dr. A. J. McLaughlin, Medical Director, United States Public Health Service, "The greatest single defect in our public health work today is our inability to secure early immunization and early discovery and correction of defects in children from 1 to 5 years old . . . generally speaking, this field is almost untilled."*

The thorough application of present medical and public health knowledge should make possible a further reduction, if not the practical elimination, of diphtheria and diarrhea. In the matter of pneumonia the situation is less fortunate, but a more intensive effort against all the diseases of children over one and under five years should result in a lowered mortality from pneumonia as well.

* The Medical Profession and the Health Department. U. S. Public Health Report V.1. 46, No. 35.



HEARING SURVEY, PUBLIC SCHOOLS, ALBANY, N. Y.

By E MARTIN FREUND, M D, ALBANY, N Y

DURING the years of 1930 and 1931 a survey was undertaken of the hearing of the public school children in Albany. This study was commenced in May, 1930, and was continued that fall until June, 1931. These tests were done on all pupils in and above the third grades, also in the Junior and Senior High Schools. It was considered impracticable to examine those of the kindergarten and the first two grades as it was felt that these three groups could not cooperate sufficiently with the devices used.

The total school attendance for the entire Public School system, including the Part-Time Junior and Senior High Schools was 14,361 pupils. The census of the Part-Time High School, Kindergartens, and the first and second grades, comprising the groups not tested, was 4,041, or nearly 33 per cent of the total school population.

It is pertinent here to note that the total Albany school population, i.e., children below 18 years of age, was approximately 21,000, the remaining 7,000 being pupils attending the various parochial schools, private academies and business schools.

With the aid of the phono audiometer, type 4-A (Westinghouse) it was possible to test a group of 40 children at one time. This apparatus consists of a phonograph and records which "speak" numbers in 2- or 3-digit groups to each child by means of individual head phones that are connected to the phonograph by 5 trays, serially wired in groups of 8 head sets to each tray. In this manner the pitch and intensity of the spoken numbers do not vary in any of the 40 head sets. The records, as previously stated, transmit spoken numbers, the speaker's voice growing quieter and quieter as the succeeding numbers are uttered. Twelve groups of numbers are dictated in each column so that the spoken voice commences in an ordinary loud conversational tone and ends in a very low whisper. Each ear receives a 4-column test, 2 giving the voice of a woman and 2 that of a man. Thus the pupil is tested for pitch as well as sensation unit loss. The average time consumed in testing a group of 40 children is 20 minutes. Each pupil being thus tested writes the number he hears in the proper column and the most correct column of each ear test is judged as the final result.

In each case also the pupil fills out a Standard Record Sheet including such facts as name, age, grade, sex, history of previous or present earaches, ear discharges and head noises, and designates which ear or ears are or have been so affected. In this anamnesis the school nurse and grade teacher are of considerable assistance, especially with the younger children. Information regarding previous tonsil inflammation or operation and

mastoid operation is also noted on the sheets.

In this survey the routine was as follows: first the 4-A test was given to all the children in groups of 40 or less, those of the 3rd and 4th grades receiving the 2-digit tests while the 5th and higher grades received the 3-digit tests. The sheets were then corrected and those children showing a loss of 9 or more sensation units were reexamined several days later with the 4-A. Those showing similar defects in the retest were finally tested individually with the 2-A audiometer (Westinghouse). This latter is an electric device which gives the exact percentage of loss of hearing analogous to calibrated tuning forks ranging from 64 to 8192 vibrations. This apparatus has certain advantages over tuning forks in that the intensity of sound is constant, it is time saving and it does not depend upon the interpretation of the person conducting the test.

All the pupils tested with the 2-A were given a routine ear, nose and throat examination for the purpose of noting any existing pathology that might in any way have some bearing upon the existing diminution of hearing. The 2-A tests and the otolaryngological examinations were all done by the otologist, thus insuring uniformity of routine.

TABLE I

Number of Pupils Tested and Retested with 4-A Audiometer, Number Tested with 2-A Audiometer, Number of Defective and Borderline Cases, by Schools

	No. tested with 4 A	No. retested with 4 A	Total tested with 2 A	Normals with 2 A	Defective hearing	Borderline defects
1	157	40	34	14	16	4
2	137	42	14	7	4	3
3	131	28	16	7	6	3
4	310	98	57	14	29	14
5	306	84	22	8	6	8
6	460	122	22	4	11	7
7	149	51	12	6	3	3
8	171	43	40	12	20	8
9	150	36	13	4	8	1
10	130	31	18	6	5	7
11	172	43	10	9	1	0
12	425	76	34	13	11	10
14	609	152	76	22	40	14
15	216	51	47	6	25	16
16	495	92	22	7	8	7
17	218	11	7	1	5	1
18	340	68	21	8	7	6
19	441	82	39	12	18	9
20	342	87	33	6	18	9
21	349	84	16	5	6	5
22	103	47	17	8	6	3
23	314	96	32	14	8	10
24	253	86	19	13	2	4
26	176	58	20	9	7	4
27	203	79	33	17	12	4
J H S	1298	292	35	2	29	4
A H S	1686	394	38	6	28	4
Totals	9741	2373	747	240	339	168

TABLE 2

Totals and Explanation of Fig. 1.

Total number of pupils tested with 4-A.....	9741
Total number retested with 4-A	2373
Total number tested with 2-A	747
Total defective hearing with 2-A	339
Total borderline defects with 2-A	168

It is to be noted that out of 9,741 pupils tested with the 4-A, 2,373 or 25% required retesting. The reasons for this large percentage of failures are numerous. One must take into consideration the child's nervousness, inattention, apprehension, and distraction; also extraneous noises and lack of coordination between auditory, visual and motor centers. That these numerous possibilities were eliminated in the retests is proven by the fact that more than two-thirds of those re-examined with the 4-A showed normal hearing.

After the second test there were 747 pupils still showing a hearing loss of 9 or more sensation units. These were then tested with the 2-A with the result that 240 showed normal hearing. This emphasizes the importance of checking up with the 2-A audiometer. Finally 339 cases or 3.5% showed defective hearing and 168 cases or 1.7% showed borderline defects, giving a total of 507 or 5.2% hearing defects of the total of 9,741 school children tested.

noises; particularly where there has been pain previously in both ears. In other words 1,244 pupils gave a history of previous earaches in both ears and 1,259, nearly the identical number, reported bilateral head noises. In the majority of instances the same children reported both of these findings.

Table 3(b).

Analysis of Histories of Table 3(a).

Total number of children tested	9741
Total number giving history of previous earaches	3253 or 35%
Right ear	1051
Left ear	958
Both ears	1244
Total number of previous ear discharges..	1068 or 12%
Right ear	350
Left ear	340
Both ears	378
Total number showing present discharge...	139 or 1.5%
Total number showing tinnitus.....	2430 or 26%
Right ear	671
Left ear	500
Both ears	1259

This information was elicited from the test sheets which included the following questions:

Did you ever have an ache or pain in your ear?.....
Which ear?.....When?.....
Did you ever have a running ear?.....Which ear?.....
When?.....
Does it run now?.....

TABLE 3(a)

Histories of Previous Earaches, Ear Discharges and Head Noises (or Tinnitus) of Total Children Tested

P. S.	Previous Earaches			Previous Discharge			Present Discharge	Head Noises		
	R	L	B	R	L	B		R	L	B
1	29	24	23	9	7	5	3	16	14	20
2	14	8	17	3	4	7	2	9	2	16
3	19	13	35	10	11	6	6	15	11	33
4	28	36	56	8	17	18	3	20	25	52
5	64	29	14	18	10	12	10	45	21	14
6	58	46	59	11	16	14	4	22	10	30
7	28	19	27	8	10	10	3	6	7	12
8	23	17	22	9	10	7	0	12	15	15
9	17	9	24	4	3	5	3	14	5	24
10	15	9	27	3	5	7	5	5	7	28
11	22	16	16	5	10	2	2	11	10	13
12	53	55	61	10	22	18	3	37	31	78
14	77	86	60	39	28	34	18	59	39	88
15	30	15	15	8	4	8	3	15	15	29
16	38	40	136	15	14	38	6	35	19	122
17	Records Lost									
18	36	29	48	16	7	16	4	21	14	52
19	53	33	157	21	14	26	8	60	27	122
20	52	41	43	17	15	14	9	28	18	34
21	47	57	43	23	13	19	5	39	27	44
22	12	20	14	9	10	3	7	7	11	12
23	Records Lost									
24	31	36	19	10	14	8	4	11	12	20
26	18	22	9	9	9	0	3	12	14	17
27	14	13	8	4	6	2	1	2	6	13
J.H.S.	153	167	154	43	43	33	15	95	93	202
A.H.S.	120	118	156	37	37	44	14	56	46	158
Totals	1051	958	1244	350	340	378	138	671	500	1259

Note the proportional relationship between previous earaches and presence of or history of head

Do you ever have noises in your ear, like buzzing, hissing or roaring?.....Which ear?.....When?.....

In general one must not depend too much on these facts answered by the children themselves. However, repeated surveys should provide more reliable data for comparative study of these histories. Emphasis may be laid here on the necessity of reporting all absences due to ear, nose or throat ailments and exanthemata in order to furnish a basis for more accurate histories. The follow-up examinations among these absentees often should enable us to discover early manifestations of deafness that may be developing.

In analyzing the previous tonsil and adenoid and mastoid involvements in the total of 9,741 school children in this survey the following figures were gleaned (see Table 4)

TABLE 4

Previous Tonsil and Adenoid and Mastoid Operations in All School Children Examined, by Schools

P S	Previous T & A Ope	Previous Mastoid Op			Total
		Right	Left	Both	
1	59	2	0	0	2
2	42	0	1	0	1
3	30	0	1	0	1
4	131	2	3	3	8
5	79		No Record		
6	126	1	0	0	1
7	47	0	1	0	1
8	73		No Record		
9	43	1	1	0	2
10	73		No Record		
11	31		No Record		
12	117		No Record		
14	179	1	3	0	4
15	68	1	1	0	2
16	216	3	4	0	7
17	87	1	1	1	3
18	89	0	2	0	2
19	117	6	5	1	12
20	92	1	1	0	2
21	94	1	0	0	1
22	48	0	1	0	1
23	99	3	1	0	4
24	65	1	2	0	3
26	22		No Record		
27	40	2	0	0	2
JHS	359	4	5	2	11
AHS	426	7	8	1	16
Total	2852	37	40	8	85

Thus it is seen that 2,852 children or nearly 33 1/3% had had their tonsils and adenoids removed while 85 children or 85% had had a mastoid operation. Of these 85 mastoid operations 37 were done on the right ear, 40 on the left and 8 were bilateral.

The routine of this procedure was as follows. All pupils requiring a 2-A test (numbering 747) were given an ear, nose and throat examination, and in some instances supplemented by translucination of the sinuses. The tabulated results in Table 5 covers only the findings of 507 children showing defects in hearing after the 2-A tests. The results in the remaining 240 cases were not here tabulated but were recorded on the individual health records for follow up work. Many of

TABLE 5

Ear, Nose and Throat Findings in Defective and Borderline Cases

		Defective			Borderline		
		Right	Left	Total	Right	Left	Total
Ears	Wax	52	47	99	23	33	62
	Discharge	25	11	36	3	2	5
	Tophi	0	0	0	0	0	0
	Perforated drum	66	56	122	24	21	45
	Otitis media	1	0	1	0	0	0
	Mastoiditis	1	0	1	0	0	0
	Myringitis	1	2	3	0	0	0
	Retracted drum	102	120	222	72	54	126
	Calc. plaques	20	17	37	8	6	14
	Eczema	1	0	1	2	2	4
Nose	Furuncle	0	0	0	0	0	0
	Discharge	16	9	25	7	5	12
	Scabs	3	3	6	2	0	2
	Deviated septum	25	12	37	9	3	12
	Swollen turbinates	96	66	162	46	20	66
	Polyp	1	0	1	1	0	1
	Inflammation	8	8	16	0	4	4
	Sinus involvement	20	14	34	6	4	10
	Enlarged tonsils			143			79
	Infected tonsils			93			38
Throat	Enlarged uvula			1			0
	Pharyngitis			28			11
	Granulations			12			5
	Adenoids			60			33

these children showed multiplicity of defects. There was a special correlation between chronic hypertrophied tonsils and adenoids and deafness, due to tubal and middle ear catarrh.

Occasionally some tonsil stubs were noted but in no instance did these lymphoid tabs seem to be harmful. More than 80% of the perforations noted were of the healed and closed types. Some that were healed but not covered with a thin scar showed granulations about the margin and in only about a dozen instances was there complete or nearly complete absence of drum. Calcified plaques were more numerous than expected.

One active case of mastoiditis was discovered, as well as six acute sinus infections.

We wish to emphasize the importance of the discovery of these defects during childhood. For in all of these cases the parents are notified and urged to place the children under care of their family physicians or competent specialists. The school examination in this field as in other health fields is primarily diagnostic and in no way encroaches upon the practice of the private physician in the community. Without cooperation of parents and physicians the value of this school health activity would be entirely lost.

There was a striking prevalence of hypertrophied and infected tonsils and adenoids found among the children showing defective and borderline hearing. This proves beyond a doubt that many normal hearing pupils were saved from developing ear conditions by the early removal of diseased tonsils and adenoids. This is evinced

by the fact that at least 33⅓% of all children in this survey had had a previous tonsil and adenoid operation. (See Table 4.)

On the other hand, of the defective and borderline cases examined 222 out of 507 or 40% showed enlarged tonsils; 131 or 25% showed infected tonsils; while 93 or 18% showed adenoid vegetations.

This also leads us to conclude that any child found in a routine school examination to have diseased tonsils and adenoids, should have its hearing watched although no signs of diminished hearing may be evident at that time.

TABLE 6

Defective and Borderline Cases According to Sex

P.S.	Male	Female	Total Tested
1	5	15	157
2	3	4	137
3	5	4	131
4	24	19	310
This group includes the deaf-oral class of 14 and the sight-saving class of 16 pupils.			
5	8	6	306
6	13	4	460
7	0	6	149
8	13	15	171
9	5	4	150
10	4	8	130
11	0	1	172
12	10	11	425
14	27	27	609
15	20	21	216
16	8	7	495
17	1	5	218
18	4	9	340
19	23	15	441
20	11	6	342
21	6	5	349
22	7	2	103
23	7	11	314
24	4	2	253
26	5	6	176
27	9	7	203
J.H.S.	20	12	1298
A.H.S.	17	15	1548
Total	259	247	9741

Our findings coincide with other similar surveys as regards the distribution of hearing by sex. As is noted in Table 6 the incidence of defective hearing is about the same in both sexes.

An Attempt to Ascertain Relationship Between Hearing Defect and Mental Achievement

An attempt was made to correlate the National Standard achievement tests with the audiometric tests to discover if there exists any connection between defective hearing and learning capacity. The sixth grade was selected for this study because it was at that time the only grade in which the achievement as well as the audiometric tests had been completed.

Of the 68 sixth grade children with faulty

hearing the achievement tests of 40 were available. Of these, the results are as follows:

29 or 72% were below normal.

11 or 28% were normal or above normal.

This suggests a definite relationship between defective hearing and mental achievement. It will be interesting to follow this comparison through further studies as both achievement and hearing tests are repeated.

A Study of Hyperacute Hearing Group

One of the schools, namely P.S. 17, showed an unusual number of bilateral hyperacute hearing pupils. Out of 218 pupils tested with the 4-A, 118 or nearly 55% heard at —3 sensation unit loss with both ears. This is equivalent to hearing a very faint distant whisper. Of the remaining 100, 94 showed normal hearing in both ears. Of the other 6, 5 had defective hearing and 1 showed borderline defect.

A further analysis of these two groups as to their histories shows the following facts.

TABLE 7

Analysis of Hearing Examinations of P.S. 17

Number of pupils tested with 4-A	218
Number of pupils showing —3 in both ears	118
Number of pupils showing normal hearing in both ears	94
Number of pupils showing defective hearing with 2-A	5
Number of pupils showing borderline defect with 2-A	1

HEARING TABULATION

	Hyperacute 118 or 55%	Normal 94
Total cases examined		
No defects stated	40	36
Earache, total	67	57
Right	23	27
Left	17	15
Both	27	15
Previous ear discharge	18 or 15%	14
Right	4	5
Left	6	5
Both	8	4
Present ear discharge	2 or 1%	2
Tinnitus	29 or 25%	39
Right	8	9
Left	4	2
Both	17	28
Earache, prev. disch., pres. disch., and tinnitus	1	2
Earache, prev. disch. and tinnitus	6	7
Earache, pres. disch. and tinnitus	0	0
Earache and pres. disch.	1	0
Earache and prev. disch.	8	5
Prev. disch. and tinnitus	1	0
Earache and tinnitus	13	18
Earache alone	38	25
Tinnitus alone	8	12
Present discharge alone	0	0
Previous discharge alone	2	0

It is difficult to account for the high incidence of previous earaches, ear discharge and head noises among the hyperacute cases studied in this

group. One of the possible explanations may be that this school has maintained the highest record in discipline, health, mental achievement and parental cooperation. Therefore it is reasonable to assume that the various physical ailments that may develop, are promptly attended to by the parents and not permitted to become chronic.

TABLE 8

Number of Children Recommended for Lip Reading Instruction, by Schools

P S	No of children	P S	No of children
1	2	16	1
2	1	17	2
3	2	18	0
4	2	19	2
5	0	20	1
6	3	21	1
7	0	22	5
8	5	23	1
9	0	24	0
10	1	26	0
11	1	27	1
12	1	JHS	11
14	5	AHS	19
15	5	—	—
		Total	72

This group is comprised of those children showing more than 30% bilateral hearing loss with the 2-A, or 50% or more unilateral hearing loss with the 2-A. The reason for including the latter is that being so handicapped in one ear, there is possibility of involvement of the other ear in the future. Early instruction in lip reading is therefore a foresighted measure in these instances.

TABLE 9

Otologic Name	Study of Age	of the Deaf Oral Class, PS 4
Name	Age	Diagnosis and Remarks
Viola B	14	Acquired deafness, chronic catarrhal type
Charlotte B	8	Same as above
Jack D	10	Progressive catarrhal deafness, congenital (?)
Frank G	13	Toxic nerve (luec?) deafness, chronic sinusitis
Catherine M	13	Chronic catarrhal deafness, chronic sinusitis
Regina N	10	Congenital nerve deafness
Raymond S	9	Congenital nerve deafness, progressive middle ear disease
Stanley W	20	Chronic progressive catarrhal deafness, chronic sinusitis
Joseph T	?	Progressive acquired catarrhal deafness
William S	15	Toxic nerve deafness, bilateral, post scarlatinal
Frank McC	15	Congenital deafness, bilateral
Edward S	15	Bilateral deafness, congenital
Joseph C	14	Progressive deafness catarrhal type

Albany is among the progressive cities which provides separate instruction in the public school system for the very deafened child. Two specially trained teachers instruct this group in both grade work and lip reading.

Conclusions

1 Of a group of 9,741 children tested, 339 or 3.5% showed definite defective hearing while 168 or 1.7% showed borderline defects, giving a total number of 507 or 5.2% of children with impaired hearing.

2 The large incidence of hypertrophied and infected tonsils and adenoids among the children with impaired hearing shows this to be a definite factor in the production of deafness.

3 Tubal catarrh or middle ear involvement in this group plays a more important role in the production of impaired hearing than does the evidence of previous drum abscesses.

4 We cannot emphasize too strongly the urgency of discovering hearing defects in early childhood. It has been estimated that the follow-up work and correction of these physical defects should reduce the incidence of deafness in children to less than a fourth of the present total.

5 Sex does not seem to be an important factor in the incidence of deafness.

6 Impaired hearing is a definite cause of mental retardation. Recent statistics show that from 10 to 12% of the school budget goes toward the expenditure for the repeating child, and nearly 60% of this expenditure is traceable to the hard of hearing child.

7 Prompt parental cooperation in correcting ear, nose and throat defects lessens the possibility of development of impaired hearing.

Recommendations

1 A thorough hearing survey is an essential need in the modern educational program. It is the consensus of opinion that such a survey should be conducted two or three years in succession. After that period, all incoming 3rd year classes, all new pupils entering the school system and all defective and borderline cases should be examined annually or more often when indicated.

2 Absences due to ear, nose and throat diseases, and the various exanthemata should be given hearing tests on their return to school.

3 All children with defective speech (stuttering, stammering, etc.) should have a routine hearing test. It has been pointed out that many of these conditions are due to imperfect hearing.

4 The hearing survey and examinations should be conducted by a part time otologist. He should have to assist him a school nurse, assigned to this particular work, whom he can train in the technique of testing.

5 All cases of impaired hearing should be promptly reported to the parents who should be urged to place the children under the care of their family physicians or otologists. Where financial handicaps exist, the children should be taken to ear clinics for treatment.

6. Lip reading instruction should be given to all pupils showing a bilateral hearing loss of more than 30% or a unilateral hearing loss of 50 or more per cent.

7. A proper understanding on the part of the classroom teacher of the psychology and intelligent handling of the hard of hearing pupil is very essential for his educational development. Some suggestions as to classroom handling of the hard of hearing child are:

(a) front row location.

(b) additional rest periods.

(c) kindly encouragement without emphasis on the handicap.

8. Each school should have a "permanently quiet room" for the eye, ear, nose and throat examinations according to Dr. E. P. Fowler of New York. Such facility would give more accurate results in the tests by eliminating extraneous noises.

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ORAL FOCAL INFECTION

Under What Conditions Should Pulpless Teeth Be Removed

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Read before the Second Combined Medical and Dental Meeting of the Westchester Dental Society, December 15, 1931.

IN THE comparatively recent practice of medicine the conception has arisen that a localized primary infection can cause systemic disturbances and even organic changes. Many tissues and organs have been mentioned as the site of this primary focal infection, viz.—the teeth, the jaws, the gums (pyorrhœa), the uveal tract, the nose, the sinuses, the Waldeyer ring of lymphatic tissues, the bronchi, the pleuræ the lung parenchyma, the hiluses of the lungs, the gastro-intestinal tract and the gall-bladder with its passages, the genito-urinary system (prostate, seminal vesicles, bladder, adnexia, uterus, kidney pelvis and kidney itself), the bony skeleton, the joints and the skin. This list does not exhaust all the possibilities but serves to indicate how wide in range is the possible occurrence of a local infection. In this paper our more immediate concern is with the role which the oral infections play in general medicine.

Oral infection in this connection* was more

* For the notes on the historical data I am indebted to Dr. G. Stein of Vienna.

than a vague notion as early as 1828 when Leonhard Koecker recognized the "influence of infected teeth upon the entire body." In 1884-1885 Miller and Kaczorowski quite clearly recognized primary oral infections. The last two decades have been marked especially by much work and discussion along this line. Thus William Hunter (1910) in his McGill Lecture definitely spoke of the relation between mouth and the body infections. Billings (1912) and Rosenow (1915) began their experimental studies on this problem and since then work has appeared, to mention but a few, by Black, Brophy, Buckley, Henrici, Hartwell, Price, etc., in this country, and by Falta (1919), Höglér, Antonius and Czepa abroad. As is well-known the American authors about this time came to believe that the tonsils and root canal infections were chiefly responsible for associated systemic infections, although Falta in a personal talk in Vienna (September, 1930) stated that he had had the same idea independently as early as 1915. Schottmüller's original work on streptococcus viridans was an important

milestone because this bacterium was observed in focal teeth infection and in distant body organs.

In our more practical study as to when and under what circumstances should pulpless teeth be removed there are at least three (3) chief considerations:

(1) First, there must be no important contraindication, for example, a marked bleeding tendency in the patient as in hemophilia in males or in patients with hemorrhagic tendencies associated with blood diseases such as leukemia, pernicious anemia, or thrombocytopenia (changes in the quantity and, very likely, in the quality of the blood platelets). Another example would be the presence of an already existing lethal disease, i.e., sarcoma, carcinoma, advanced tuberculosis, acute leukemia, or Hodgkin's Disease. No extirpation of teeth should be undertaken in fever states like typhoid, cerebrospinal meningitis, in acute encephalitis lethargica. Similarly, the removal of teeth is contraindicated in patients suffering with cardiovascular diseases, especially during stages of heart failure decompensation or shortly after an acute coronary vessel thrombosis or in recent hemiplegics or in acute rheumatic endocarditis or pancarditis. Marked hypertension as well as uncontrolled or severe diabetes may also be contraindications. These conditions are examples, there are others also, which make the removal of teeth inadvisable and even uncalled for.

(2) Second, there should exist a strong plausible causal relationship between the patient's general condition and any pulpless teeth he may have. We have already noted that many observers sensed this clinically and were even certain of such a relationship because of experimental evidence but the practicing dentist and physician often still remain in doubt. They hesitate to give advice or to remove pulpless teeth because no sure relationship is demonstrable with regard to systemic symptoms that may be present. Moreover, it is known that some patients do well, medically speaking, when their pulpless teeth are out while other individuals show no improvement even when they are made toothless. Obviously, the haphazard empirical extirpation of teeth can lead to no data for sound deduction and sound practice. However, there do seem to be conditions the validity of which have been strengthened by repeated reliable observations in which the removal of pulpless teeth is valuable, viz.—joint disturbances, myositis, nerve afflictions (sciatica, trigeminal), unexplained secondary anemias and unexplained prolonged fevers (the latter two conditions being in reality signs of sepsis). Here the mouth may be rid of pulpless teeth, particularly if, as is so often the case, practically all other sensible and available therapeutic measures brought no relief. At this point we could discuss the local and general indi-

cations for surgical interference but we shall postpone this for the moment. We must, however, again repeat that at best, the relationship between pulpless teeth and systemic disease is inferred, at present, excepting, of course in the mind of Rosenow who feels that he has demonstrated such a relationship. Rosenow's investigations are well known. They represent painstaking careful studies carried on over many years. In many quarters, however, his deductions are not accepted chiefly because his bacteriological studies are not readily repeated and also because there is, as a rule, only meagre reliable clinical data in general. Thus, in questioning good observers like Falta, Stein, Gotthelb in Vienna, one gained the impression that here and there clinical improvement could be ascribed to the removal of pulpless teeth but that more frequently no clinical improvement occurred. The important point at issue is whether it is permissible to interpret this improvement as due to the removed teeth since so many cases show no relief after the same procedure and since improvement in chronic medical conditions may be spontaneous in a limited percentage of cases. Nevertheless, it can not be denied that there are clinical circumstances when attention is strongly directed to pulpless teeth as the etiological factor. These are polyarthritis, uveal tract infections, infections of the sinuses, nose and throat, skin conditions like eczema, urticaria erythema multiforma, maybe, endocarditis. To these von Passler (1930), at the Congress at Wiesbaden, adds metabolic disturbances, febrile conditions, and psychic derangements.

(3) The third consideration is really related to and part of our second consideration but is discussed separately because of its clinical importance. Pulpless teeth may be removed when they are impugned to or, better, known to harbor bacteria or toxins capable of involving various structures in the body such as the heart lining especially about the valves, the joint membranes, lung tissues (abscess), bones, etc. This subject is by no means clear but there is a strong presumption that bacteria like anhemolytic streptococci, often recovered from pulpless teeth, may infect organs and tissues as mentioned above. Accordingly the removal of such teeth may be a valuable prophylactic measure in dental and medical practice.

We may now turn to the question what are the more direct indications for the removal of pulpless teeth?

Dental Indications

1 These I touch very briefly, they are not in my field. It may, however, be permissible to emphasize three points, first the value of light percussion of all teeth at every dental examination. Dead teeth are insensitive, of course, but teeth

slightly sensitive to delicate percussion should be watched. These sensitive teeth, later quiescent or dead, may prove to be the starting point and possibly the true primary focal point of a systemic disorder. Unless the dentist knows of the presence of such teeth their significance may never come to light. The second point is in the history of the patient. The dentist should question carefully if there were any other teeth, diseased or inflamed, or gums, etc.; or if *at the time* of the appearance of constitutional symptoms any tooth began to ache. Frequently tooth trouble, unless, very severe, escapes the recognition of the patient, dentist, and doctor because the patient is suffering much with his general condition or his general disturbance is long drawn out over months and years. A third important point is the discovery in a patient's history that he was compelled to interrupt any dental work (especially root canal work) because of the onset and development of generalized or medical symptoms. If it can be established that the *onset* of a general disease began with a tooth infection then such a tooth should be removed unhesitatingly.

These dental considerations were pointed out to me by Dr. G. Stein of Vienna.

The Medical Indications

We have, for the most part, already reviewed these. Here we may summarize them under three headings, first when all other methods have been found wanting, second where there is a sensible and reasonable presumption that much may be gained prophylactically, and third when medical conditions exist that are chronic, unyielding and generalized in character and distribution as in slow moving sepsis or else localized in organs and tissues and so suggest the possibility of secondary focal depot formation.

Laboratory Methods

Generally speaking these are not accurate means for estimating which if any pulpless teeth should be removed. The *x*-rays, obviously, have a direct and special usefulness in diagnosis. The bacteriological and serological procedures in this connection, however, are not sufficiently practical

according to the work and views of most observers, for instance the complement fixation for streptococci, the agglutination test, these are not yet conclusively established as clinically valuable.

The blood in general can give us an idea of the state of anemia or the presence of disease and blood examination is, therefore, a valuable medical test.

Clinical Data

As is well recognized many patients have teeth infections for years yet develop no apparent medical disturbances. Conversely, many patients have localized medical disease in the zones and organs proved to be secondarily infected and yet their teeth seem normal.

In the Vienna Arbeiterversicherungsgesellschaft 78,039 cases were treated in 1929. (This year (1930) a 50% increase is anticipated.) There were 40,000 fillings, 12,000 extractions, 1,800 root fillings. Dr. Grossman, the chief dentist, stated that he could recall few patients who had any systemic complaints. He personally observed over 100 cases for the removal of chronic infected and non-infected cysts, apical infections, and observed no general constitutional disturbances. Perhaps two or three times a year a physician refers a patient to him with oral sepsis and general disturbances where a search for a causal relationship is required.

Dr. George Stein (Vienna) treated in Falta's clinic about 120 cases of general medical conditions associated with pulpless teeth, some infected, some not. Extractions were done in all cases and the patients carefully followed up. He believes he observed definite clinical improvement in about 10 to 20% of his cases. The improvement occurred only in cases with joint trouble, in acute nephritis, in skin conditions like erythema multiforme and lichen urticaria, also in a few cases of streptococcus viridans endocarditis he saw clinical improvement when the pulpless teeth were out. Stein feels that the "relationship" between pulpless teeth extraction and general clinical improvement is probably greater than 10 or 20% because there are, very likely, secondary "settled" infections in various parts of the body and in these cases the extraction of the primary focal trouble in the teeth is without effect.



THE DIVISION OF CANCER IN THE DEPARTMENT OF HOSPITALS

By J G WM GREEFF, M.D, NEW YORK, N Y

An address at the Dinner of the Cancer Division, at the Commodore Hotel, on December 16, 1931

THE Department of Hospitals realizes ever more acutely the need for centralized control in its various activities. Only through centralization may complete coordination be attained. The Department itself owes its birth to the present tendency toward such centralization. And throughout its functioning it constantly endeavors to integrate its efforts in the interests of efficiency.

Thus have arisen the different Departmental Divisions. The high and uniform standard of service resulting therefrom has already proved their merit. And of the Departmental Divisions none is more important to the welfare of the city than the Division of Cancer.

Cancer is now recognized as a health menace against which municipalities must take protective measures. The cancer death rate shows a steady increase as the years go by. And this increase cannot be accounted for entirely by the fact that diagnostic technique has improved within recent times or that, with the lowered mortality in the younger age groups, more persons reach the period of life when cancer is most likely to appear.

In addition, our lack of knowledge as to the cause of cancer and our helplessness to cure it, once it has gained headway, make this disease a matter with which the community must be vitally concerned.

As the situation stands today, the community is in duty bound to take certain steps in an attempt to check this rising menace. It must educate the general public as to the necessity of early diagnosis and treatment and the possibility of preventing the development of cancer through the allaying of pre-cancerous conditions. It must place at the disposal of the people the services of specialists in the diagnosis and treatment of cancer. It must provide these specialists with every modern scientific facility for the exercise of their profession. It must train future cancer specialists. And it must do all in its power to further cancer research.

The City of New York endeavors to fulfill these obligations through the Division of Cancer of the Department of Hospitals.

Since its inception, the Division of Cancer has made encouraging headway in integrating the Department's cancer work. It goes without saying that the Department will continue to give it unqualified support.

The Department of Hospitals is aware that patients requiring radiation therapy are most effectively treated when centralized in units specifically equipped for this work. There must be the proper equipment for X ray therapy, a sufficient amount of radium and a specially trained and ef-

ficient personnel. Through the efficient organization of the Division of Cancer this desired centralization is now in effect. The Division deserves great credit for having achieved so much under the handicaps of limited facilities and lack of space.

We believe that in the future these handicaps will be removed. The projected *cancer hospital*, which the City hopes soon to build, will mark a new chapter in the annals of the Division of Cancer.

It is planned to place the new hospital on First Avenue between 30th and 31st Streets, adjacent to the new psychiatric hospital. It will thus become part of the great Bellevue medical centre.

Here will be provided every facility for the diagnosis of cancer and for its treatment by all approved methods. There will be sufficient space for the hospitalization of patients to a far greater extent than is possible under present conditions. Adequate quarters and modern equipment for research will be provided.

Such a hospital will undoubtedly attract to it eminent workers in the field of cancer who will find therein opportunity to pursue unhampered studies. Bellevue Hospital has long attracted men renowned in every branch of medical science. A cancer institution in conjunction with Bellevue must give the stimulus of new horizons to specialists in this field.

From the standpoint of teaching facilities, the plan to place the new hospital in the vicinity of Bellevue is particularly fortunate. Allied with three great medical schools, Bellevue offers unusual teaching opportunities. And teaching facilities in a hospital promote the welfare of the community in more ways than one. Not only is the community insured future physicians and future specialists who know their subjects, but the hospital in which teaching is carried on gives better service to the community.

This fact is generally acknowledged. Let me, however, quote Doctor Richard C Cabot on the subject.

"A hospital," says Doctor Cabot, "is almost certain to rise to a better standard of usefulness to its patients and to attain strikingly higher standards—both technical and humanitarian—when medical students and medical teachers become a part of its organization and help to carry on its daily work. There is no question that medical students and medical teachers focus upon the central tasks of diagnosis and treatment an amount of energy and conscientiousness that cannot be attained without their presence. There is less carelessness on the part of nurses and doctors, less neglect, fewer blunders, less reliance on

antiquated and useless methods. Criticism and inquiry are in the air. One has to justify one's ways and convince others. One cannot conceal one's shortcomings of patience, one's laziness, one's petty tyranny, one's inhumanity and selfishness—or rather, it is much harder to do so, when the results of one's work have to be shown to students and described in lectures as good examples of modern science, or now and then as awful examples of modern blundering. With such possibilities in view, people brace up and 'watch their step.' They may even catch the inspiration and the current of better ways and be transformed inwardly as well as outwardly."

The Department of Hospitals agrees with these views. It is endeavoring to increase facilities for teaching throughout its institutions. But of all its institutions Bellevue, in point of view of numbers, possesses the greatest wealth of clinical material. Thus, by forming part of the Bellevue centre, the new cancer hospital will both reap the benefits of the existing teaching facilities and enhance them further.

The new hospital, however, is still a thing of the future. The Division of Cancer must carry on with its existing equipment. At present it is working under many handicaps.

An immediate need is the rebuilding of Brooklyn Cancer Institute. The necessary processes for this undertaking have already been begun and it is hoped that work will be started before the first of the year. Until the renovation is completed, the staff of this institution will undoubtedly go forward with its work under makeshift conditions as splendidly as it has done heretofore.

The Cancer Hospital on Welfare Island has long been cramped for space and needs much in the way of equipment. In accordance with these needs the Department of Hospitals plans to enlarge and remodel this hospital and hopes to institute this work before much time passes. It is essential that the City do everything possible to comfort patients suffering from advanced stages of cancer and to alleviate their suffering. And it is greatly to the credit of this institution that under present conditions so much has been accomplished to this end.

To proceed effectively with cancer work an adequate supply of radium is necessary. The Division of Cancer at present has at its disposal five grammes of City-owned radium and an additional gramme secured by the Director as a loan from the Radium Belge, the Belgian Government radium agency. To supplement this amount, the Department of Hospitals is planning to purchase new quantities of radium during the course of the next year.

No talk on the subject of cancer control would be complete without mention of social service.

The modern hospital is realizing ever more clearly the invaluable role of the medical social worker. The Social Service Division of the Department of Hospitals is a vital unit in the effective functioning of the City's institutions. And nowhere is the social worker more greatly needed than in cancer work.

The social worker acts as a liaison between the hospital and the community. Through effective follow-up work after the patient leaves the hospital she sees that the patient receives any necessary medical attention and is not left stranded financially. While the patient is in the hospital she inquires into his home conditions and relieves his mind of the burden of responsibility. If, on his discharge from the hospital, convalescent care is required, she makes sure that he receives it. Her work accomplishes two purposes. It gives direct aid to the individual patient. And through this direct aid it helps the community, preventing the patient from remaining indefinitely a public charge.

In the case of the cancer patient, the social worker becomes of paramount importance. The sufferer from cancer becomes steadily more dependent. Treatments must be carried on over a long period of time. They become tedious and the patient may begin to doubt their use.

Here the social worker comes forward with encouragement. She heartens the patient and makes him see the necessity for reporting regularly for treatment. She familiarizes herself with his economic status and prevents unwarranted distress. Hers is the difficult task of bringing hope and peace of mind to the despairing sufferer and assistance to his dependents. Without her ministrations cancer would bring even more desolation than now follows in its wake.

The Department of Hospitals realizes these facts. It will do everything possible to aid social service in cancer and to widen the scope of the social worker.

As long as cancer remains an enigma and as long as cancer continues to increase its toll, the City of New York must press forward its efforts to protect the public. The Division of Cancer is the medium through which these efforts must be carried out. And the Division of Cancer is most worthy to bear this high responsibility.

From small beginnings it has built up a noble undertaking. Under heavy odds it has attained a remarkable efficiency. The Department of Hospitals is fortunate, indeed, to possess as one of its units an organization composed of such loyal and indefatigable workers who are tackling undauntedly a problem of disheartening proportions—the eradication of cancer.

To this organization the Department of Hospitals will promise unflagging support.

HEPATIC ABSCESS DUE TO REFLUX OF DUODENAL CONTENTS FOLLOWING CHOLECYSTECTOMY

By HENRY M. FEINBLATT, M.D., BROOKLYN, N. Y.

IN a previous article,* the author emphasized the importance of the gallbladder as a means of equalizing positive pressure flow to the duodenum. This case is reported as an instance in which cholecystectomy was a probable factor in permitting reflux of duodenal contents back through the bile ducts into the liver.

Mrs. J. O., aged 45, was admitted to the Kings County Hospital, December 16, 1930, complaining of chills, vomiting, malaise, constipation and belching. She was the mother of three children and had been well until twelve years ago, when she became ill with belching, epigastric distress and pain in the right upper quadrant of the abdomen. After these symptoms had persisted for about eight months, cholecystectomy was performed. The distress was not relieved by the operation.

In the past twenty months, the symptoms increased in severity so that there was pain in the epigastrium about two hours after meals, which was partially relieved by sodium bicarbonate. During this period she visited fourteen different institutions and had fourteen gastro-intestinal X-ray series.

The present illness began acutely a week before admission with a chill and vomiting. The chill lasted one-half hour and was followed by a febrile reaction. The patient failed rapidly from that time on.

On admission to the hospital, temperature was 102° F., pulse 120, respiration 30. The patient was emaciated, weighing 90 pounds. She was restless. There was herpes about the lips and cyanosis about the eyes and finger-tips. The tongue was coated. The abdomen showed practically no subcutaneous fat; there was no tenderness, rigidity or masses. The extremities were thin and relaxed; the knee-jerks absent.

X-ray examination revealed no lesion of stomach or duodenum. There was a small residue in the stomach at the end of four hours after the barium meal. The large bile ducts and some of the smaller radicals show the reflux of barium from the duodenum and are clearly outlined.

The white blood cell count on December 17 was 10,000; polymorphonuclear cells, 69 per cent. The red cell count was 4,128,000; hemoglobin, 85 per cent. On December 26 the white cell count was 13,650, with 78 per cent polymorphonuclears. Wassermann reaction and Widal test were negative.

The patient's condition became progressively worse with increasing toxicity and asthenia, and she died December 29.

On postmortem examination the anterior surface of the liver was covered by adherent omentum. At the lateral anterior margin of the left lobe, the omentum was particularly tightly bound down. On removing it, a thin, foul, yellowish pus exuded from the liver. Further examination revealed an abscess about 4 cm. in diameter. On the anterior surface of the mid-portion of the right lobe, there was a fluctuating area 8 cm. in diameter. On section it was found to contain about 150 cc. of thin, yellowish-green pus. The liver weighed 2150 Gm.

On histologic examination, the liver showed diffuse cloudy swelling. In the abscess, the lesion was typically that of suppurative inflammation.

Other lesions found at the necropsy included vascular nephritis, chronic splenitis, small punctate hemorrhages on the mucous membrane of the stomach, ovarian cyst and healed tuberculosis of the pulmonary apices.

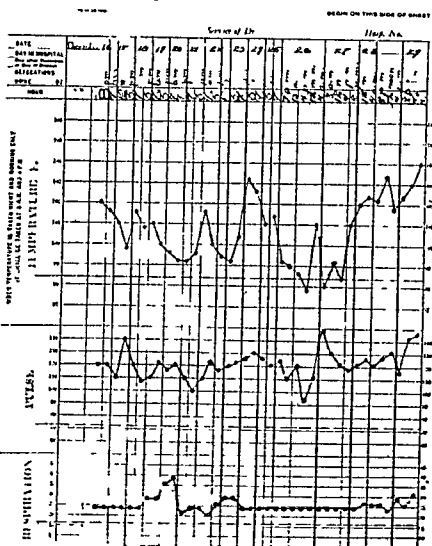


FIGURE 1
Temperature chart

* Feinblatt, H. M. Infrequency of primary infection in gall bladder disease; study of 400 gallbladders removed at operation, *New England J. Med.*, 199 1073 (Nov 29), 1928

CHOICE OF INSTRUMENT IN DELIVERY WITH FORCEPS*

By EDWARD H. DENNEN, M.D., F.A.C.S., NEW YORK, N. Y.

GIVEN a proper case for delivery with forceps, an operator may select the kind of instrument most suitable for the conditions. Delivery may be accomplished with only one, or at most two varieties of forceps. However, (other things being equal), a greater degree of success should be obtained with a knowledge of the advantages, and a discrimination in the use of the various kinds of forceps. There are several kinds of forceps, old and new, that have peculiar advantages under certain conditions. An attempt to make these differentiations may be of interest.

In delivery with forceps under proper conditions, there are two features of prime importance; the application of the forceps to the child's head, and the traction used in accomplishing the delivery. These two acts determine the manipulation, effort, and consequently, the associated trauma.

Application of Forceps: The application must be cephalic and accurate. In a true cephalic or bi-parietal application, the blades should fit the head, as far as possible. They should lie evenly against the sides of the head, reaching from the parietal bosses to, and beyond the malar eminences; covering symmetrically the spaces between the orbits and the ears. There should be no extra pressure at any one point.

A correct application is essential. It prevents injury to the head because:—the blades fit the head accurately, and pressure is evenly distributed; the pressure is on the least vulnerable areas; the increased diameter of the head, due to the thickness of the blades, is at the narrowest place, thereby minimizing the force necessary for delivery.

It lessens injury to the mother because the head advances in the proper attitude. It is vital to the technique of the delivery because it enables the operator to know the exact position of the head, and allows him to use the most favorable diameters. These conditions are not fulfilled by the undesirable brow-mastoid application.

In selecting an instrument with which a good application can be obtained, the choice depends upon a correct diagnosis of the amount of moulding, position and station of the head, and the type of pelvis.

On moulded heads, the best application is obtained with blades which have a long, tapering, cephalic curve. Those with a short, full curve do not fit evenly, causing pressure points, and often are not anchored below the malar eminences, with consequent cutting or slipping.

In considering the position of the head, the

instrument to be chosen is the one which gives the correct application with the least effort. When the occiput is anterior, the application is, as a rule, easily made, and any blade which fulfills the requirements of the moulding may be used. For other positions and presentations there are several new types which will be considered with the various forceps operations. A high head, in a flat pelvis may be angulated in such a position that a cephalic application cannot be obtained unless the forceps have the sliding lock principle.

Traction: The traction also plays a very important part in the choice. To use the least force, one should make traction in the pelvic axis. This is best accomplished in all stations of the head with some form of axis-traction forceps. Even in low forceps, it is valuable in obtaining flexion, and in eliminating the force wasted against the symphysis. The deep episiotomy, advocated by DeLee, allows the handles of the forceps to lie in a lower plane. This, with the use of the fingers as a fulcrum, may eliminate the necessity of axis-traction on low heads. However, the axis-traction principle automatically directs the force away from the symphysis, and thus simulates the physiological mechanism of labor.

Axis-traction suggests to many a difficult operation with a complicated instrument. For this reason, in the average case, it is often neglected though the advantages are admitted. The classical forceps, without axis-traction, are frequently used with the maximum force, modified by the Pajot maneuver. Axis-traction, however, tends to keep the force in the plane of least resistance, thereby diminishing the amount of effort and injury.

Selection of Instrument: In the selection of an instrument which fulfills the requirements of application and traction, there are a number of very excellent forceps from which to choose. Some are simple, others complicated. All have one or more good points, which justify their use when properly chosen. Some are so similar that there is very little choice between them. Most modern forceps of the classical type follow, in a general way, one of two constructions: the shanks overlap, and the blades have a short, cephalic curve as in the Elliott, or the shanks are separated, and the blades have a long, tapering curve as in the Simpson (Fig. No. 1). But not all of them have axis-traction. This disadvantage can be overcome in some, by the use of the Bill axis-traction handle.

Various localities have their favorites. In Boston and that vicinity, the light Good forceps with the traction rods from the fenestrations, concealed in the handles, are very popular. So are Irving's

* Read before the Section of Obs. & Gyn., Buffalo Acad. of Med., Dec. 16, '31.

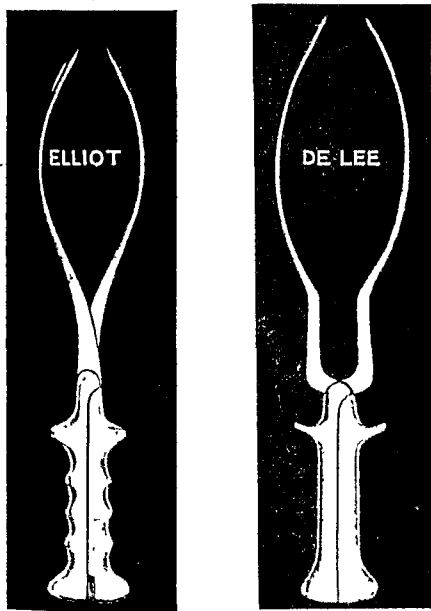


FIGURE 1

Shows difference in construction in the two common types of forceps

with traction rods similar to Tarnier's. In Philadelphia, there is a preference for the DeWees, with the traction rod attached to the end of one handle. In New York, several types are used: DeLee's, DeWees', Tucker-McLane's, Hague-Ferguson's, Bailey-Williamson's, Lobenstein-Tarnier's and Elliott's (Fig. Nos. 2, 3, & 4).

Low Forceps: In a truly low forceps, most heads are in the anterior position. The mount of moulding, and the type of outlet determine the choice of instrument. In pelvis with a low pubic arch, and a short anterior-posterior diameter of the outlet, it is essential to choose a blade with a good pelvic curve. This will put less pressure on the perineum, and tend to avoid sulcus tears of the vagina during extension. In normal pelvis, the important factor is protection of the child's head—no cuts, no abrasions. Of course we do not wish any third degree tears, but that accident is guarded against by frequent use of perineotomy. It is thought that a cut perineum, well repaired, is better than one which is torn or stretched. It also relieves the pressure on the anterior wall.

The mother is, as a rule, a primipara, or perhaps a multipara in long labor. This usually means moulding of the baby's head, with its sides lengthened and flattened. A Simpson type of

forceps preferably DeLee's model, in which the blades have been lengthened, fits best. It has a long, shallow, cephalic curve, and the tips can be anchored well below the malar eminences, preventing pressure points and slipping. A blade with a short, sharp, cephalic curve, of the Elliott type is suitable for round heads. But when much moulding is present, it fits unevenly, and occasionally gives difficulty in proper locking.

For easy extractions, the solid blades of the Tucker-McLane are popular with some obstetricians. They are easy to apply and remove, and may be used on small round heads. But on moulded heads, they may slip, due to lack of anchorage below the malars, and they exert pressure on two points; the zygoma, and the parietal boss. The result may be a cut over the zygoma, just in front of the ear, and the appearance later of a swelling over the boss—a periostitis that lasts for weeks, and occasionally develops into an abscess.

Many times, what is thought to be an easy low forceps, later proves to be the caput of a moulded head, the bi-parietal diameter of which is at, or above the ischial spines. Then the operator wishes he had chosen a fenestrated blade originally. The solid blades are excellent as rotators in the first stage of the Scanzoni maneuver. A suitable fenestrated type may be used for the extraction.

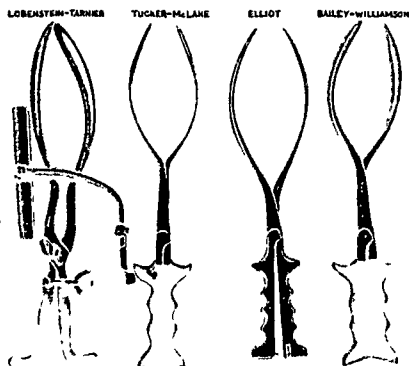


FIGURE 2

Shows Elliott Types (except Tarnier)

Mid Forceps: In the mid forceps operation, more frequently than in the low, the position, as well as the shape of the head must be considered in selecting a suitable type of instrument. The rules for anterior positions are the same in all stations of the head, with emphasis on axis-traction. The DeWees gives the truest axis-traction, and is considered the choice by many. With the

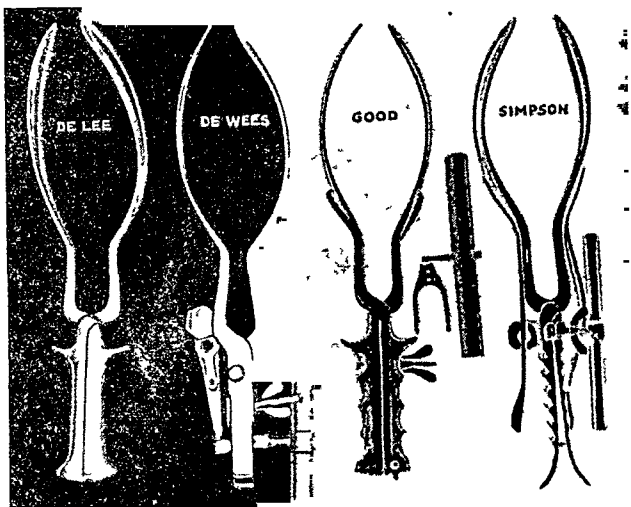


FIGURE 3
Shows Simpson Types

head in transverse arrest, some operators have developed their skill in the use of manual rotation, and also the gliding maneuver. However, it is not an uncommon experience to find a head which cannot be rotated manually without displacement; or one which refuses to remain anterior during the process of applying the second blade, and locking the handles. In the gliding maneuver, the anterior blade occasionally hits the brow, causing the occiput to rotate backward. This may result in a brow-mastoid application, which no amount of manipulation will entirely correct. To simplify this procedure, two new types of forceps have been developed: the Kielland and the Barton. Their chief advantage is the ease with which an accurate cephalic application can be obtained. Both have the sliding lock principle which allows for adjustment on asynclitic heads. The Kielland, since it is built for traction, has a wider field of usefulness, and appears to be the choice.

In posterior positions the single accurate application, without displacement of the head, and semi axis-traction pull with the Kielland favor

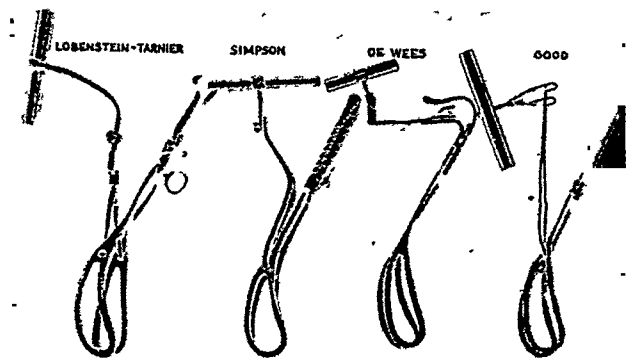


FIGURE 4
Axis-traction Attachments on Simpson Types

better results, with less manipulation than the Scanzoni, Pomeroy, and "Key in Lock" maneuvers, or manual rotation. Also, the dangers of version in unsuitable cases are eliminated. The slight pelvic curve of the Kielland is a disadvantage in extraction through a funnel pelvis. It is thought best to remove the forceps after anterior rotation has been completed, and the head flexed and fixed with one or two tractions, substituting a suitable axis-traction forceps with a good pelvic curve. This keeps the force in the axis of the pelvis, increases the flexion, and lessens the danger of injury to the posterior wall and perineum. Following the proper use of the Kielland, rarely, if ever, are there any badly marked faces or facial palsies. The cushion on the inside of the blades eliminates the cuts and bruises, and the brow-mastoid application is avoided by using the inversion method of application. Much has been said about the dangers of the Kielland, but, as is true of any instrument, the dangers diminish as the knowledge of its proper use increases. Complicated cases have frequently been made simple by the Kielland,

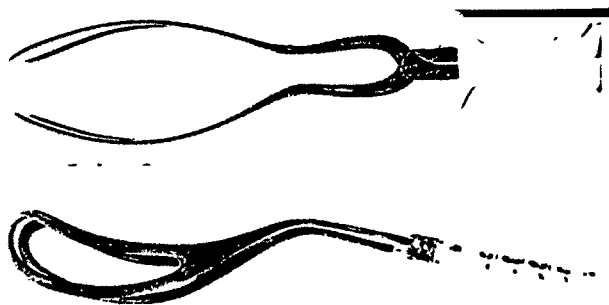


FIGURE 5
Traction Curve Forceps

even after unsuccessful attempts with other types.

High Forceps: High forceps operations, of course, are frowned upon but occasionally, in well chosen cases, with version contra indicated, it is an easy procedure, offering, in experienced hands, less risk than Caesarean section. When the head is arrested in the superior straight, the same principles which apply to mid forceps are used, with one exception—a flat pelvis, with the head in the transverse position, and the posterior parietal bone presenting. Here, as was so well shown by Dr. Caldwell, the Barton forceps stand alone as the choice. The ease of application diminishes the amount of manipulation; the perfect pelvic curve reduces the amount of effort and minimizes the amount of injury; and the sliding lock permits adjustment as the asynclitism is corrected.

The author has had several cases of this sort, which after adequate trial labor, were being considered for Caesarean section. A tentative trial

with the Barton forceps, as a final test, resulted, with very little effort, in a successful delivery. In one other case, the Barton, not being a tractor, was not effective because of the resistance of a tight uterus, and a rim of cervix, so a Latzko extra-peritoneal Caesarean was done.

With the possible exception of the new Roderick forceps, personal experience with which is limited, the Kielland is the only other forceps now in use which can be properly applied to this particular type of case. It is not chosen, however, because when applied, it has no pelvic curve and no axis-traction. It increases the angulation of the head, and consequently, the diameter of the descending part is increased. This endangers the symphysis-pubis and bladder, against which most of the force is directed.

In face presentations, the advantages of the Kielland again make it the choice. This is particularly true when the chin is posterior. Here the blades may be applied directly to the sides of the head, with the pelvic curve directed backward. Then rotation of the chin to anterior, followed by extraction, may be done without readjustment of the forceps.

For the after-coming head in breech extractions, the Piper forceps are the choice. The springy blades permit adjustment to heads of different sizes and shapes, with the least amount of compression. The dropped handles make it easy to obtain an application directly to the sides of the head without raising the body above the horizontal. They also give axis-traction.

To simplify the choice of instrument for anterior positions of the occiput, an uncomplicated, light, fixed axis-traction forceps has been designed by Dr. E. M. Hawks and the author, described in the *American Journal of Obs. & Gyn.*, Aug., 1931 (Fig. 5).

Several principles are included in this instrument. The advantages of application and traction make the delivery easier and safer. The modified Simpson blades, with the Kielland cushion, tend to fit the head without pressure points or cutting, and they do not slip because the tips can be anchored well below the malar eminences. The exaggerated pelvic curve of the posterior lips of the blades permit extension over the perineum with the least amount of pressure on the posterior vaginal wall and sulci.

The modified Piper shanks give more spring to the blades, allowing accommodation to heads of different sizes and shapes with the least amount of compression. The backward curve of the shanks gives axis-traction. (Fig. 6). (The idea of this curve was obtained from Dr. Piper while

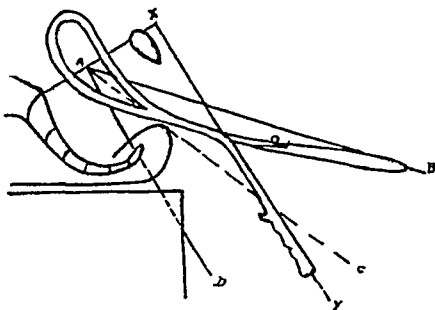


FIGURE 6

Line AB is direction of force applied to classical forceps. Line XY is the plane of handles of traction curve forceps, and is parallel to AD, the true axis-traction. Line AC is the resultant of force applied in the direction of XY

watching him demonstrate his forceps, intended for the after-coming head.)

SUMMARY

1. In a proper case for delivery with forceps, the two essential requirements are: an accurate cephalic application, and traction in the axis of the pelvis.
2. A correct diagnosis must be made of the amount of moulding, position and station of the head, and type of pelvis.
3. Moulded heads require a blade with a long, shallow cephalic curve.
4. Axis-traction diminishes the amount of effort and injury, and is desirable in any station of the head.
5. The large variety of instruments in use shows there is no universal forceps.
6. In most anterior positions, the Simpson type of blade, with some form of axis-traction is desirable.
7. In most posterior and transverse positions, the Kielland seems to be the choice. Rotation manually, or with the Barton or the solid blades, may be used in some cases.
8. A high transverse head, with a posterior parietal presentation in a flat pelvis, requires the Barton.
9. In face presentations, with the chin posterior, the Kielland forceps, and, on after-coming heads, the Piper forceps offer advantages.
10. A new traction curve forceps combining features of several instruments, and satisfying the requirements of application and traction may be used on anterior heads.

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For list of officers of County Medical Societies, see this issue, advertising page xxiv.

ROSTER OF OFFICERS

The roster of officers and committeemen of the Medical Society of the State of New York, as completed by the Executive Committee, appears on pages 806 and 816 of this Journal. The personnel remains largely unchanged, for the work of an organization as large as that of the State Medical Society requires an intimate knowledge which comes only from long experience.

The changes in personnel consist principally in the promotion of excellent workers from lower grades of service, for it is the ideal of the Medical Society, like that of the Army, that each officer shall prepare himself to fill the next office above his own. Each member of the State Medical Society will do well to preserve the list of officers for reference.

MENTAL HYGIENE

Two branches of medical practice have developed side by side,—the physical and the mental. The effect of physical conditions of the body on mental states is common-place knowledge. The extreme reverse of that statement,—that mental states may produce physical ills—has often been proven true in the practice of every doctor, but in many persons go so far as to believe that all sickness has a mental origin.

Every doctor is compelled to consider the mental state of his patient, and the most successful physician is he who does so unconsciously and naturally. On the other hand the doctor who ignores the desires and prejudices of the sick does not inspire the confidence of his patients and their families and friends, no matter how skilful he may be in dealing with physical conditions and diseases.

The branch of medical practice which deals with mental disorders has developed along its own line so far that it is almost separated from the practice of physical medicine—at least in the minds of most physicians and surgeons. It has its own vocabulary and expressions and its language is hardly understandable to the average doctor, but it must be remembered that every specialty has a language of its own. The ophthalmologist, for example, is compelled to use terms which the average doctor does not understand simply because he has no use for them in his daily practice.

The vocabulary of any specialty applies principally to fully developed conditions and diseases. The modern science of mental trends and disorders is so new that nervous states are usually ignored until they are fixed and difficult to change, as are physical inflammations in the stage of fibrosis. As any branch of medicine advances, the time of the possibility of making a diagnosis recedes to the earliest stage of the disease when it is curable or even preventable by simple means. Family doctors have the opportunity to deal with mental disorders in their very incipency. These conditions are usually concealed or excused by both the patient and the doctor until they are in advanced stages. If the family doctor has in mind the clear indications of states of nervousness and other abnormalities of his patients, he will be able to recognize impending dangers and advise his patients and their families regarding the cure of the present conditions and the prevention of actual mental diseases.

Mental disorders are recognized by the State of New York to be of as great importance as those of physical origin. This is shown by the establishment of two departments to deal with diseases.

1 The Department of Health which deals with physical disorders

2 The Department of Mental Hygiene, which deals with mental abnormalities.

The Department of Health has reached a stage of development when its principal work is that of the prevention of physical diseases.

The Department of Mental Hygiene also has prevention as its ideal, but practically its major work is the care of patients in advanced stages of mental disorder, as is shown by the fact that the largest item in the annual budget of the State of New York is that for the care of the mentally incompetent.

The greatest factor in the prevention of physical diseases has been the intelligent cooperation of family doctors in all phases of the work of the State Department of Health.

The greatest factor in the prevention of mental disorders will be a similar cooperation of family doctors with the State Department of Mental Hygiene.

The Department of Health of New York State secured the cooperation of family doctors over thirty years ago by instituting a system of instruction of practicing physicians, beginning with health officers numbering over six hundred, and extending its influence to family doctors and medical students.

When the instruction was begun, allergy, and immunity, and susceptibility, and vaccination were as obscure to the family doctors as subconscious states and dual personalities are now, and the Wassermann reaction was as mysterious as psychoanalysis.

The method of teaching the pathology of physical disease has been simplified until now it is a basic subject begun in the first year of instruction in the medical school.

The pathology of mental states or emotions has now reached a stage of clarity and unity in which it is understandable by the average doctor; but its fundamental principles are usually taught to students in their fourth year, and then only in conjunction with other specialties, such as ophthalmology and laryngology. The result is that students and family doctors are not taught the fundamental principles of mental pathology as they are those of physical pathology, and naturally family doctors do not take a spontaneous interest in the subject of mental disorders, but consider them to be outside of their field of practice.

Teachers in mental hygiene sometimes assume that general practitioners already understand the fundamentals of mental pathology and often make apologies when they attempt to explain these basic facts. These teachers need not fear that they will "insult the intelligence" of their medical audiences. Physicians like to have a lecturer preface his talk with a simple review of the patho-

logical principles underlying his subject, thereby fixing the attention of his listeners on the principal point which he is developing. There is need that specialists in mental diseases shall develop a simple syllabus of instruction covering the fundamental principles of mental pathology. Such a syllabus will be warmly welcomed by medical students and the medical profession.

Practising physicians are interested in all phases of the activities of the State Department of Mental Hygiene; and the Department has the opportunity to reach the doctors by means of the staffs of the State Hospitals scattered throughout the State. The staffs may come into close contact with general practitioners in three ways:

1. By friendly cooperation with the doctors in diagnosing and treating patients.
2. By taking active parts in county society activities, especially by conversations with individual doctors who are interested in mental hygiene.
3. By developing a system of teaching the fundamental principles of mental pathology.

The State Hospitals reach physicians through

impersonal clinics conducted in general hospitals and health centers. A development much to be desired is that family doctors shall feel free to consider members of the staffs of State Hospitals and friendly consultants in regard to their private cases.

The development of a system of teaching the elements of mental pathology has been considered by the staff of Kings Park Hospital in cooperation with the Suffolk County Medical Society. The experiment, though brief, has revealed the fact that a great difficulty in the development of such a system has been that the line of thought of mental specialists has been divergent from that of the practitioner in other branches of medicine. The problem is to make these lines of thought converge, and to discover the common points of contact between the general practitioners and the psychiatrists.

When the two groups of medical men meet on a common sympathetic ground, the practice of mental hygiene can become habitual with family physicians.

GRANT C. MADILL, M.D., LL.D.

The physicians of New York State in active practice share the honor conferred upon one of their own number, Dr. Grant C. Madill, of Ogdensburg, to whom the New York University gave the degree of Doctor of Laws on Commencement Day, June eighth.

The honor has come to Dr. Madill in the natural course of the development of his experience and opportunities. He has been a center of influence which has extended in ever-widening waves. He is first of all a surgeon, deeply interested in his specialty, and in the physicians by whom he is called in consultation. His influence has extended naturally through the St. Lawrence County Medical Society and the Fourth District

Branch, to the Medical Society of the State of New York, of which he was President in 1919.

Dr. Madill has also developed the cultural side of his life, as is attested by his large library on historical, economic, and philosophical subjects—and those books are equally as familiar to him as are those on medicine.

The opportunity for the practical application of his broad culture came in February, 1930, when the Legislature elected him to the Board of Regents of the State of New York.

The crowning recognition of a life successful both professionally and culturally, and of a career of civic usefulness, is the action of the New York University in making Dr. Madill a Doctor of Laws.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Press Publicity: This Journal of July, 1907, contains the following news item showing one phase of the attitude of the newspapers toward public health a quarter of a century ago:

"*The California State Journal of Medicine*, according to the *Journal of the American Medical Association*, exposed an atrocious humbug, the 'Viavi Treatment,' which has been doing incalculable damage to gullible invalids. It is clearly shown that this 'system' is operated without even a suggestion of consideration for its dupes. The *California Journal* sent marked copies of this exposure to every San Francisco newspaper. One

weekly and one daily made faint reference to it. Immediately, however, in all of the San Francisco newspapers large advertisements of Viavi appeared, and no further news notice was paid the subject—excepting that the daily which had referred to the fraud repented of its freedom of speech, and published as reading matter a complimentary write-up of the humbug and its backers. In other words, the press prostitutes itself to the criminals who prey upon the sick, and sells its freedom of expression for their patronage. Little boys at school are no longer making declamations upon 'the freedom of the press.'"



MEDICAL PROGRESS



Thrombophlebitis Migrans vel Recurrens.—F. Parkes Weber and E. Schwarz believe that thrombophlebitis migrans is probably due to an infection of low virulence, though as yet no causative microbe has been cultured from the patient's blood. It is also possible that a constitutional or vascular condition may predispose to the infection. In support of this theory they cite the case of a man who had recurrent attacks of thrombosis over a number of years and who gave a history of having had primary syphilis at the age of 18. Pearce Gould reports a case, in which the first attack of thrombosis occurred during convalescence from typhoid fever. J. B. Ellison describes mild thrombophlebitis migrans complicating scarlet fever in two boys. The authors make the point that in apparently healthy young adults, with a history of having suffered from two or more attacks of nonsuppurative thrombophlebitis the possibility of further attacks must be seriously considered in regard to acceptance for life insurance or insurance against illness. It has been suggested that some of the supposed embolisms in thrombophlebitic patients are really concurrent foci of thrombophlebitis in the lungs, brain, mesentery, kidneys and elsewhere. This interpretation, however, requires substantiation. In a case cited by the authors there were repeated pulmonary embolisms. In such cases operative treatment is not free from danger. Nodular thrombophlebitis may form part of the clinical picture of thromboangiitis obliterans, as in the case of a Russian Jew, aged 66 years, in whom the symptoms of thrombo-angiitis obliterans commenced at the age of 38. In this case the disease progressed by exacerbations with long periods of quiescence and finally all active signs of the disease disappeared. This occurrence affords strong evidence in favor of the disease being due to an infective or toxic agent, and being quite distinct from degenerative arteriosclerosis and arteriolosclerosis. The superficial inflammatory nodules, which constituted episodes in the course of the thrombo-angiitis obliterans, may be interpreted as representing Buerger's disease when it attacks superficial venules and possibly capillaries and the minutest arteries. Their presence is probably occasionally of some value in regard to differential diagnosis.—*Practitioner*, April, 1932, cxxviii, 4.

A Method of Increasing the Specific Resistance of a Syphilitic Individual to His Disease.—Charles H. Dennie reminds us that the chemical treatment of syphilis has changed but

little during the past twenty years, and that we do not as yet know a successful treatment for this disease. The arsenamines, mercury and bismuth, modified by some protoplasmic body substance, have a direct action upon *Spirocheta pallida*. When one uses these drugs, one is attempting to destroy the cause of the disease. The defense of the body against syphilis probably lies in the reticulo-endothelial system. The malarial plasmodium stimulates the reticulo-endothelial system and thus raises the resistance of the individual to his disease. With this agent the aim is to hold the disease in check. All of our knowledge of the action of the malarial plasmodium has been drawn from the action of this agent upon the paretic. Simple deduction leads to the belief that this action would not be specific for paresis alone. The same phenomenon should take place in constructive bone and joint lesions, in resistant skin manifestations, in interstitial keratitis, and in enlarged liver and spleen, in fact in any syphilitic lesion which has not passed beyond the stage of resolution. The author made radiographic and photographic studies of constructive syphilitic lesions in patients who were under malarial treatment and was able to demonstrate that bone lesions of recent origin, interstitial keratitis, and resistant skin lesions would heal under malarial therapy. He found that Wassermann negative cases with cutaneous lesions may become Wassermann positive following malarial therapy. The benefit obtained from malarial therapy is not maintained unless antisyphilitic treatment is immediately instituted. As soon as an individual has recovered from the effects of the malaria, he should receive energetic treatment with the arsenamines, mercury, bismuth and the iodides, unless there are contraindications to the use of these drugs. This applies whether the patient is a paretic, a tabetic or has some form of somatic syphilis.—*Southern Medical Journal*, May, 1932, xxv, 5.

Analysis of Reports of 8,354 Cases of Impf-Malaria.—William Krauss has endeavored by means of a questionnaire to obtain data in regard to impf (inoculated) malaria upon which to base a discussion of malaria as modified by the "impf" (vaccination) method, in the one hand, and by the pathological individual, the paretic, on the other hand. Reports were received from 52 institutions in 24 States. The death rate for the entire series was 5.38, but varied in different groups from 24.63 to 2.2 per cent. In a total of 5,652 inoculations 89.13 per cent were successful. Generally speaking, good results have been shown under all conditions of transfer. The answers to

the questions as to the number of paroxysms allowed showed an average of perhaps 15, while in individual reports they ran as high as 32 or "as many as they will have." No seasonal influence upon successful inoculations was observed. No successful method of reducing impf-malaria to the tertian periodicity has as yet been developed. Relapses appear to be extremely uncommon. This is in striking contrast to the experience of the British, using *Anopheles malaria*. The questionnaire, as regards fatal cases, included questions as to age, sex, physical risk, and season of the year, none of which was believed to have any bearing except extreme age. The number of paroxysms before death varied greatly. Some died after the first, second, or third chill. The causes of death mentioned most often were circulatory collapse and convulsions. Other causes given were hyperpyrexia, albuminuria, vomiting, gastro-intestinal disturbances, and hemorrhage. In order to guard against severe reactions and fatalities Krauss urges prompt recognition of premonitory symptoms and the desirability of a daily check on the number of parasites. He discusses the influence of massive infection and of a too-prolonged course of malaria upon the death rate. It is important to have patients cared for in a perfectly organized hospital by someone who understands malaria and has the benefit of consultation with an expert malariologist. As to the selection of cases for the sake of a lower mortality, patients should not be deprived of the benefit of treatment, as surprising results have been seen in desperate cases. Extreme weakness and galloping paralysis are contraindications to the treatment. There is unmistakable evidence of refractoriness to inoculation among residents in the South and in malarious districts. Negroes are less susceptible to inoculation than whites.—*Southern Medical Journal*, May, 1932, xxv, 5.

Etiology of Psychic Manifestations in Thyroid Disease.—E. O. Houda, writing in the *Schweizerische medizinische Wochenschrift* of April 9, 1932, says that the literature throws no direct light whatever upon the cause of the psychoses of thyroid disease. "With no fear of contradiction, one can say that hyperthyroidism is not the immediate cause of mental imbalance. Thyroxin and thyroid extracts have never induced more than keener cerebration and increased metabolism. When insanity appears months after surgical removal of toxic goiter, one may justly question whether thyroid secretion *per se* has anything whatever to do with its appearance. More iodine than even normal thyroids ever do need and more than diseased ones can be made to use is available everywhere. Through nature's universal distribution of naturally excessive iodine, it is in large part treated as excess and as quickly eliminated as adsorbed essentially from foods. Goiter unquestionably is

thyroid pathology. Like every etiologically determined pathological tissue, it contains a common denominator necessary to its pathology. Microorganisms are now demonstrable in all endemic goitrous tissues, and in the serum readily obtained from them on surgical removal; also in the serum obtained from the drainage after surgical removal. A special method, not yet in general vogue, is necessary to cultivate them, which can be done with monotonous regularity. Inoculation of rabbits produces thyroid disease in each instance, from which the same organisms are recovered. This micrococcus has been cultivated by all who have duplicated the method, and its presence has received abundant confirmation. Clinically effective responses to goiter vaccine have been proved during several years of the author's personal and original use, in treatment of all types of endemic goiter. The two singular results obtained by its use in the treatment of the first two mental cases are regarded as therapeutic tests not only of the value of this vaccine but also of the validity of a now-established infectious hypothesis for goiter in general. In both cases outlined by the author the first injection of the vaccine was followed by a violent mental reaction, while no reaction at all followed subsequent injections. Both patients shortly afterwards recovered completely and were able to resume their usual activities in life. The method of culture of the goitrogenous micrococci is outlined by Houda.

Oscillatory Desiccation in the Treatment of Accessible Malignant Growths and Minor Surgical Conditions.—In *Physical Therapeutics*, April, 1932, 1, 4, the editor publishes, with the permission of the author, the original epoch-making essay upon "Desiccation," read by William L. Clark before the American Electrotherapeutic Association in 1910. The conclusions reached at that time have since been shown to be true. This paper was based on an experience of 317 lesions in 78 patients treated by this method. Desiccation, as produced by a current from a static machine of large output with properly connected and attuned accessories, when applied with correct technique and care, is capable of producing superficial or deep destruction of any accessible tissue, whether normal or neoplastic, resulting in disintegration of the cells, thus permanently devitalizing them. Desiccation has sterilizing, deodorant, and styptic properties. In order to test the bactericidal properties of the current, cultures taken from an ulcerating carcinoma of the pharynx were examined and showed the presence of *Streptococcus pyogenes* and *Micrococcus aureus*. Cultures taken from the same area after treatment showed no bacterial growth. Desiccation also stimulates surrounding untreated tissue to rapid repair. It has no particular affinity for abnormal tissue over the nor-

mal, but it is not difficult to keep the destruction well within proper bounds, owing to the refinement of its control. Desiccation is applicable to all accessible lesions where a lethal action is desired, and it operates from without inward. Malignant growths on cutaneous surfaces and mucous membranes may be destroyed by this procedure without opening up blood or lymph channels, and thereby the likelihood of metastasis or of inoculation of healthy tissues with malignant cells is lessened. On the first appearance of recurrence of cancer of the breast (after operation) there is a possibility of arresting and controlling the disease if desiccation is employed. In cancer of the cervix desiccation is a more desirable treatment than the curette and cautery. It penetrates more deeply beneath the surface than cauterization, and at the same time has a styptic and deodorant effect. It is most effective in exuberant granulations. Clark expressed the belief that desiccation would be effective in trachoma, and for tonsillectomy, and that by employing endoscopes of various types it could be applied to lesions in body cavities. These expectations have been verified, except in the case of the stomach. Old pus sacs may be entered and destroyed by desiccation, as for example in pustular acne, furunculosis, and carbuncles. The cosmetic effect after desiccation is better than after destructive fulguration.

The Treatment of Bronchial Asthma—For a subject to become asthmatic, say M. Pehu and J. Valin, a modification of an unknown nature must be produced within him which creates what is known as a "soil." For this reason two kinds of medication are needed, one addressed to the symptom, the other to its probable cause. The latter must be employed during the period intervening between the paroxysmal "crises." During the crisis the medicaments employed are chosen for their action upon the vago sympathetic system, and consist of adrenaline, ephedrine, belladonna and atropine. At the present time, adrenaline hydrochloride 1:1000 or 1:2000 is the remedy chiefly indicated because of its excitatory sympathetic action, which causes cessation of the bronchial spasm resulting from paresis of the sympathetic which in its turn produces increased tonus of the pneumogastric. With adrenaline may be combined extract of posterior lobe of hypophysis. The sedative effect of levorotatory hyoscyamine administered by intramuscular injection in dosage of 0.5 mg. may be utilized advantageously. Morphine continues to be indispensable in certain cases where all other remedies fail. Amyl nitrite, ethyl iodide, and pyridine may be given by inhalation. Other valuable medicaments to which recourse may be had are benzyl benzoate, veronal, valerian, and the bromides and iodides. Venesection with withdrawal of 20 to 500 c.c. blood is sometimes useful. Bi-

lateral paravertebral injections of novocaine between the first and fourth dorsal vertebrae have given relief in some cases. In inveterate cases biliary drainage by the duodenal tube has been employed with good results. Treatment between the attacks is more difficult, since bronchial asthma is not a uniform disease and a medication that succeeds in one case may fail in another. It is necessary to try to find out upon which apparatus the disturbance bears most heavily (liver, endocrine glands, the neurovegetative system). Often one is forced to grope in the dark, for slight troubles not readily revealed. It must also be emphasized that whatever the treatment, it must be followed up for a long time before one concludes that it is without efficacy. Methods that may be effective consist in the administration of iodine, arsenic, nervines, opotherapy, antiarthritic and eupeptic remedies, specific or nonspecific desensitization, physical agents (radiotherapy, diathermy, ultraviolet rays), climatotherapy and crounotherapy. In some cases even surgical interventions upon the appendix, the genital organs, or spleen have been of use. Perseverance and persistence in these efforts must be prolonged if they are to be effective.—*Journal de médecine de Lyon*, April 15, 1932.

Acute Anterior Poliomyelitis—In an experience with ninety patients suffering from the "bulbar" and high spinal types of poliomyelitis, James L. Wilson has developed a program for the symptomatic treatment of the various types of respiratory disturbances by the use of the Drinker respirator. Clinically it has been possible to distinguish in this group of patients three mechanisms by which respiratory failure has been brought about, namely, (1) paralysis of the intercostal muscles or of the diaphragm, (2) in patients with pharyngeal paralysis, excessive fatigue caused by continual interference with inspiration of unswallowed material in the pharynx or to actual aspiration of this material, and (3) direct involvement of the respiratory centers. Of 23 patients with paralysis of the respiratory muscles treated with the Drinker respirator, three died, all of pneumonia. Features believed to be of great importance in the treatment of these patients were (1) Early, uninterrupted, and prolonged use of the respirator, to avoid dyspnea or fatigue, especially in the acute stage of the disease, (2) painstaking care of the patients in the respirator in respect to frequent change in position, cleanliness of the skin, care of the bowels, and in patients who also had pharyngeal paralysis, postural drainage and the parenteral administration of fluids. There were 40 patients with undoubted pharyngeal paralysis. In the treatment of this group the therapeutic details of greatest value were (1) Avoidance of vomiting by keeping the stomach empty during the febrile period and until hunger returned, (2)

postural drainage; (3) aspiration of the throat; (4) adequate administration of fluids parenterally, and (5) in a few selected cases tracheotomy. Twenty patients with probable involvement of the respiratory centers or with sudden respiratory failure following an attack of choking were treated in the Drinker respirator. Of these, thirteen died. It is believed that the respirator was an important factor in the survival of the others. The author emphasizes the fact that the use of the respirator in poliomyelitis with respiratory muscle paralysis should not be regarded as a method to be employed only as a last resort. It should be considered as a method of giving needed relief and rest to any patient with weakness of the muscles of respiration.—*New England Journal of Medicine and Surgery*, April 28, 1932, ccvi, 17.

Effort Thrombophlebitis.—J. Cottalorda, writing in the *Lyon chirurgical* of March-April, 1932, undertakes to establish a more rational pathogenesis of effort thrombophlebitis than is offered by the two classic theories of a purely traumatic or of an infectious origin, neither of which is entirely satisfactory. This affection, which is met most usually in the right upper extremity, and which attacks males almost exclusively, may be observed after either sudden effort or chronic strain. In most cases the edema appears immediately or a few hours after the initial accident, but there are cases in which the subject awakes in the morning to find an edema when no special effort has been experienced. An impressive fact is that the coagulum found in the majority of cases is not constant. In one of the author's cases in which the entire syndrome was present, with its edema, functional impotence, collateral circulation, and venous cord, positively no coagulum could be demonstrated. The multiple vascular troubles present, and the importance of vasomotor disturbances of a sympathetic type at a distance, lead Cottalorda to the following theory of pathogenesis: The sudden and violent, or the repeated, traumatism causes a perivenous irritation, perhaps most frequently as the result of a tearing of venules or through contusion of abnormal anatomical elements. This contusion then produces a perivenous adventitial irritation which induces venospasm. This may be only intermittent if the cause of the irritation ceases to act or diminishes below the threshold of excitation of the sympathetic. But if this spasm becomes permanent, it produces stasis and favors the formation of a coagulum, especially when the venous endothelium has been changed by the traumatism or possibly by a latent perivascular infection manifested by an infected hematoma or by chronically inflamed ganglia. In any case, infection cannot play more than a secondary role, and the essential element is the venous spasm. Effort thrombophlebitis may accordingly be de-

fined as a syndrome characterized by vascular lesions, predominantly of the veins, whose point of departure is a venous spasm due to sympathetic irritation, and which are generally, but not necessarily, accompanied by venous thrombosis, and betrayed clinically by edema, which is the exteriorization of the vasomotor disequilibrium of the limb. Treatment should be surgical, if a brief expectant medical treatment fails to bring relief after a few days in which the sphygmomanometric readings are closely watched. It should consist of phlebectomy and periarterial sympathectomy of the corresponding artery.

The Insulin Method of Increasing Weight in Thin Patients.—Louis H. Nahum and H. E. Himwich, writing in the *American Journal of the Medical Sciences*, May, 1932, clxxxiii, 5, state that it is not generally appreciated that insulin plays an important rôle in the hunger-producing mechanism. After referring to experimental work in animals which has afforded evidence that insulin has a definite influence on the hunger mechanism, they report four cases in which thin patients, otherwise normal, gained weight rapidly while receiving subcutaneous injections of insulin. The first patient gained 22½ pounds in twenty-eight days, the second gained 10 pounds in twelve days, the third 12½ pounds in twenty-three days, and the fourth gained 15 pounds in thirty-nine days. The treatment was begun by administering 3 units of insulin every three hours. The dose of insulin was gradually increased until 10 units or even larger doses were injected every three hours. The patients were urged at all times to have available carbohydrates in case of an insulin reaction. Untoward reactions, however, were very few considering that from 45 to 65 units of insulin were administered daily to normal persons. As a result of the treatment, there was a great increase in the appetite, probably a considerable enlargement of stomach capacity, and the generation of great pleasure associated with eating. The gain in weight was not due to water retention, as the caloric intake was doubled and tripled during the treatment and the patients maintained their gain in weight for the most part after the discontinuance of treatment. The authors discuss the relation of mental states to anorexia and trace their influence upon the insulin mechanism. It has long been known that patients subjected to worry and anxiety quickly lose the appetite and grow thin. That the mind may mediate these effects through the insulin mechanism gains support from the work of Beattie, Brown, and Long (1930), who have traced anatomic pathways from the hypothalamus to the sympathetic nerve fibers in the cord. It is known that adrenaline tends to inhibit insulin activity, and it is therefore not difficult to understand how emotional states may interfere with the insulin mechanism and so diminish appetite.



LEGAL



LIBEL—DEFAMATORY STATEMENTS CONCERNING DECEASED PERSONS

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Every year biographies are published that are so bold in their delineation of the characteristics, weaknesses and vices of their subjects that one is led to wonder just how far a writer is entitled to go in writing biography before he will run into some legal restraint. Statements circulated in such biographies are bound to offend the sensitive and sentimental. The descendants of the subject may be caused great embarrassment, and even direct financial loss. If the publication is untrue the injustice caused by the free publication of a libelous biography becomes apparent.

Recently an action was instituted in one of the states in the Southwest against a widely circulated magazine that had published a biographical sketch of one of the popular heroes of the early days of that part of the country. The article falsely imputed that the subject had been the father of an illegitimate child. One of his descendants sued to recover damages and a large verdict was awarded by a jury. An appeal was taken to the Federal Circuit Court, but before the appeal had been decided, the defendant settled the case, thus preventing a decisive ruling on the question by an appellate court. The tendency, however, has been for courts to rule that civil actions for damages may not be brought based upon libel of the dead. In England and France civil actions brought by descendants of famous people against their biographers have recently failed to be sustained. It will be interesting to note the outcome if some case brought by descendants of illustrious dead to recover damages is bitterly contested to obtain an adjudication in one of our courts.

Of course, the publication of matter defaming the memory of the dead is not wholly unrestrained by law. Whether an action at civil law for damages may be maintained or not, the criminal law here acts as a curb. Even at common law, which forms our fundamental law in the absence of statute, libel of the dead was a crime punishable as a misdemeanor. The punishment of said crime, however, was obstructed by the technical requirements that to constitute a punishable offense the libel must have been published with the malevolent purpose to injure the family and posterity of the deceased, and must have tended to cause a breach of the peace. Deliberate intent to

injure the family of the deceased was punished in order to prevent members of the family from taking the law into their own hands to avenge the defamatory statements.

Statutes in many of the states have been enacted which more adequately deal with the offense than the old common law. The section from the Penal Law of our state which governs is as follows:

"Sec. 1340. Libel defined. A malicious publication, by writing, printing, picture, effigy, sign or otherwise than by mere speech, which exposes any living person, or the memory of any person deceased, to hatred, contempt, ridicule or obloquy, or which causes, or tends to cause any person to be shunned or avoided, or which has a tendency to injure any person, corporation or association of persons, in his or their business or occupation, is a libel."

Some years ago under such a statute in a western state an article regarding George Washington was published in a newspaper. It was charged in an information that the defendant had composed and published the article so as to expose Washington's memory to hatred, contempt, and obloquy. In a jury trial it was determined that the matter published constituted an offense under the statute, and judgment and sentence were imposed. An appeal was taken and the principal contention was made that the facts charged did not constitute the offense of libel, for the language complained of related to a person who had been dead for a period reaching back prior to the birth of any person living, and that no claim was made by the prosecution that any relatives or posterity of Washington were injured by the publication. The Appellate Court affirmed the conviction and said:

"We conclude that the reasons of the common law are no longer controlling, and that under this new statutory definition of the offense it is not a question of whether the memory of the deceased is defamed to the injury of his living relatives and friends to the end that they be not provoked to breaches of the peace, but it is simply a question of whether or not the libelous publications tended 'to expose the memory of one deceased to hatred, contempt, ridicule or obloquy.' If such is the tendency of this publication and it was maliciously made we see no escape from the conclu-

sion that the act was an offense within the meaning of this new Statute. If it be necessary to look for a reason permitting the legislature to thus broaden the definition of the offense we may well presume that it can be found in the conclusion of the legislature, which clearly is within the bounds of reason, that all publications tending to defame the memory of deceased persons might have the tendency to excite some persons to breaches of the peace, whether they be relatives or friends of the deceased or others who may have a high regard for the deceased, though such regard rest only upon traditional or historical knowledge."

It has been urged as a defense to criminal proceedings to punish for libelous statements concerning the dead that the doctrine of freedom of the press prevented conviction. The First Amendment to the United States Constitution prevents Congress from abridging the freedom of speech or of the press, and the highest Court of the land has decided that the Fourteenth Amendment protects against unfair restraints on free speech and

a free press by state laws. However, these constitutional guarantees have not been interpreted to permit unchecked abuses of the freedom of the press. As one court said:

"It is well to notice that the liberty of speech and press are guaranteed alike in this section of the bill of rights; that which a man may write with impunity, he may speak with impunity; what may be published in the columns of a newspaper, may be proclaimed from the hustings, the pulpit, or the lecture platform; that the liberty of the press is and should be no more sacred than the liberty of speech. While the liberty of each is a sacred right, dear to the hearts of an entire Anglo-Saxon civilization, yet the law makers and the framers of the Constitution have all realized that liberty in the exercise of any natural right, when unrestrained by law leads to licentiousness, and have therefor wisely provided that anyone exercising the liberty of speech or of the press within this State shall be held responsible for an abuse of such privilege."

TREATMENT OF PERITONSILLAR ABSCESS

A doctor engaged in the general practice of medicine was summoned to attend to a woman who was suffering from a throat condition.

The doctor examined the patient and found an acute condition of right peritonsillar abscess. He ordered an ice bag to the throat and directed that she gargle with alkaline antiseptic tablets and take aspirin and a cathartic.

Two days later he was again called in and found that her condition had not improved. He discontinued the cold applications and substituted heat treatment to the throat. The doctor saw her each day thereafter for four days. At the end of that time her condition had not improved, but there was swelling and edema of the throat and she was unable to take nourishment. The doctor directed that she enter a nearby hospital in order that he might open and drain the abscess under an anæsthetic at the said hospital. The patient entered said hospital and the doctor had her put under an ether anæsthetic and removed a section of the upper pole of the right palatine tonsil, reaching the abscessed cavity with very little hemorrhage. The condition of the pus was such that the abscessed cavity was curretted to remove necrosed material. The left tonsil was not disturbed in any way, as there was no evidence of infection therein. Following the operation her condition rapidly improved and she was able to return to her home in three days.

Three weeks later the patient returned to the doctor's office, at his request, and an associate of

the doctor, under his instruction, removed the remainder of the right tonsil under local anæsthesia. It was not possible at that time to remove all the tissue by dissection and snare due to the thickness of the capsule as a result of the inflammation therein. A few diathermy treatments were administered to her and it was understood between the doctor and the patient that she was to return for further treatment, but she failed to do so because of other illness in her family. She never returned to the doctor for further treatment.

The doctor undertook to collect his fee for services and was obliged to resort to the institution of a law suit for that purpose. An answer was interposed on behalf of the defendant, claiming that the services rendered by the doctor were wholly without value and further stating as a counterclaim that the treatment rendered by the doctor was negligent and unskilled and as a result the defendant was rendered sick and disabled for a long period of time and was obliged to expend large sums of money for treatment and medicines.

The action was brought on for trial and the patient introduced considerable testimony with respect to the pain and suffering which she went through, but failed to introduce competent medical proof that the practice followed by the doctor in the case was a departure from proper and approved practice. A decision was rendered by the court in favor of the doctor for the full amount of his bill, and dismissing the counterclaim.

CLAIMED FAILURE TO REMOVE GALLSTONES

In this case a surgeon was called to a hospital by the family physician of a patient to examine her with respect to the advisability of an operation. The family physician advised the surgeon that the patient, a middle aged woman, had had gallbladder attacks for about twenty years and that she had a long-standing chronic nephritis, her urine containing albumin and pus, that she had had high blood pressure for many years and, although the pain in the gallbladder region had been severe, she had not consented to any operation until they became so severe that she could not stand it. The doctor examined the patient, found that she was about four and a half feet high and weighed about two hundred forty pounds, that at that time her blood pressure was systolic 190, diastolic 90. The doctor's diagnosis was chronic cholecystitis with adhesions. Because of the patient's condition, namely, blood pressure and the various other conditions, he thought that the patient would not survive an operation at that time. The doctor, therefore, advised absolute rest so as to improve her condition, in other words, to build her up for the operation.

About ten days later the doctor performed an operation upon the plaintiff. Her blood pressure at that time was 210/110. He made an incision on the right side of the upper abdomen which was distended, opened the gall bladder and duct, and thoroughly explored and drained the same. There were no gallstones present. The surgeon found and drained a large amount of dark bile and permitted a drainage tube to remain in the patient for about two weeks subsequent to the operation. The patient was discharged from the hospital about three weeks after the operation, in good health so far as the operation was concerned, but there had been no improvement in her kidney condition.

The patient thereafter called at the doctor's office on several occasions complaining of attacks of dizziness and a discharging sinus. Examination showed the presence of a discharging sinus with a small amount of mucus. The

surgeon gave her no treatment but referred her to the family physician. No further operation was ever requested by either the patient or her family physician.

About four years after the operation, the doctor received a call to visit the patient at her home to see a concretion which was said to have come through the fistula which had never healed. The doctor examined the substance, but was unable to say whether or not it was a gallstone or whether it had come through the fistula. This was the last time the doctor ever saw the patient.

An action was thereafter instituted against the surgeon, claiming that he had negligently operated upon the patient in that he failed to ascertain the presence of gallstones and to remove them, and further that by reason of his negligence the incision which he had made failed to heal and for upwards of four years caused her to suffer from an open sloughing sore. The plaintiff's complaint further charged that by reason of the negligence of the defendant her blood pressure had become increased and accelerated, so that about three years after the operation the plaintiff sustained a cerebral hemorrhage which caused the left side of her body to be wholly paralyzed.

The defendant's answer, in addition to denying all allegations of negligence, set up the special defense that the action was not commenced within the statutory period. The case came on for trial, and at the conclusion of the testimony which required three days to put in, the defendant's attorney moved for a dismissal of the complaint on the ground that the plaintiff had failed to establish a cause of action. The motion was granted by the court.

An appeal was taken on behalf of the plaintiff, but before the appeal could be argued the plaintiff died. A motion was thereupon made to dismiss the appeal on the ground that the action abated by reason of the death of the plaintiff. Said motion was granted, thus finally terminating the case in favor of the doctor.





NEWS NOTES



THE EXECUTIVE COMMITTEE MEETING, JUNE 16, 1932

The Executive Committee of the Medical Society of the State of New York held its regular monthly meeting on Thursday, June 16, 1932. The personnel of the Committee as completed by the Council on May 24, 1932, in accordance with the By-laws, Chapter 5, Section 1, is as follows:

Dr. Chas. Gordon Heyd, President, New York.
Dr. John A. Card, Speaker, Poughkeepsie.
Dr. Daniel S. Dougherty, Secretary, New York.
Dr. Frederic E. Sondern, Treasurer, New York.
Dr. William D. Johnson, Past-President, Batavia.
Dr. Frederick H. Flaherty, Syracuse.
Dr. Charles D. Kline, Nyack.
Dr. Arthur J. Bedell, Albany.
Dr. Louis A. Van Kleeck, Manhasset.
Dr. James M. Flynn, Rochester.

The Executive Committee completed the list of members of the Committees, both the Standing and the Special.

STANDING COMMITTEES

The Chairmen of the Standing Committees are elected by the House of Delegates according to Chapter 10, Section 8 of the By-laws. The list of the Chairmen elected at the last meeting of the House of Delegates is published on the first editorial page of each issue of the JOURNAL. The Executive Committee appointed the other members of the Standing Committees, on their nomination by President Heyd. The personnel of the Standing Committees is now as follows:

COMMITTEE ON PUBLIC HEALTH AND MEDICAL EDUCATION:

Dr. Thomas P. Farmer, Chairman, Syracuse.
Dr. George W. Kosmak, New York.
Dr. Mahlon H. Atkinson, Catskill.
Dr. Leo F. Schiff, Plattsburg.
Dr. William A. Groat, Syracuse.
Dr. Martin B. Tinker, Ithaca.
Dr. Clayton W. Greene, Buffalo.
Dr. Edward G. Whipple, Rochester.
Dr. Nellis B. Foster, New York.

COMMITTEE ON PUBLIC RELATIONS

Dr. James E. Sadlier, Chairman, Poughkeepsie.
Dr. William H. Ross, Brentwood.
Dr. George M. Fisher, Utica.
Dr. O. W. H. Mitchell, Syracuse.
Dr. Augustus J. Hambrook, Troy.
Dr. William D. Johnson, Batavia.
Dr. Thomas H. Cunningham, Glens Falls.

COMMITTEE ON MEDICAL ECONOMICS

Dr. Charles H. Goodrich, Chairman, Brooklyn.
Dr. Frederic E. Elliott, Brooklyn.
Dr. Joseph P. Garen, Olean.
Dr. Frederick M. Miller, Utica.

Dr. Homer L. Nelms, Albany.
Dr. Joseph C. O'Gorman, Buffalo.
Dr. Cassius H. Watson, New York.
Dr. Terry M. Townsend, New York.
Dr. Frederick S. Wetherell, Syracuse.
Dr. Edward R. Cuniffe, Bronx.

COMMITTEE ON LEGISLATION

Dr. Harry Aranow, Chairman, Bronx.
Dr. John J. Buettner, Syracuse.
Dr. Bernard B. Berkowitz, Brooklyn.
Dr. B. Wallace Hamilton, New York.
Dr. Edward E. Haley, Buffalo.

SCIENTIFIC WORK:

(The Committee on Scientific Work consists of the chairman, elected by the House of Delegates, the chairmen of the scientific sections, and one member elected by the Council—By-laws, Chapter 10, Section 2.)

Dr. Arthur J. Bedell, chairman, Albany.
Dr. Edward C. Reifenshtein, Syracuse.
Dr. Edward R. Cuniffe, Bronx.
Dr. Edward C. Hughes, Syracuse.
Dr. Brewster C. Doust, Syracuse.
Dr. Davis F. Gillette, Syracuse.
Dr. Daniel R. Reilly, Cortland.
Dr. Henry W. Williams, Rochester.
Dr. Paul E. Bechet, New York.
Dr. Frederic E. Sondern, New York.

ARRANGEMENTS:

Dr. Samuel J. Kopetzky, Chairman, New York.
(The other members will be chosen later.)

SPECIAL COMMITTEES

The Executive Committee appointed the following Special Committees:

COMMITTEE ON MEDICAL RESEARCH:

Dr. Frederic E. Sondern, Chairman, New York.
Dr. John Wyckoff, New York.
Dr. S. R. Detwiller, New York.
Dr. George Baehr, New York.
Dr. G. Canby Robinson, New York.
Dr. Augustus B. Wadsworth, Albany.
Dr. Edwin M. Stanton, Schenectady.
Dr. Herman G. Weiskotten, Syracuse.
Dr. John J. Morton, Rochester.
Dr. Winfield W. Scott, Rochester.
Dr. Burton T. Simpson, Buffalo.
Dr. F. A. Hartman, Buffalo.
Dr. James L. Gallagher, Buffalo.
Dr. Simon Flexner, New York.
Dr. Peyton Rous, New York.

PRESS PUBLICITY:

Dr. Alec N. Thomson, Chairman, Brooklyn.
Dr. Edward C. Podvin, Bronx.
Dr. James N. Vander Veer, Albany.
Dr. Louise W. Beamis, Buffalo.

PRIZE ESSAYS

Dr Henry H M Lyle, Chairman, New York
Dr Martin Cohen, New York
Dr Joshua C Sweet, New York

COORDINATED ACTIVITIES

(The Committee was authorized by the House of Delegates by resolution as follows: The Council be instructed to prepare for publication not later than December 15, 1932 a program of action by the Committees of the Society to further cooperation and coordination of activity and to make the collective thought of the State Society effective and powerful and to encourage the work of its committees. —JOURNAL June 15 page 752)

Dr Frederick H Flaherty, Chairman Syracuse
Dr Charles D Kline, Nyack
Dr Louis A Van Kleeck, Manhattan

It was decided to hold the next Annual Meeting of the Medical Society of the State of New York in New York City at the Waldorf-Astoria Hotel. The date of the meeting was left to the decision of the President, the Secretary, and the Chairman of the Committee on Arrangements

Dr Frederick H Flaherty, President elect, was appointed ex-officio member of the Executive Committee of the State Charities Aid Committee on Tuberculosis and Public Health

Mr Lorenz J Brosnan was reappointed Counsel, and Mr Thomas H Clearwater, Attorney

Dr Eugene F Traub was granted permission to publish his paper on "Squamous Cell Epithelioma of the Skin of the Face" in the *Archives of Dermatology* provided that due credit is given that it had been read at the Annual Meeting of the Medical Society of the State of New York

Dr Kenneth M Lewis was granted permission to publish his paper on "Antitoxin Treatment of Erysipelas" in the *Journal of the American Medical Association*, provided that due credit is given that it had been read at the Annual Meeting of the Medical Society of the State of New York

DANIEL S DOUGHERTY, Secretary

THE BUDGET

The following budget of the Medical Society of the State of New York, for the year July 1,

1932, to June 30, 1933, was adopted by the Trustees on June 24, 1932

GENERAL

	Appropriation
Rent	\$ 2,900 00
Telephone	200 00
Postage	900 00
Stationery and Printing	1,000 00
Salaries	18,600 00
Contingent Fund	1,000 00
Annual Meeting—Printing, Postage and Stenographer for House of Delegates	2,500 00
Printing District Branch Programs and Postage for mailing paid through Secretary's office	800 00
Auditor	500 00
Traveling Expenses—General Including President and Secretary	3,000 00
Traveling Expenses, A M A Delegates	2,000 00
Counsel—Salary	12,000 00
Counsel—Expenses	500 00
Secretary—Honorarium	3,000 00
Secretary—Expenses	500 00
Executive Officer's Salary	8,000 00
Executive Officer's Expenses	1,200 00

STANDING COMMITTEES

Legislation	\$ 5,000 00
Medical Economics	2,000 00
Public Health and Medical Education	8,000 00
Public Relations	2,000 00
Scientific Work	500 00

DISTRICT BRANCHES

For Annual Meeting as allowed under By laws \$1,600 00

SPECIAL COMMITTEES

Press Publicity	\$ 100 00
Medical Research	1,000 00

SPECIAL APPROPRIATIONS

Conference of County Secretaries	\$ 500 00
Conference, Executive Committees District Branches	200 00
Christmas Bonus	600 00

JOURNAL

Printing and Cuts	\$31,500 00
Postage—Mailing Journal	3,600 00
Postage—General	600 00
Commissions	8,000 00
Honorarium—Editor in Chief	500 00
Executive Editor—Salary	4,500 00
Executive Editor—Traveling and Incidental Expenses	500 00
Rent	1,658 00
Salaries	4,420 00
Telephone	200 00
Wrappers for Journal	600 00
General Office Supplies	600 00

DIRECTORY

Printing Directory	\$12,500 00
Wrapping and Delivery	1,700 00
Postage	1,000 00
Commissions	700 00
Stationery, Printing and Expenses	700 00

Nebraska	510	Malpractice Defense in Colorado	511
Distribution of Physicians in Indiana	632	Malpractice Defense in Michigan	641
District Branch, The Second	756	Massachusetts, Cancer Control	575
Education, Health, in Nebraska	508	Chiropractic Initiative	434
Economics in Ohio	699	Medical Agencies in Michigan	638, 694
Executive Secretary for Louisiana	574	Medical Education in Ohio	700
Exhibit on Public Health by a Railroad in Georgia	428	Medical Society Lectures to Students	676
Explanation and Apology, for Plagiarism	558	Michigan, County Society Activities	513
Federal Aid	691	Libellous Letters	705
Fees, Medical, in California	768	Malpractice Defense	641
Fees, Medical, for Welfare Calls in Oneida Co.	618	Medical Agencies	638, 694
Florida, Publicity, Medical	435	Minutes, House of Delegates	732
Georgia, Public Health Activities	428	Mississippi, Indigent, Care of	512
Governor's Committee on Compensation Insurance	733	Missouri, Free Clinics in	514
Governor's Health Commission, Joint Committee on	414	Nebraska, Director, Medical	510
Grading Health Officers	406	Education, Health	508
Graduate Education in Virginia	569	Journal	435, 770
Graduate Fortnight of New York Academy of Medicine	757	Ohio, Annual Reports	698
Grievance Committee, Press Opinion	420	Care of Indigent	504
Health Exhibit Train in Georgia	428	Child Health Conference	507
House of Delegates, Minutes	732	Oklahoma, Student Lectures	705
Index of Activities of Medical Societies, First Quarter of Year	417	Oneida County, Public Relations	617
Index of Annual Reports	548	Orthopedic Clinic in Warren County	408
House of Delegates	755	Pennsylvania, Cancer Control	570
Indiana, Distribution of Physicians	632	Public Relations	639
Indigent, Care of, in Iowa	504	Periodic Health Examination in Ohio	700
Indigent, Care of, in Ohio	504	Plagiarism, A Case of	558
Indigent, Care of, in Mississippi	512	Program, Annual Meeting	462
Initiative on Chiropractic in Massachusetts	434	Public Health Activities in Georgia	428
Insurance, Compulsory Health Abroad, Koffler	437	Public Health Administration in Alabama	424
Iowa, Care of Indigent	504	Public Health Conference in Washington State	567
Journal of, Nebraska	435, 771	Public Health Practice in Arkansas	571
Journal of, Ohio	699	Publicity, Medical, in Florida	435
Journals of States Quoted:		Public Policy in Ohio	698
Alabama	424, 562	Public Relations Committees of Counties	406
Arkansas	571	Warren County	408
California	766, 768	Public Relations Committee, Meeting February 18	406
Colorado	511, 771	April 21	614
Florida	435	Public Relations in California	766
Georgia	428	Pennsylvania	639
Indiana	632	Wyoming	435
Iowa	504	Reference Committees, House of Delegates	501, 732
Kansas	704	Regional Conference of Public Relations Chairmen in Albany	406
Louisiana	574	Regional Conference of Public Relations Chairmen in Syracuse	614
Maine	640	Registration, Annual in Texas	432
Massachusetts	434, 575	Reports, Annual	435, 474, 515
Michigan	513, 638, 641, 694, 705	School Children, Examination of	406
Mississippi	512	Second District Branch, Meeting of June 8	756
Missouri	514	South Carolina, Bill for Attendance in 1736	572
Nebraska	435, 508, 510, 770	State Medical Society and Public Health in Alabama	424
Ohio	504, 507, 698	State Sanitary Code, Adoption of	406
Oklahoma	705	Student Lectures by Medical Society in Oklahoma	705
Pennsylvania	639	Student Loans in Colorado	771
South Carolina	572	Texas, Registration, Annual	432
Texas	575	Library Service	575
Virginia	568	Ticks, Vaccine for, in Wyoming	636
Washington	567, 764	Tuberculosis, Early Diagnosis Campaign	411
West Virginia	433, 703	Venereal Disease Control for Counties	614
Wisconsin	564	Veteran's Relief in Ohio	698
Wyoming	435, 636	Virginia, Graduate Education	568
Kansas, Crippled Children	704	Warren County, Public Relations in	408
Laboratories, Public Health, Association of	559	Washington, Public Health Conference	567
Lectures to Students by Medical Society	676	Economics, Questionnaire	764
Legislation in 1932	412	West Virginia, Detail Man	433
Final Bulletin	619	Legislation	703
in West Virginia	703	Wisconsin, Chiropractors	564
Libellous Letters in Michigan	705	Women's Medical Society of New York State	756
Library Service in Texas	575	Wyoming, Public Relations	435
Loans to Students in Colorado	771	Vaccine for Ticks	636
Louisiana, Executive Secretary	574		
Maine, Coroners' Cases	640		



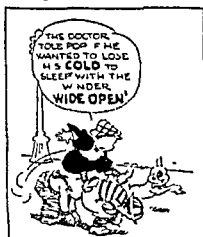
THE DAILY PRESS



Reg'lar Fellers

In and Out the Window

By Gene Byrnes



From New York Herald Tribune, January 6, 1932

THE WORLD OF MAKE BELIEVE

Children are encouraged to use their imaginations, and to compose imaginary stories based on real life. It is not surprising that sometimes memories of the make believe are confused with the real. The *New York Times* of June 17 records such an incident as follows

"More than twenty policemen of the Bayside Precinct in Queens, including both uniformed men and detectives, reinforced by a police emergency squad and more than 400 other men and women, spent a busy hour and one half late yesterday investigating a kidnapping alarm which proved, while the search for a supposedly missing child was still in progress, to be the figment of a childish imagination

"The futile search began when Claire Gormley, 7 years old, reported to a man she met in the street that her little friend, Rita Celinski, 8 years old, had been kidnapped by a Negro

"Claire notified Lieutenant William Dooley of

the Bayside Precinct, who sent for an emergency squad and also dispatched twenty of his uniformed men and detectives to search the woods. Claire's story was corroborated by a playmate, Faith Nicholson, also 7 years old

"The arrival of the police cars sent the neighborhood into an uproar. More than 400 men and women hurried to join the policemen in the search. While the hunt for Rita was still going on Rita came home at about 6 P. M. The police, who had been keeping in constant touch with Rita's home, called the search off

"Detective William Benecke questioned Claire, but she tearfully declared that she could give no reason for conceiving the kidnapping story. The Nicholson girl said she had supported Claire's story because her friend would get in trouble otherwise. Claire's parents promised the police that they would deal with their daughter in the approved manner when they took her home"

AUTOPSIES ON PHYSICIANS' BODIES

The death of Dr. William W. Keen of Philadelphia, on June seventh, was noticed in the *New York* daily papers. The *New York Times* of June 9 said editorially

"Dr. William Keen, who died at the age of ninety-five, was one of the country's most distinguished surgeons, though perhaps better known to the laity as the man who could keep for a quarter of a century the secret of the operation upon President Cleveland in the dark and nervous

days of 1893. A surgeon during the Civil War, a writer, a staunch churchman yet a believer in evolution, and a lifelong defender of vivisection, he should also be remarkable to this generation as a witness of nearly all the great battles fought by medicine to reach a state of public health which we now take for granted"

The *New York Herald Tribune* of June 15 carried a news note of an unusual bequest in the will of Dr. Keen as follows

Nebraska	510	Malpractice Defense in Colorado	511
Distribution of Physicians in Indiana	632	————— in Michigan	641
District Branch, The Second	756	Massachusetts, Cancer Control	575
Education, Health, in Nebraska	508	————— Chiropractic Initiative	434
Economics in Ohio	699	Medical Agencies in Michigan	638, 694
Executive Secretary for Louisiana	574	Medical Education in Ohio	700
Exhibit on Public Health by a Railroad in Georgia	428	Medical Society Lectures to Students	676
Explanation and Apology, for Plagiarism	558	Michigan, County Society Activities	513
Federal Aid	691	————— Libellous Letters	705
Fees, Medical, in California	768	————— Malpractice Defense	641
Fees, Medical, for Welfare Calls in Oneida Co. ..	618	————— Medical Agencies	638, 694
Florida, Publicity, Medical	435	Minutes, House of Delegates	732
Georgia, Public Health Activities	428	Mississippi, Indigent, Care of	512
Governor's Committee on Compensation Insurance ..	733	Missouri, Free Clinics in	514
Governor's Health Commission, Joint Committee on ..	414	Nebraska, Director, Medical	510
Grading Health Officers	406	————— Education, Health	508
Graduate Education in Virginia	569	————— Journal	435, 770
Graduate Fortnight of New York Academy of ..		Ohio, Annual Reports	698
Medicine	757	————— Care of Indigent	504
Grievance Committee, Press Opinion	420	————— Child Health Conference	507
Health Exhibit Train in Georgia	428	Oklahoma, Student Lectures	705
House of Delegates, Minutes	732	Oneida County, Public Relations	617
Index of Activities of Medical Societies, First ..		Orthopedic Clinic in Warren County	408
Quarter of Year	417	Pennsylvania, Cancer Control	570
Index of Annual Reports	548	————— Public Relations	639
————— House of Delegates	755	Periodic Health Examination in Ohio	700
Indiana, Distribution of Physicians	632	Plagiarism, A Case of	558
Indigent, Care of, in Iowa	504	Program, Annual Meeting	462
————— in Ohio	504	Public Health Activities in Georgia	428
————— in Mississippi	512	Public Health Administration in Alabama	424
Initiative on Chiropractic in Massachusetts	434	Public Health Conference in Washington State ..	567
Insurance, Compulsory Health Abroad, Koffler....	437	Public Health Practice in Arkansas	571
Iowa, Care of Indigent	504	Publicity, Medical, in Florida	435
Journal of, Nebraska	435, 771	Public Policy in Ohio	698
————— Ohio	699	Public Relations Committees of Counties	406
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Alabama	424, 562	Public Relations Committee, Meeting February 18 ..	406
Arkansas	571	————— April 21 ..	614
California	766, 768	Public Relations in California	766
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Florida	435	————— Wyoming	435
Georgia	428	Reference Committees, House of Delegates ..	501, 732
Indiana	632	Regional Conference of Public Relations Chairmen ..	406
Iowa	504	in Albany	614
Kansas	704	Regional Conference of Public Relations Chairmen ..	432
Louisiana	574	in Syracuse	515
Maine	640	Registration, Annual in Texas	406
Massachusetts	434, 575	Reports, Annual	435, 474, 515
Michigan	513, 638, 641, 694, 705	School Children, Examination of	756
Mississippi	512	Second District Branch, Meeting of June 8	572
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Nebraska	435, 508, 510, 770	State Medical Society and Public Health in ..	
Ohio	504, 507, 698	Alabama	424
Oklahoma	705	State Sanitary Code, Adoption of	406
Pennsylvania	639	Student Lectures by Medical Society in Oklahoma ..	705
South Carolina	572	Student Loans in Colorado	771
Texas	432, 575	Texas, Registration, Annual	432
Virginia	568	————— Library Service	575
Washington	567, 764	Ticks, Vaccine for, in Wyoming	636
West Virginia	433, 703	Tuberculosis, Early Diagnosis Campaign	411
Wisconsin	564	Venereal Disease Control for Counties	614
Wyoming	435, 636	Veteran's Relief in Ohio	698
Kansas, Crippled Children	704	Virginia, Graduate Education	568
Laboratories, Public Health, Association of	559	Warren County, Public Relations in	408
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Legislation in 1932	412	————— Economics, Questionnaire	764
————— Final Bulletin	619	West Virginia, Detail Man	433
————— in West Virginia	703	————— Legislation	703
Libellous Letters in Michigan	705	Wisconsin, Chiropractors	564
Library Service in Texas	575	Women's Medical Society of New York State ..	558, 756
Loans to Students in Colorado	771	Wyoming, Public Relations	435
Louisiana, Executive Secretary	574	————— Vaccine for Ticks	636
Maine, Coroners' Cases	640		



BOOKS RECEIVED



Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits, or in the interests of our readers.

PRIMARY CARCINOMA OF THE LUNG. Bronchiogenic Cancer. A Clinical and Pathological Study in Two Parts. By B. M. Fried, M.D. Octavo of 247 pages, illustrated. Baltimore, The Williams and Wilkins Company, 1932. Cloth, \$5.00. (Medicine Monograph XIX.)

MEDICAL CLINICS OF NORTH AMERICA. Vol. 15, No. 5, March, 1932. (New York Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues). Cloth, \$16.00 net; paper, \$12.00 net.

NUTRITION SERVICE IN THE FIELD. Report of the Subcommittee on Nutrition. LUCY H. GILLET, Chairman. CHILD HEALTH CENTERS: A Survey. Report of the Subcommittee on Health Centers. J. H. MASON KNOX, Jr., Chairman. LILLIAN LASER STRAUSS, Vice-Chairman. White House Conference on Child Health and Protection. Octavo of 139, 57 pages. New York, The Century Company (c. 1932). Cloth, \$2.00.

OBSTETRIC EDUCATION. Report of the Subcommittee on Obstetric Teaching and Education. FRED LYMAN ADAMS, M.D., Chairman. White House Conference on Child Health and Protection. Octavo of 302 pages. New York, The Century Company (c. 1932). Cloth, \$3.00.

GROWTH AND DEVELOPMENT OF THE CHILD. Part III. Nutrition. Report of the Committee on Growth and Development. KENNETH D. BLACKFAN, M.D., Chairman. White House Conference on Child Health and Protection. Octavo of 532 pages. New York, The Century Company (c. 1932). Cloth, \$4.00.

A CLINICAL STUDY OF THE ABDOMINAL CAVITY AND PERITONEUM. By EDWARD MEARIN LIVINGSTON, B.Sc., M.D. Quarto of 866 pages, illustrated. New York, Paul B. Hoeber, Inc., 1932. Cloth, \$15.00. (Hoeber's Surgical Monographs.)

EPILEPSY AND THE CONVULSIVE STATE. An Investigation of the Most Recent Advances. Parts 1 and 2. The Proceedings of the Association New York, December 27th and 28th, 1922. Editorial Board, FREDERICK TILNEY, M.D. and others. Octavo of 701 pages, illustrated. Baltimore, The Williams and Wilkins Company, 1931. Cloth, \$8.00. (Association for Research in Nervous and Mental Disease. Vol. VII of a Series of Research Publications.)

SCHIZOPHRENIA [Dementia Praecox]. An Investigation of the Most Recent Advances. The Proceedings of the Association New York, December 27th and 28th, 1929. Editorial Board, GEORGE H. KIRBY, M.D. and others. Octavo of 246 pages, illustrated. Baltimore, The Williams and Wilkins Company, 1931. Cloth, \$4.00. (Association for Research in Nervous and Mental Disease. Vol. X of a Series of Research Publications.)

MANIC-DEPRESSIVE PSYCHOSIS. An Investigation of the Most Recent Advances. The Proceedings of the Association New York, December 29th and 30th, 1930. Editorial Board, WILLIAM A. WHITE, M.D. and

others. Octavo of 851 pages, illustrated. Baltimore, The Williams & Wilkins Company, 1931. Cloth, \$10.00. (Association for Research in Nervous and Mental Disease. Vol. XI of a Series of Research Publications.)

PHYSIOLOGY OF BACTERIA. By OTTO RAHN. Octavo of 438 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc. (c. 1932). Cloth, \$6.00.

A CHILD'S BOOK OF THE TEETH. By HARRISON WADER FERGUSON, D.D.S. Second edition revised. 12mo of 106 pages, illustrated. Yonkers-on-Hudson, N. Y. World Book Co. [c. 1932]. Cloth, 68c.

HUMAN STERILIZATION. By J. H. LANDMAN, Ph.D., J.D., J.S.D. Quarto of 341 pages, illustrated. New York, The Macmillan Company, 1932. Cloth, \$4.00.

PRACTICAL TREATMENT OF SKIN DISEASES. By EDUARD AHLWEDE, M.D. Octavo of 770 pages, illustrated. New York, Paul B. Hoeber, Inc., 1932. Cloth, \$12.00.

DISEASES OF THE CORONARY ARTERIES. By DON C. SUTTON, M.S., M.D. and HAROLD LUETHI, Ph.D., M.D. Octavo of 164 pages, illustrated. St. Louis, The C. V. Mosby Company, 1932. Cloth, \$5.00.

HUMAN CANCER. By ARTHUR PURDY STOUT, M.D. Octavo of 1007 pages, illustrated. Philadelphia, Lea & Febiger, 1932. Cloth, \$10.00.

PULMONARY TUBERCULOSIS. By MAURICE FISHER, M.D. Fourth edition, thoroughly revised. Octavo, two volumes, totalling 1191 pages, illustrated. Philadelphia, 1932. Cloth, \$15.00.

MEDICAL CLINICS OF NORTH AMERICA. Vol. 15, No. 6, May 1932. (Mayo Clinic Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues). Cloth, \$16.00 net; paper, \$12.00 net.

CLINICAL INTERPRETATION OF LABORATORY REPORTS. By ALBERT S. WELCH, A.B., M.D. Octavo of 366 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc. [1932]. Cloth, \$4.00.

THE COSTS OF MEDICINES. By C. RUFUS ROREM, Ph.D., C.P.A. and ROBERT P. FISCHER, B.S., Ph.D. Octavo of 255 pages. Chicago, The University of Chicago Press [c. 1932]. Cloth, \$2.50. (Publications of the Committee on the Costs of Medical Care: No. 14.)

THE HEALING CULTS. By LOUIS S. REED, Ph.D. Octavo of 139 pages. Chicago, The University of Chicago Press [c. 1932]. Cloth, \$2.00. (Publications of the Committee on the Costs of Medical Care: No. 16.)

LANG'S GERMAN ENGLISH DICTIONARY OF TERMS USED IN MEDICINE AND THE ALLIED SCIENCES WITH THEIR PRONUNCIATION. Fourth edition. Revised and edited by MILTON K. MEYERS, M.D. Octavo of 926 pages. Philadelphia, P. Blakiston's Son & Co., Inc. [1932]. Cloth, \$10.00.



BOOK REVIEWS



VARICOSE VEINS with special reference to the injection treatment. By H. O. MCPHEETERS, M.D., F.A.C.S. Third edition. Octavo of 285 pages, illustrated. Philadelphia, F. A. Davis Company, 1931. Cloth, \$4.00.

The third edition of this monograph has been enlarged over the previous editions so that we now have a 250 page exposition. This is not due so much to the addition of new subjects as to the elaboration of previously considered subjects. In a general way, the new edition fulfills the requirements of correctness of errors, more completeness of description and increased usefulness.

There are several points of importance that are considered by the author as proven that are not so regarded by other observers. The two outstanding examples are: first, the circulation of the blood in varicose veins and second, the uniformity of results which the author claims for the favored sclerosing substances. We still believe, despite his contentions, that the reverse flow of blood is not proven, that all sclerosing substances that are used in this therapy are inconsistent in the results which they yield.

The book is the best American treatise on the subject and as such deserves a place in the library of the physician or surgeon who attempts to practice the sclerosing of veins by the injection method.

ROBERT F. BARBER.

TEXTBOOK OF GYNECOLOGY FOR NURSES. By PHILIP REEL, M.D., F.A.C.S. Octavo of 282 pages, illustrated. Philadelphia, F. A. Davis Company, 1932. Cloth, \$2.50.

This book is written, as the author states, for "two types of nurses. The pupil nurse receiving instruction in Gynecology as a part of her general training, and the graduate who has chosen to prepare herself for hospital supervising or clinic nursing." The book adequately provides ample instruction for such nurses. Its chief accomplishment is the terse manner in which it describes gynecological conditions without dwelling upon details that are unnecessary from the nurses' viewpoint. The duties of the nurse are emphasized and her responsibilities clearly stated. The chapters on "Operating Room Equipment" and "Operating Room Personnel" while not strictly gynecological nursing are well written and are deserving of the space allotted to them. The information they contain is of value to the nurse to whom this book may be recommended.

WILLIAM C. MEAGHER.

THE PRACTICE OF CONTRACEPTION. An International Symposium and Survey. Edited by MARGARET SANGER and HANNAH M. STONE, M.D. Octavo of 316 pages, illustrated. Baltimore, The Williams & Wilkins Company, 1931. Cloth, \$4.00.

The *raison d'être* of this book aside from the medical aspect of its contents, needs no better amplification than that embodied in the masterly foreword by Dr. Robert Latou Dickinson.

Margaret Sanger and her co-worker Dr. Hannah M. Stone deserve unstinted praise in acknowledgment of their monumental pioneer work.

Even those who have kept in touch with the educational crusade of Margaret Sanger, can only in part appreciate the many trials which she must have had to overcome before she could witness the fruition of her efforts—the Congress of Zurich, Switzerland in 1930.

The various contraceptive methods advocated by so representative a body must of necessity command respectful attention of those whose interest lies in this field. It would therefore be presumptuous for one to dogmatically advocate any one method to the exclusion of others. The interested reader will make his own choice. The reviewer ventures the opinion that while intra-uterine and other methods are still on trial, the one practiced by the Birth Control Clinic in New York, seems at least for the present the most universally adaptable one.

ADOLPH BONNER.

THE USE OF THE SELF. Its Conscious Direction in Relation to Diagnosis, Functioning and the Control of Reaction. By F. MATTHIAS ALEXANDER. 12mo. of 143 pages. New York, E. P. Dutton and Co., Inc., 1932. Cloth.

For many years Mr. Alexander has, by persistent study and untiring experimentation and observation, sought to develop a technique which will enable individuals really to secure the right use of themselves. In his book, "The Use of the Self," he has evolved this technique.

In an authoritative and scholarly manner Mr. Alexander demonstrates his new scientific principle with respect to human behavior, and the book may well be recommended to psychologists, psychiatrists and educators, as well as to workers in all fields of investigation pertaining to a study of human nature and conduct.

FREDERIC DAMRAU.

THE PRACTICAL MEDICINE SERIES. Comprising Eight Volumes on the Year's Progress in Medicine and Surgery. Series 1931. Chicago, The Year Book Publishers, 1931. General Medicine. Edited by GEORGE H. WEAVER, M.D., and others. 12mo. of 814 pages, illustrated. Cloth, \$3.00.

In this issue, as in others of this series, we find encyclopedic reviews of almost innumerable articles on medicine written during 1930-1931. While we find nothing revolutionary in the practice of medicine there are a few highlights which may be of interest to the practitioner.

Convalescent serum in the prevention of measles we are again told is effective—but for only a short time.

Scarlet fever antitoxin is in for a lot of praise when used in septic cases.

Diphtheria toxoid seems to be gradually replacing toxin-antitoxin in diphtheria prevention. There is also mention of glucose injections in the treatment of the active disease.

If we are to rely on what contributors have to tell us about poliomyelitis we should have a reliable remedy for that disease. We are told that "the serum is apparently effective and that the results are promising." But the words "apparently" and "promising" are not clarified. To the reviewer this seems like a juggling of words to hide one's ignorance.

As to smallpox, the physician is warned not to let up on his prevention propaganda for there are about 50,000 cases of this disease in this country every year.

For those who are fed up on calcium therapy for all sorts of conditions we are assured that for tuberculosis and hemoptysis it is "an excellent placebo."

In regards to Calmette's work on vaccination against tuberculosis we are advised that "an expectant attitude

toward tuberculosis vaccination is still the more reasonable."

Iron is in for another revival in the therapy of secondary anemia. How long it will last remains to be seen.

We read about the worthlessness of tonsil surgery in many types of cases hitherto regarded as thoroughly eligible for it. It is unfortunate that such opinions, however true, reflect the tendencies of the times rather than the personal opinions of the individual. The same holds true for digitalis therapy in lobar pneumonia.

We find encouraging reports and prognoses about dangerous 'high blood pressures.

If one were to search for positive discoveries in this annual compilation he will meet with little success. Case reports, confirmations, and controversies are all very interesting and valuable but they can hardly be classified under the heading of progressive medicine.

The editors of this book have done a fine piece of work in the quality of their reviews as well as of their occasional summary comments.

EVANUEL KRIMSKY

APPLIED PHYSIOLOGY By SIMSON WRIGHT, M.D., MRCP. Fourth edition. Octavo of 552 pages, illustrated. New York, Oxford University Press, 1931. Cloth, \$5.50 (Oxford Medical Publications).

This, fourth, edition is very welcome to students and teachers of the subject and especially to practitioners of medicine, for whom the value of previous editions has been proved. The thoroughness of the revision of its text reflects great credit upon its author and the amount of new material incorporated gives evidence of extensive acquaintance with recent literature as well as of sound judgment concerning the real value of experimental findings as such and as applicable in diagnosis and treatment. Despite the considerable amount of carefully selected and well arranged new material there is but slight increase in the bulk of the volume, which remains of handy size though greatly enhanced in value. So far as this reviewer is aware this book has no close competitor.

J. C. CARDWELL

THE TREATMENT OF ASTHMA By A. H. DOUTHWAITE, M.D., FRCP. 12mo of 164 pages. New York, William Wood & Company, 1931. Cloth, \$2.50.

The Treatment of Asthma by A. H. Douthwaite is a short treatise on that disease. He clearly describes the disorder in all stages and with complications. There is a brief statement of the most recent theories and researches.

While containing nothing new or startling it is a practical little book which epitomizes the generally accepted concept of this malady.

DOROTHEA E. CURNOW

AIDS TO PHYSIOLOGY By HENRY DRYERRE, Ph.D., MRCS. 16mo of 255 pages illustrated. New York, William Wood & Company, 1931. Cloth, \$1.50 (Students Aids Series).

The object of the book, according to the author, is to give a concrete, concise survey of the field of Physiology, so that the reader may more profitably utilize the larger standard textbooks. But like so many other compends, a complete survey is not presented such important topics as conditioned reflexes and maintenance of attitude and posture not being commented upon at all. The subject matter is dealt with in an elementary fashion and would therefore be of considerable value to the beginner in the field but not to the medical student.

In the first part of the book, the chemistry and histology of tissue and muscle nerve physiology are presented. The latter part is taken up with circulation

respiration, sympathetic and central nervous system, endocrines, kidney and special senses. The physiology of the gastro intestinal tract, and to a less degree, the nervous system, is discussed in detail.

DAVID I. ABRAMSON

UNITED STATES ARMY X-RAY MANUAL Authorized by the Surgeon General of the Army. Second edition, rewritten and edited by Lt. Col. H. C. PILLSBURY, MC US A. 12mo of 482 pages, illustrated. New York, Paul B. Hoeber, Inc., 1932. Cloth, \$5.00.

The United States Army X-Ray Manual may be referred to as 'the first step to Roentgenology' for such has the previous edition served to many of the present day specialists in this field. Lt. Col. Pillsbury however has made the second edition even more valuable by adding a description of the technique and application of the diagnostic procedures developed since the earlier publication. The volume includes a description of X-ray apparatus technique and interpretation, which while of necessity brief, is most concise and represents probably the most valuable single volume in the X-Ray field.

RICHARD A. RENDICK

THOMSON & MILES' MANUAL OF SURGERY By ALEXANDER MILES, M.D., LL.D., and D. P. D. WILKIE, M.D., FRCS. Eighth edition, volumes 2 and 3. 12mo of 1263 pages illustrated. New York, Oxford University Press (c1931). Cloth, \$3.80 each (Oxford Medical Publications).

The second volume of this excellent manual, containing the teachings of fractures, joint diseases and tumors is in every respect a peer of its kind. The information is complete and modern in every essential detail. The illustrations are instructive, the presentation terse and well planned. Of the 670 pages none should be missed by the reader.

Volume three is devoted to the Surgery of the thorax and abdomen. It is up to date in every respect. This volume along with the two preceding ones should grace the desk of every budding surgeon.

GEO. WEBB

EPIDEMIC ENCEPHALITIS—Etiology—Epidemiology Treatment Second Report by the Matheson Commission, William Darrach, Chairman. 12mo of 155 pages. New York, Columbia Press, 1932. Cloth, \$1.50.

This book is a second report of the work by the Matheson Commission for the study of Epidemic Encephalitis. It contains for the most part a summary and critical review of the literature up to the end of 1929. Regarding the etiology the Commission concluded that the question is still unanswered. A chapter is devoted to types other than epidemic encephalitis. Another chapter is devoted to the treatment of epidemic encephalitis. The Epidemiology is thoroughly discussed. An excellent bibliography enhances the value of this small but valuable book.

IRVING J. SANDS

THE STORY OF MEDICINE By VICTOR ROBINSON, M.D. Octavo of 527 pages. New York, Albert and Charles Boni, (c1931). Cloth, \$5.00.

A history of Medicine as absorbing as a novel. The author actually sculpts, in a fascinating and artistic manner, the process of the development of our present day conception of medicine from the earliest day of mankind. The wealth of detail and numerous personalities described, though necessary for the completeness of the history, are occasionally confusing and tiring to the reader.

Many delightful hours can be had communing with lore and learning, fancy and fact, cult and science contained in this brilliant and vivid volume.

GEO. WEBB



OUR NEIGHBORS



WASHINGTON STATE WHITE HOUSE CONFERENCE

The May number of *Northwest Medicine* contains an editorial on the Washington State Conference on Child Welfare which says:

"The Washington State White House Conference on Child Health and Protection was held at the Olympic Hotel, Seattle, April 1-2, with a registration of 530. Most of the agencies throughout the state interested in various phases of child activities were represented and many of the representatives took part in the program and discussions. The Conference was the result of a movement which had its inception in the summer of 1931, during the visit of Dr. H. E. Barnard, director of the White House Conference. His conference with the state authorities was part of the program of the National Conference to disseminate its findings and recommendations as widely as possible. Preliminary steps had been taken and conferences called in some twenty-five states, usually by their respective governors, but on account of the definite statement by Governor Hartley that he was not interested in such activities, the work in Washington was initiated by Dr. N. D. Showalter, State Superintendent of Public Instruction.

"There are over a hundred organizations and agencies in this state actively interested from various angles in child health and protection, very few of which have any idea of what the others are doing or prepared to do. A wide and active

interest is developing among individuals and lay groups in the work and findings of the White House Conference, with a rapidly increasing demand for information and guidance.

"With the exception of physicians interested in public health, there were very few members of the medical profession present. This is to be regretted and deplored, because many lay organizations which are engaging in or are planning activities directly related to the health of children, will welcome the advice and guidance of the medical profession, and will assume that the advisers are familiar in a general way at least with the bearing which other factors in child life have upon health matters. The medical profession must in many instances offer this aid rather than wait for an invitation, and should be in a position to guide activities rather than to criticize bad results which have developed through ignorance or misinformation.

"For the continuation of the work the state has been divided into eight districts which will be sub-divided according to local conditions. Each district will organize for the study of conditions bearing upon child health, for the study and application of the findings of the White House Conference, and for the collection and analysis of data to be presented to a second conference at a future date, possibly in time for suggestions as to remedial legislation."

PUBLIC SCHOOLS FOR CRIPPLED CHILDREN IN WASHINGTON, D.C.

The May number of *Medical Annals* of the District of Columbia has an editorial describing the special work of the public schools of Washington in giving crippled children not only classroom instruction, but also treatment with an extensive outfit for hydrotherapy, lamps, splints, and other apparatus:

"In November, 1929, two public schools for crippled children were opened in the District of Columbia; Weightman School for white children at 23rd and M Streets, N.W., and Magruder School for colored children at 17th and M Streets, N.W.

"These children are collected from all sections of the city by buses rented by the District of Columbia from a local traction company. At the opening of Weightman School approximately 40

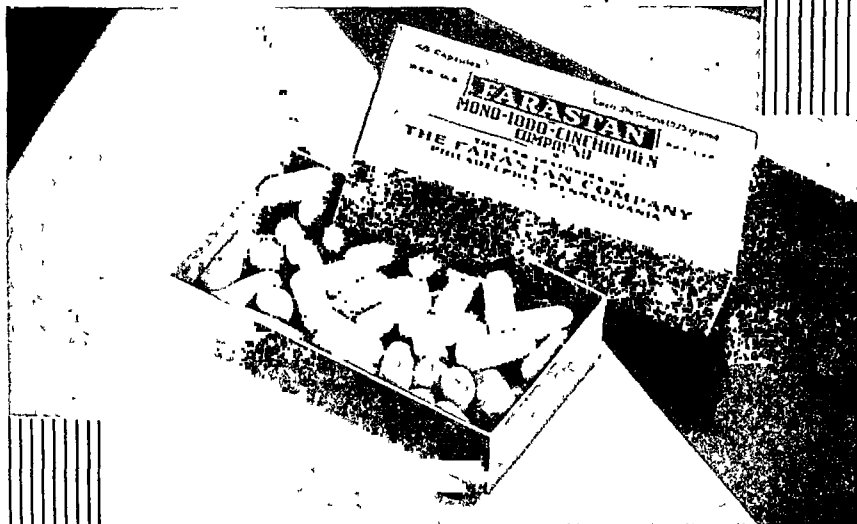
children were admitted, this number now having increased to fifty. The equipment authorized by Congress has been completely installed and except for more needed floor space the building is well provided to care for those now in attendance.

"The dietary demands of each child are given special attention by a dietitian and a cook. At 10 o'clock in the morning the children are given milk, and at noon a well balanced meal is served. A matron is always on duty to care for the many individual wants which may arise.

"One physiotherapist works full time, treating the children who are sent from their class rooms according to a definite program. Each child is treated twice a week and special exercises are given daily in some cases.

(Continued on page 828)

The Rationale of FARASTAN as an Anti-Rheumatic Agent



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(Continued from page 826)

"No child is treated without written permission from the parent or guardian and a prescription signed by the physician in charge of the case. The school medical inspector visits frequently, and all activities are closely supervised by him.

"The greatest difficulty has been overcome by the Parent Teacher's Association which has without fail provided transportation to the numerous clinics where it has been necessary to send children whose parents have been unable to take them. This is done, of course, only with the parents' full consent.

"It is generally felt that the school has passed the experimental stage and has now become a permanent institution. At a meeting of a committee representing the Board of Education, the Health Department and the Kiwanis Club, it was decided that the project was quite worthwhile, and plans are now under way to ask Congress for another appropriation to build a larger and even better equipped institution. There is some question as to whether it is more advantageous to continue on the present regime or to build the new school in connection with Children's Hospital and transfer all medical care of the children to the Hospital.

"There can be little doubt in anyone's mind that it is economically necessary to educate these children, and to one who is thrown in daily contact with them it seems ethically a glorious idea. It is enough to say that most of the children dread vacation, which should make the next step the establishment of a summer school for them. Visitors are cordially welcomed and are asked to suggest investigation of the school to those for whom it might help solve a difficult problem."

FINANCES OF FLORIDA ASSOCIATION

The President's address at the annual meeting of the Florida Medical Association on May third, reported in the May Journal of the Association, discusses dues as follows:

"In some sections and in the minds of some individual members there seems to be a feeling that our dues are too high and that there is extravagance in the administration of our affairs. The small sum which we contribute yearly to the Association might well be considered as a premium on a form of insurance, which will to some extent protect us against influences and encroachments which are destructive to ourselves, our ideals, our very existence.

"The joint report of the secretary, treasurer and business manager will show that there has been no extravagance and no mismanagement. Our surplus fund has been safely and wisely invested and while the amount on hand may seem large, our increasingly larger position in public

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Tonicine Male contains, in each fluid dram, hormones representing fresh testicle 25 grains, strychnin sulphate 1/200 grain, and sodium glycerophosphate 1 grain.

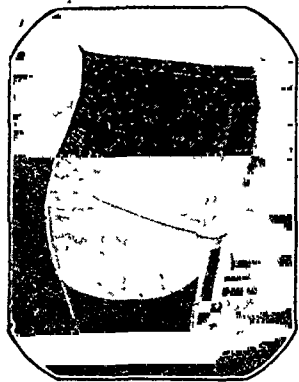
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(Continued from page 828)

affairs and our campaign of education demands that the fund be increased continuously. In 1927, 1928 and 1929 with a membership of approximately 1,100, we were able to get out of debt and build up a surplus of some \$10,000; but now, with a decrease in membership from removals and death and with comparatively few additions, our expenses in proportion have crawled up. The past year our surplus has increased about \$1,700, due entirely to the activity of our business manager, in decreasing salaries and curtailing expenses, especially in connection with the publication of the Journal. But it will decrease rapidly if the Public Relations and Legislative Committees continue to display the activity they now present.

"If our dues are reduced to \$5.00, as suggested by a few, our present surplus would eventually become exhausted and our Association would become little more than a skeleton organization. The Journal would have to be curtailed, until it might revert to the type and irregularity of the early twenties. The activities of the Public Relations Committee would have to be entirely discontinued and it is more than probable that we would lose the services of our very efficient business manager.

"I believe that if any change is made our dues should be materially increased so that a medical defense fund could be established."

ANNUAL REGISTRATION IN MINNESOTA

The June number of *Minnesota Medicine* contains the following editorial on the annual registration of physicians:

"An analysis of the laws pertaining to the annual registration of physicians in the various states of the Union by Dr. E. J. Engberg, secretary of our State Board of Medical Examiners, appeared in a recent issue of the *Federation Bulletin*. There has been a steady increase in the number of states requiring annual registration of those engaged in the healing art since California led the way in 1917. Now seventeen states require this yearly registration with fees ranging from \$1 to \$10.

"From the questionnaire sent to the secretaries of the various State Boards it was ascertained that the majority of the secretaries favor annual registration. Without it, a Board has a record only of those who have been licensed to practice in the state and data concerning the practitioner for the most part only up to the time he was licensed. With it, the Board knows who are practicing in the state. In addition, the registration

(Continued on page 831—adv. xv)

(Continued from page 830—adv xiv)

fee furnishes a fund which can be used to enforce medical practice laws.

"The practical result of such registration is well known in the case of Minnesota. Previous to the enactment of the present law requiring yearly registration, prosecutions of those practicing in the state without a license were almost unknown, largely because of lack of funds. In the last four years, however, the Board has investigated 213 cases and obtained fifty-four convictions out of fifty-eight cases brought to court.

"Some have objected to the principle of taxing the medical profession for the purpose of enforcing a law designated to protect the public. The same criticism might be made of other fees, which are in effect special taxes. On the other hand the enforcement of medical practice laws does benefit physicians as well as the public. Doubtless many State Medical Associations would be willing to donate a sum yearly, as is done in Kentucky, to help enforce these laws."

PUBLICITY IN FLORIDA

The annual report of the Public Relations Committee of the Florida State Medical Association is contained in the May number of the Journal of the Association. This committee deals entirely with popular medical publicity through the press, the radio, and the moving picture. The radio bureau is described as follows:

"This Bureau has been functioning smoothly. It is composed of two parts. The first is a major program for the entire year. This has been mapped out as coming directly from men interested in and connected with headquarters of the State Medical Association Station WRUF, University of Florida, Gainesville, has cooperated to the fullest extent."

Some of the topics discussed were as follows:

- Medical History of Florida
- The Medical Profession.
- The Hospital.
- Internal Medicine.
- State Board of Health.

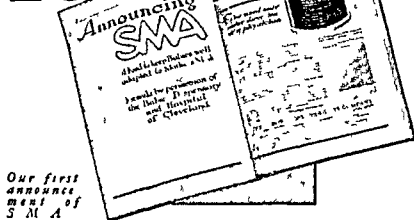
The Press Bureau is described as follows:

"The entire press of Florida has been circularized. The Committee collected, or received, thirty-one articles, either original or rewritten, from various members of the Florida Medical Association. Each article is three hundred to four hundred words in length and is ready for press publication.

"Starting with December 16, 1931, and carried through to February 9, 1932, articles were released one each week. These articles were released at a time when their topic was thought to be the most useful to the Florida reading public.

(Continued on page 832—adv xvi)

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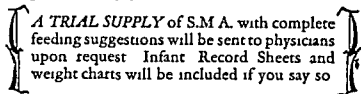
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Q. What is Maltcao used for? Ans. As a tonic in food form.

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**COMMITTEE
ON PUBLICATION . .**

(Continued from page 831—adv. xv)

"There were approximately one hundred seventy copies sent each week to the Florida newspapers; of these not over fourteen were during any one week. Your state officers, State Executive Committee, and the Public Relations Committee came in for some rather rough usage from several small-town newspaper editors, their idea seeming to be that the medical profession was endeavoring to obtain 'something nothing,' namely, free advertising. The State Executive Committee felt that because of the considerable labor necessary for these publications, the necessary expense, the poor response, and adverse criticisms, that this phase of our program should be in some way rearranged.

"Your Committee has been instrumental in advising several county societies against making outlay of money for a set of copyrighted art to appear in the local press. It was explained the State Association is attempting, through Committee, to spread similar propaganda, of more educational value, and through more diversified channels including the press, thereby bringing a saving to the county society and individual members."

The Motion Picture Bureau is described as follows:

"This Bureau has ascertained sources of medical and medical educational motion pictures and has on file at present five available sources with a total of thirty-eight films; eighteen which are on the rental plan, and twenty which are on the free plan. Of these twenty free films, three have the transportation paid one way only, and seventeen have the transportation paid both ways, with the use of a projector and an operator without cost requested."

INHERITANCE OF MEDICAL SKILL IN MASSACHUSETTS

The NEW YORK STATE JOURNAL OF MEDICINE has recorded the known instances of the practice of medicine by father, son, and grand-son and has been able to obtain only a few records. The *New England Journal of Medicine*, November 19, 1931, contains the following brief note on eight generations of doctors in one family:

"In recognition of several generations of doctors the town of North Andover recently dedicated a drinking fountain to perpetuate a record of service to humanity by a remarkable line of physicians beginning with John Kittredge in 1630, who was followed by eight generations, all bearing the family name, an aggregate service covering about thirteen centuries.

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IOWA STATE MEDICAL LIBRARY

The April number of the Journal of the Iowa State Medical Society contains the following editorial on the Iowa State Medical Library:

"This Medical Library, now composed of 15,200 volumes, is a part of the Iowa State Library housed in the Historical Building in Des Moines, and is efficiently operated by a graduate physician thoroughly familiar with medical literature. Augmenting the facilities offered by the bound volumes, the library has thousands of pamphlets and magazines. Limited funds are available for the purchase of new volumes, which, because of their judicious handling, have proved sufficient to keep the library files up to date and well stocked with current journals. Complete sets of the Index Medicus, the Cumulative Index of the American Medical Association, and the Surgeon-General's Index, are available. The librarian will attempt to cooperate with any physician in the state in securing information upon a particular subject in which he is interested. Where books are desired that are unavailable in this library, the librarian will secure from other sources the desired volume and transmit it to you. From the generous number of ab-

stracts on hand, the librarian can furnish frequently the translation or abstract of foreign articles. Physicians wishing to read current medical journals to which they are not subscribers may secure these current journals from the State Medical Library.

"Some physicians have been deterred from using the library in a generous fashion due to the fact that they anticipated that such an elaborate service would necessarily be an expensive one. The surprise of this excellent service is the cost. The physician may obtain any volume he wishes from the library upon payment only of the transportation costs involved. He may receive the journals, abstracts or bibliographies referred to at no cost other than the actual postage required.

"The librarian wishes to serve just as many physicians as possible, and to those who have availed themselves of this opportunity the service needs no recommendation. To those who are unfamiliar with the service, we would urge that you become acquainted with the librarian and the library.

"Physicians who have medical journals—
(Continued on page 834—adv. xviii)

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(Continued from page 833—adv. xvii)

bound or unbound—and who no longer wish to maintain them in their own libraries will render a real service to Iowa medicine by donating this literature to the state library. Address your communications to Dr. Jeanette Dean Throckmorton, Iowa State Medical Library, Historical Building, Des Moines, Iowa."

CHARGES AGAINST DOCTORS IN COLORADO

The Colorado State Board of Medical Examiners takes notice of charges of unprofessional conduct brought against practicing physicians, and thereby performs some of the duties of the Grievance Committee of the State of New York. The May issue of *Colorado Medicine* tells of the action of the Mayor of a small city and a delegation of twenty-one citizens who came to Denver to protest against the action of the State Board of Medical Examiners in considering charges against two doctors of the city, although the doctors had already been exonerated by the Board.

Dr. W. W. Williams, Secretary of the Board, made the following statement in the *Journal*:

"This is an outrage," Mayor Nichols told Attorney General Ireland. 'Haines, the investigator, is going about the state snooping into the private lives of reputable physicians and then bringing charges against them. The mere fact that charges are filed does serious damage to the reputation of the doctors.'

"Haines' activities, according to state officials, are financed from a fund which was created through assessing Colorado physicians and chiropractors \$3 each.

"Mayor Nichols told Attorney General Ireland that members of the medical profession throughout the state are up in arms against the state board for having Haines conduct secret investigations of their activities.

"Attorney General Ireland declared he would make a personal investigation of the activities of the medical board.

"The medical board, at its session Wednesday, restored the license of Dr. H. H. Thomas of Denver.

"It always has been, and still is, the policy of the Colorado State Board of Medical Examiners to give out no information concerning the physician involved and the charges against him unless the charges warrant the revocation of his license to practice in Colorado.

"When such information is given out, this action is compelled by statute, which requires the Board to notify the clerk and recorder of each county in the state in which the license is recorded to remove the holder's name from his records.

"If the names of the doctors who came up for

(Continued on page 835—adv. xix)

(Continued from page 834—adv. rxm)

a hearing before the Board at its last meeting on April 5 and 6, and the charges preferred against them, had not been divulged by some of their own witnesses or by themselves, such information would never have been given out by the Board

"A vital purpose of the Board is not only to protect the public against negligent and ignorant malpractice on the part of licensees but equally to defend doctors against unwarranted charges brought against them.

"When charges are filed against any licensee, no matter how trivial or unreasonable it is the duty of the Board to investigate them fully. Most of this investigative work is carried on by the deputy secretary-treasurer, Mr. Charles H. Haines, under the direction of the Board. Naturally, the interviewing of persons who might possess knowledge relative to the charges must take place. The insinuation that Mr. Haines goes about the state 'snooping' into the private lives of reputable physicians, then to bring charges against them, is ridiculous and without any foundation of fact. Very few reputable physicians have charges filed against them, but in such cases it is just as much the duty of the Board to investigate as if the charges were against one of doubtful reputation. Occasionally reputable physicians are saved much annoyance and undeserved publicity by the Board finding the charges are unfounded and thus heading off malpractice suits."

LIAISON COMMITTEE IN TENNESSEE

The following editorial in the May issue of the Journal of the Tennessee State Medical Association, explains some of the work of the Liaison Committee.

"The medical profession of Tennessee has taken a long forward step in the interest of public health and the profession of medicine.

"Last year, by amendment to the by-laws there was created a committee known as the Liaison Committee, whose duty it is to give serious thought to the policies and activities of various health agencies in the state as they affect the public and the medical profession.

"After considering all phases of the question, this committee made definite recommendations to the House of Delegates this year which were adopted. The recommendations were in brief as follows:

"1. The passage of an amendment to the so-called reorganization bill which provides that a public health council of seven members shall be formed.

"The Governor will appoint the members of this council from a list of nominations by the House of Delegates of the State medical association.

(Continued on page 836—adv. rx)

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(Continued from page 835—adv. xix)

tion and one member nominated by the state dental association.

"That this public health council will elect the executive officer, or commissioner of health, and formulate the policies of the department.

"The next recommendation is the members of the Tennessee State Medical Association must carry the responsibility of doing the actual work of immunizing people against contagious or infectious disease where such procedures are of proven value. To this end an educational committee is to be formed for the purpose of supplying each and every doctor with accurate information as to the actual technique in the use of various agencies.

"It is believed that, by these steps, the public will enjoy a greater protection against communicable disease, and that the greatest possible harmony between the health agencies of the state and the medical profession will be promoted."

PUBLIC RELATIONS COMMITTEE IN PENNSYLVANIA

The Public Relations Committee of the Medical Society of the State of Pennsylvania has a somewhat different field from that of the New York State Society as is shown in the following news note from the January

number of the *Pennsylvania Medical Journal*:

"The Committee of nine active and five ex officio members was subdivided into three subcommittees in order to expedite the year's work:

"(1) A committee to prepare for distribution through appropriate channels historical facts and other data regarding medical contributions to human happiness; Drs. Mechling, Mayer and Donaldson; (2) A committee to emphasize the need for active participation by representatives of the organized medical profession in all counties, in the administration of all public movements touching upon health and sickness prevention—Drs. Krusen, Cross and Harley; (3) A committee to emphasize the part to be played by the medical profession in the economic adjustment of medical service to those who are ill—Drs. Foss, Smith, Gannon and Bishop.

"Dr. Wilmer Krusen was appointed to confer with Secretary of Public Instruction James N. Rule regarding the introduction of prescribed standard courses in the high school curricula in Pennsylvania in the teaching of health and its allied subjects.

"Under general discussion it was decided to emphasize to county societies the advisability of developing a library, also reviving interest in periodic health examinations."

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GRADUATE EDUCATION IN VIRGINIA

The Medical Society of Virginia is extending its work in graduate education, and has secured the services of the faculties of the medical schools of the State, as is told in the following announcement in the May issue of the *Virginia Medical Monthly*:

"In response to the request of the officers and chairmen of program committees of many medical societies, members of the faculties of the Medical College of Virginia and the University of Virginia, sixty-one in number, have volunteered their services as clinicians and instructors for educational meetings. Each speaker is available for engagements which involve reasonable travel. Invitations for them to appear on programs should be made as far in advance as possible, either directly or through the officers of the Department, Dr. J. C. Flippin, Chairman, and Mr. George W. Eutsler, Executive Secretary, at the University of Virginia."

The Journal gives a list of the lecturers and the 136 subjects which they offer. It also has the following description of a clinical day in Norfolk:

"The All-Day Post-Graduate Clinic by the Norfolk County Medical Society on March 30th, was a great success. This was participated in by about thirty members of the local society and was attended by about sixty physicians from out of town in addition to a large number of local doctors. One hundred and eight of these attended the luncheon at Norfolk Protestant Hospital, following the morning clinics there. The afternoon clinics were held at St. Vincent's Hospital and these were followed by supper at the Norfolk Country Club at 6 o'clock. There were one hundred and thirty-six present for this occasion. At 8:00 P.M., Dr. D. L. Borden, professor of surgery at George Washington University School of Medicine, Washington, D. C., gave a talk on 'Some Unusual Intro-Abdominal Lesions,'

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which was illustrated by moving pictures. This meeting had an excellent attendance.

"The papers, illustrations and other demonstrations were very instructive and those present seemed to feel that the Clinic was a great success and well repaid them for their efforts in attending. The committee arranging the clinics was composed of Dr. Julian L. Rawls, chairman, and Drs. A. Brownley Hodges and Robert DuVal Jones, Jr."

GROUP CONFERENCES AT THE MAINE ANNUAL MEETING

The March issue of the *Maine Medical Journal* contains the following announcement regarding the plans for group conferences at the Annual Meeting to be held June 16-18, 1932:

"The two morning sessions on Thursday and Friday will be devoted to a series of Group Conferences, covering a variety of subjects. The two afternoon sessions and the closing session Saturday morning will be devoted to scientific papers.

"The Group Conferences will be a very important part of the meeting. These Conferences will be limited to fifteen men each, and they will be given in four series, about twelve running simultaneously. A list of the Conferences, with the leader of each, is given below. Members are requested to apply for the Conferences they desire to attend. Each group will be given Thursday at 9:00 A.M.; the second group on Thursday at 10:30 A.M.; the third group Friday at 10:30 A.M., and the last group Friday at 10:30 A.M. In order that the committee may so arrange these Conferences to accommodate the wishes of the greatest number, members of the Association are requested to fill out the coupon attached below."

The announcement lists forty-five conferences on a great variety of scientific subjects of medical interest.

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POST-GRADUATE HOSPITAL

A total of 59,789 patients was given treatment during 1931 in the Out-Patient clinics of the Post-Graduate Hospital and its traumatic unit, the Reconstruction Hospital, while 11,363 patients were cared for in the hospital proper, according to the forty-ninth annual report of the New York Post-Graduate Medical School and Hospital published last week.

Of the 103,685 days of hospital care at Post-Graduate alone, 19,634 days' care were given free, and the cost of treatment not covered by payments is estimated at \$225,717.03 for the year.

"Hospital admissions give an accurate picture of the economic situation," stated Dr. Edward H. Hume, Executive Vice-President of the combined institutions. "Patients stayed fewer days on the average and elected less costly accommodations than for a

long time past. Many more availed themselves of the service of the public wards. The Out-Patient Department set up a new record of attendance—the largest in its history—visits to both Post-Graduate and Reconstruction Hospital clinics totaling 306,484, an increase of 14,433 visits over those of 1930." An average of 950 persons attended the clinics daily for treatment with attendance running up well over a thousand on many clinic days.

There was a enormous increase in the case load of the Social Service Department, according to the Director, who reports 6,104 new patients applying for aid during 1931, as compared with only 3,192 the previous year. Of the 8,548 patients coming under the supervision of Social Service, 6,390 were given treatments in the Out-Patient clinics and 2,158 cared for in the hospital wards. Close cooperation has been maintained throughout the year with the Emergency Work Bureau, the hospital giving medical aid to those referred by the Bureau and the latter finding employment for some of the Hospital's most deserving patients. —See page xxii.—*Adv.*

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NEW YORK STATE JOURNAL of MEDICINE

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ANEMIA IN THE NEW BORN

By GILBERT DALLDORF, M D, and HOLLIS K RUSSELL, M D, VALHALLA, N. Y.

The purpose of this paper is to report a case of severe primary anemia in the new born, and to discuss its relationship to the nutritional anemias of infancy

CASE REPORT

History—B B, a white male infant born June 4, 1931, was jaundiced and very pallid. The father, 33, and the mother 30 years old, had always enjoyed good health. The parents had been married twelve years and the mother had been pregnant four times. The previous pregnancies resulted in two abortions and one miscarriage. The first abortion occurred during the sixth week of gestation (December, 1920) and the second occurred two years later during the twelfth week of gestation. The miscarriage occurred in the fourth month of gestation in August, 1926.

The product of the fourth pregnancy is the subject of this case report. At the fourth month of gestation the mother had erysipelas from which she recovered promptly. Her blood pressure was normal throughout her pregnancy. During the latter months a trace of albuminuria was present. No drugs were taken during pregnancy. The blood Wassermann was negative. Labor began spontaneously at full term and was of short duration. The cord Wassermann was negative.

The infant at birth weighed six pounds eight ounces, was well developed and cried spontaneously. It was noted that the infant was jaundiced. The color of the skin was not the reddish-yellow of icterus neonatorum but an extremely pale yellow. The temperature was normal and remained so throughout the period of observation. The stools were normal. An examination on the second day of life revealed a few purpuric spots on the chest. The lungs and heart were normal. The liver and spleen were found to be enlarged and readily palpable below the costal border. The jaundice gradually lessened until its disappearance about the twentieth day, and as the jaundice cleared the pallor became more evident.

On the sixth day of the infant's life an examination of the blood was made and the following results obtained:

Erythrocytes	1,250,000
Leucocytes	19,100
Hæmoglobin	30% (Salhi)
Color Index	1.2

The differentiation of the leucocytes

Lymphocytes	4%
Basophils	1%
Myelocytes	4%
Metamyelocytes	6½%
Band forms	14½%
Mature forms	15%
Lymphocytes	41½%
Monocytes	13½%

Study of the erythrocytes showed numerous nucleated forms, mostly normoblasts. Slight poikilocytosis and anisocytosis as well as punctate basophilia and polychromasia were also noted.

The infant was given twenty cubic centimeters of the mother's blood intramuscularly on the sixth day of life and on the ninth day of life was transfused with seventy cubic centimeters of the father's blood. An examination of the blood on the twelfth day showed:

Erythrocytes	1,130,000
Leucocytes	23,800
Hæmoglobin	35% (Newcomer)

The color index was therefore 1.5

A differential count revealed no significant change in the relative percentages of the various cell types and the morphology of the erythrocytes had not changed. Examination of the stools, urine, fragility test and coagulation time yielded normal results. Icteric index was thirty eight and the Van den Bergh reaction showed a delayed direct, indirect reading. A blood culture reported on the sixteenth day after two weeks' incubation was negative.

Re-examination of the blood on the twenty-sixth day of life showed:

Erythrocytes	1,640,000
Leucocytes	11,000
Hæmoglobin	38% (Newcomer)
Color index	1.2

The child was discharged from the hospital July 10, 1931, having gained twenty-one ounces in weight.

On the fifty-fifth day of life the mother and infant visited the hematological clinic. An examination of the blood showed the erythrocytes to be 2,580,000 per cubic millimeter and the hæmoglobin 50% (Newcomer). At this time the leucocyte count was 9,750.

Eosinophiles	4%
Eosinophilic myelocytes	1%
Eosinophilic metamyelocytes	1%
Neutrophilic metamyelocytes	6%
Band forms	7%
Mature forms	10%
Lymphocytes	55%
Monocytes	16%

In addition fragility test, coagulation time, bleeding time and capillary resistance tests¹, taken at this time, all yielded normal results.

When three months of age the infant's blood was again examined and the erythrocytes found to be 4,530,000 per cubic millimeter, hæmoglobin 70% (Newcomer) and the leucocytes 12,450.

During the course of improvement of the blood picture an equally marked and corresponding improvement was noted in the appearance and clinical condition of the infant. There was a gradual increase in weight until at the end of three months the infant weighed twelve pounds. In addition the color approached normal and he appeared to be well nourished and healthy.

SIGNIFICANCES OF BLOOD FINDINGS

The severity of the anemia in this case is greater than the figures first suggest, since the standard for infants and children is definitely higher than for adults. The blood of the new born shows higher erythrocyte values, 5,000,000—8,000,000, and very high hæmoglobin values, 100-120%. Soon after birth these high values fall slowly until at nine months the hæmoglobin averages 75%. The relatively high leucocyte counts of the first two examinations are well within the normal limits for new born, 15,000-30,000, usually dropping on the fourth to sixth day to 7,000-10,000 and then gradually rising². Likewise the large number of immature myelocytic cells present may be regarded as normal, for Schilling states that

the blood at birth shows a great many immature neutrophils including myelocytes and metamyelocytes. Arneth³ reported as normal for new born the following differential curve which shows a marked shift to the left:

Class	I	II	III	IV	V
	60%	26%	12%	1%	1%

CHARACTERISTICS OF PRIMARY CONGENITAL ANEMIA

The reported cases of primary anemia in the new born have recently been summarized by Pasachoff and Wilson.⁴ Most of the cases are similar to the case just reported.

The average birth weight of the previously reported cases has been six pounds fourteen ounces. The average duration of the disease has been slightly less than six months. The outcome has been fatal in three of twenty-nine reported cases. It is interesting to note that post mortem examinations in the three cases which resulted fatally failed in each instance to determine the cause of the severe anemia.

The degree of the anemia in fifteen cases in which these figures are available may be summarized as follows:

Erythrocytes

- Less than one million, four cases
- One to two million, five cases
- Two to three million, four cases
- Three million and over, two cases

Hæmoglobin

- Less than ten per cent, one case
- Ten to twenty per cent, two cases
- Twenty to thirty per cent, two cases
- Thirty to forty per cent, three cases
- Forty to fifty per cent, seven cases

Leucocytes

- 10—20,000, nine cases
- 20—30,000, three cases
- 30—40,000, one case
- 60—70,000, one case

Color index above one, eight cases.

The spleen was palpable in nine cases. In those cases in which bleeding time, coagulation time and fragility test were performed they have yielded normal results.

In none of these cases, as in the case here reported, was there known cause for the anemia. Indeed there are but few conditions which cause severe anemia in the new born, the most prominent being hemorrhage, active congenital syphilis, hemolytic icterus, prematurity and the so-called hemorrhagic disease of the new born.

Little is known of the etiology of congenital anemia, in part due to the rarity of its occurrence. The only factors suggested have been infections, chronic nephritis and repeated pregnancies at short intervals*. In the present case erysipelas occurred during the fourth month. Nevertheless there is no record of infectious disease in the cases of Bonar⁷, Greenthal⁸, Sanford⁹, Susstrunk⁸, McClelland⁹, Ecklin¹⁰, Canino¹¹ and Pasachoff and Wilson¹. In a number of other cases no mention is made of the mother's health during gestation. It would seem that the incidence of maternal infection has not been unduly high and the etiological importance of infection appears to us to be slight.

DISCUSSION

More is known about the anemias of infants than of the new born. We can do no better than compare the two diseases in the hope that through such comparison some light will be cast upon the origin of the congenital cases. We omit from consideration the anemias of which the primary cause is hemolytic icterus, helminthiasis, leukemia, syphilis or infectious disease of other kind.

In all respects excepting the age of the patients the two groups of anemias are strangely similar. Included in both groups are cases of mild nature and chlorotic type in which hemoglobinemia alone is marked, and severe cases in which erythrocytemia and hyperleucocytosis are also present. The severe cases generally show splenic tumor. Both groups are characterized clinically by pallor, subicterus, flattened weight curves and indifferent appetites. In the cases among infants a latent scurvy or rachitis sometimes is present. Von Jasch's anemia can be considered a severe form of anemia in infants which is eligible to this group.

On inquiry into the cases of infants' anemias we find no evidence to support an infectious origin. Formerly the theory of disturbed iron metabolism or iron starvation was popular. The growing realization that iron feeding had little or no effect in such cases and that at least one group of these anemias (goat's milk anemia) occurred when the iron intake was ample, led to the abandonment of the hypothesis. The present conception is that a deficiency exists but not of iron.

The basis for the nutritional theory of the anemias of infants rests upon numerous observations and much experimental evidence which can be briefly summarized as follows:

(A) The anemias of infancy do not occur in well fed infants.

(B) Cases have been numerous in localities and under conditions where only nutrition might be responsible. In Switzerland many cases of severe anemia have been seen in infants fed on goat's milk. Moreover while the cases have been common in Berne, where the goats are kept in small stalls, they were unknown where the goats were allowed to graze freely on the alpine meadows¹².

(C) Recovery can be expected when the diet is corrected though it must be admitted that recovery is generally more gradual than in the known vitamin deficiencies.

(D) Anemias can be experimentally produced in laboratory animals by dietary means alone. Hart, Steenbock et al.¹³ produced anemias in young guinea pigs on a milk diet.

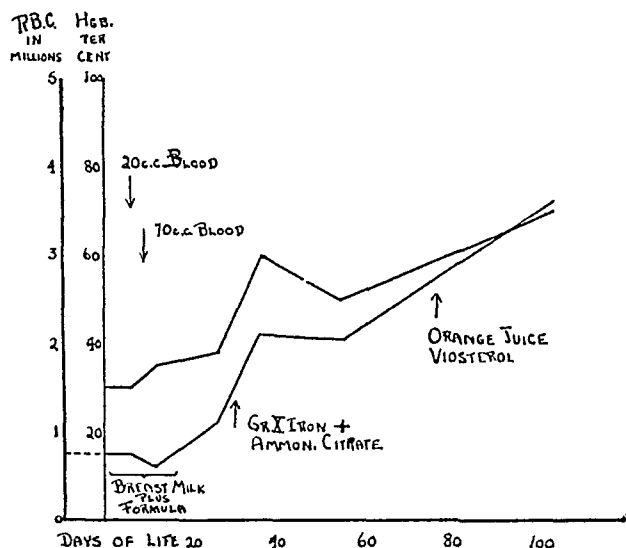
There has been no evidence to associate these anemias with any of the established vitamins or accessory food factors despite the fact that in many of the deficiencies anemia occurs simultaneously and in experimental scurvy is usually present¹⁴. The improvement of cases fed foods rich in vitamins appears to be due to other factors, since, while Hart and Steenbock were able to cure their experimental anemias with fresh vegetables, chlorophyll, free of Fe and containing no vitamin A, B, C, or D, likewise caused recovery. Moreover, in many cases, there is no evidence of deficiency disease of known nature. Further, goat's milk anemia has been cured by diets at least very low in vitamins¹⁵.

It would appear that an as yet unknown factor is responsible. Gyorgy suggests it is part of the globin fraction of hemoglobin¹⁶.

The case for a deficiency causing the anemias of infants appears substantial if not conclusive. We may now compare the similar or identical anemia of new born and consider whether the similarity may extend to etiological factors as well. Since the latter cases are present before feeding is commenced it would perhaps seem unwarranted to attempt a comparison.

In referring to the experimental study of nutritional disease, however, we find that gestation and lactation are well recognized as critical periods in which not only the mother's health but the health and life of the fetus as well require fully ample diets. As examples may be mentioned the experiments of Walkhoff¹⁷ who produced stigmata in new born guinea pigs by causing partial deficiencies of antiscorbutic substances in the mother's diet, Parkes and Drummond's¹⁸ observation that in deficiencies of vitamin B1 the young died, and Sure and Schilling's¹⁹ discovery that three times the normal intake of B1 was not pro-

* C. Parsons
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milk and
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suggests moreover that cases such as ours are probably nutri-
tional in nature



tective during lactation. Indeed deficient offspring may be expected in most of the deficiency diseases if the supply of the accessory factor is large enough to prevent abortion or prematurity (own observation).

It is worthy of note in this respect that in the nine reported cases in which detailed family histories are given there are four instances of abortion, miscarriage or stillbirth. Including the present case half of the mothers have had one or more incompleting pregnancies. The remaining cases followed close upon previous pregnancies and inspired the opinion that repeated pregnancies predisposed to the anemia. The case histories may be considered in accord with the behavior of experimental animals suffering from any of the known deficiencies.

It may be asked why in such cases a like effect (i.e. anemia) is not present in the mother. This probably follows the difference between the young and the old organism, a

difference particularly marked in the hematopoietic system. Indeed György has suggested that the anemias of infants and Addisonian anemia may have their origin in a common deficiency but that the dissimilarity of the diseases produced is due to the difference in the age groups affected.

In the fourteen cases in which treatment has been described half have been given transfusions and three iron by mouth. In eight cases breast milk was given but in no cases was it the sole diet for more than a brief period. Our own case was given breast feedings for seventeen days but from the second day on supplementary feedings were prescribed by the physicians in charge. The formula used contained eight ounces of evaporated milk, one ounce of Karo syrup and fifteen minims of lactic acid with one half ounce of Casec. The amounts were increased at the end of the first month. Orange juice and viosterol were added on the eighty-fifth day. Iron ammonium citrate was given (10 grains per day) from the thirtieth day onward.

In the accompanying chart may be seen the improvement in hemoglobin and erythrocyte values. A marked improvement followed closely upon the inauguration of the iron therapy but an even greater gain was registered later when orange juice and viosterol were added to the dietary. The beneficial effects of transfusions and iron are common to both the congenital and infantile anemias and, it may be pointed out, to the secondary anemias of adults as well. The action is a stimulatory one and does not damage the validity of the nutritional theory.

CONCLUSIONS

A case of severe anemia in a new born is described and the suggestion made that these cases are the result of nutritional deficiencies.

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THE ROENTGENOLOGIC MANIFESTATIONS AND DIFFERENTIAL DIAGNOSIS OF CARCINOMA OF THE COLON*

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IT IS not an exaggeration to say that the roentgen ray has contributed as much to the precise and accurate diagnosis of carcinoma of the colon as it has to the diagnosis of carcinoma of the stomach. The roentgenologic signs of carcinoma of the colon, like those of carcinoma of the stomach, are distinctive and can be elicited not only at the stage when the disease is clinically apparent on account of the ulceration or obstruction which it has produced but when subjective and objective evidence from other sources is entirely lacking or very indefinite.

In no division of gastro enterologic roentgenology does the roentgen ray compete with the microscope in making histologic diagnoses. The roentgenologist, however, does not hesitate to exercise his prerogative as a physician to reinforce the visual characteristics of a lesion furnished by his special method of observation with such other features as topical manipulation of the diseased segment might supply. Such are the units of which the roentgenologist's conception of the gross appearance of a lesion is composed. His diagnostic efficiency depends in a large measure on his familiarity with macroscopic pathology, and on the facility with which he is able to correlate the gross pathologic picture with the roentgenologic picture. It is not an idle boast to affirm that the roentgen ray can be made to exhibit a favorable showing in competition with macroscopic examination in the diagnosis of carcinoma of the colon and in distinguishing it from other lesions of the colon.

PATHOLOGY

Carcinoma is by far the most commonly encountered malignant lesion of the colon. Sarcoma is seen with extreme rarity. The gross features of a nonepithelial malignant lesion usually bespeak its malignant nature, but a certain diagnosis is possible only after microscopic examination of the tissue.

Rankin classifies carcinomas of the colon morphologically into the following types:

Scirrhous or fibrocarcinoma—In these tumors there are relatively few carcinoma cells. Fibrous tissue, however, may be so abundant that it is difficult to recognize epithelial cells. Early in its development the tumor consists merely of a small, flat, indurated area in the wall of the bowel. Gradually the intestinal tube is encircled in annular fashion. Stenosis develops with cicatricial contraction of the fibrous tissue. The names "annular" or "napkin ring" carcinoma are descrip-

tive of its macroscopic appearance. Ulceration is not a prominent feature, hence early in the clinical course blood or mucus is not noted in the stool, and the disease becomes clinically apparent only when obstruction begins to be manifest. As a rule the tumor itself is too small to be palpable through the abdominal wall. The mass sometimes discovered in association with it is usually a collection of scybalous fecal material proximal to the constriction.

Medullary or polypoid carcinoma—It is important to keep in mind that polypoid tumors, which macroscopically have all the characteristics which we have learned to associate with benign lesions, are not infrequently found on microscopic examination to be malignant. In fact, it is now quite generally believed that medullary or polypoid carcinomas have their beginnings in lesions indistinguishable grossly from the simple and so-called benign polyp. It is therefore to be expected that all stages in the development of a pedunculated or broad based polypoid tumor to the frank medullary carcinoma with extensive exposed surfaces will be encountered. Medullary carcinomas are characterized grossly by large, soft, lobulated or cauliflower-like masses projecting into the lumen from the mucosal surface. The margins are irregular, overhanging, elevated, the floor of ulcerated areas is ragged and covered with exudate. Sometimes the intestinal wall does not seem to have been extensively invaded. More commonly, however, mural infiltration is marked and the lesion has the indurated consistence characteristic of malignancy. Necrosis and sloughing of the peripheral proliferative portions of an originally pedunculated polyp result in a flat saucer shaped lesion.

Gelatinous (mucoid) carcinoma—Morphologically, this type of carcinoma of the colon might be looked on as holding a middle ground between the medullary and scirrhous forms. It becomes a circular lesion, enveloping the bowel in annular fashion, but is a much more extensive lesion than the true fibrocarcinoma. In the latter the constricting feature is apparent from both the luminal and serosal aspects. In the former, however, the wall is markedly thickened, heaping up of the malignant tissue having progressed both into and away from the lumen. The luminal aspect of fibrocarcinoma presents a short stricture with little if any ulceration. With the colloid type of lesion, however, the channel through the tumor is relatively long, and its luminal surface is denuded and irregular in its course. The tumor is firm and when in a situation accessible to manipulation, may be discovered clinically by the hard mass it presents.

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METHODS OF INVESTIGATION

The opaque meal.—The earliest examinations of the large intestine were carried on with the opaque meal. It is now generally agreed, however, that this method is incapable of delivering adequate information regarding organic lesions, although it still has applications in special instances. Its property of becoming dispersed in scattered masses or accumulated in large lumps in separate segments, prevents a satisfactory estimate of the entire colon. Repeated roentgenoscopic examinations are always required. Further, in the presence of an obstructing lesion, the opaque meal is liable to become impacted above the stenosis. It may thus be responsible for much distress to the patient, and seriously affect the prognosis by becoming the immediate cause of acute intestinal obstruction.

The opaque enema.—Almost all organic diseases of the colon produce deformity in the contours of the lumen of the affected segment. This is particularly true of carcinoma. It follows that the choice of an investigative procedure will devolve on the method which serves best to demonstrate the deformity. The opaque enema is the procedure of maximal efficiency for this purpose.

It is hardly possible to outline the technic of administering the opaque enema without placing emphasis on the necessity of clearing the colon of fecal remnants, gas and fluid before investigation is attempted. This cannot be accomplished without purgation and cleansing enemas. Saline cathartics are ill-advised as purgative agents because they produce their effect by osmotically drawing fluid into the intestinal lumen to the point of maximal distensibility. Evacuation after saline purgation is frequently incomplete and considerable time is usually required for the colon to assume a state of collapse sufficient for satisfactory observation of the opaque enema. On the other hand, purgatives the action of which depends on their property of activating the bowel by severe irritation are likewise undesirable because they are not uniformly efficient, and because of their tendency to leave the colon in such a prolonged state of irritability that retention of the enema becomes extremely difficult or impossible. Castor oil, of all the purgative agents active enough to produce adequate evacuation, is in fact a milder irritant than many others, and we consider it to be the most uniformly efficient purgative agent available for our purposes. The patient to be examined abstains from his evening meal and takes 2 ounces (60 c.c.) of castor oil. The following morning, before the examination, the distal portion of the colon is cleansed with a few normal saline enemas. It is assumed that the castor oil will have achieved this result in the proximal segments. This procedure usually effects a satisfactory preparation, and the routine is broken only for patients with very severe diar-

rhea, for those who have a tendency toward severe intestinal hemorrhages, and occasionally for patients with acute or subacute obstruction.

Occasionally a patient experiences undue difficulty in retaining the enema, and sometimes when there is reason to believe that considerable intestinal spasm accompanies the suspected lesion, the administration of an antispasmodic drug often proves helpful. It seems hardly necessary to point out that the drug must be administered to full physiologic effect. Inhalation of amyl nitrite at the time of examination sometimes answers the purpose, but atropine in the form of tincture of belladonna is more efficient and reliable. Sixty drops of the tincture, divided into three equal doses, two of which are taken at an interval of two hours the evening before the examination, and the remaining dose within an hour before the examination, is a dependable form of administration.

Some attention should be devoted to the preparation of the enema itself. Since the roentgenoscopic observation of the opaque enema is the keystone procedure in the roentgenologic examination, the enema must contain a concentration of the basic opaque substance sufficiently high to yield maximal contrast. The opaque material in the enema should be minutely divided, uniformly suspended, and the suspension should be well sustained. Simple suspension in water by agitation is inadequate on account of the rapidity with which the salt is precipitated from such a mixture. Several commercial preparations of barium sulphate are available which are satisfactory in this respect, or a suspending agent, such as gum acacia, may be added to the mixture when it is prepared in the laboratory. The consistence of the suspension should approximate that of heavy cream. It is most important that the temperature of the enema be kept at or slightly above the temperature of the body, because the colon reacts violently at times to the direct application of cold.

With the patient in the recumbent position the enema is administered slowly and steadily, under constant roentgenoscopic observation from the time it enters the rectum until the cecum and terminal coils of ileum are visualized. This is necessary in order to detect abnormalities which may later be hidden by an overlying loop of normal bowel. As the examination progresses the patient is rotated from side to side to obtain views at different angles. These maneuvers, coupled with careful palpatory manipulation, are essential parts of the examination.

Although the roentgenoscopic observation of the opaque enema is the basic and cardinal roentgenologic procedure in the investigation of the colon, it must not be inferred that roentgenography is unnecessary or superfluous. A well executed roentgenogram will often provide invaluable supplementary information which was not

so clearly available at the roentgenoscopic examination. On the other hand, the practice of administering the opaque enema, and confining the investigation of the colon to the examination of one or two roentgenograms in different positions is so inadequate that it is mentioned here only in condemnation. Roentgenograms usually are made with the patient in the prone position. It will often be found necessary, however, to place the patient in an unusual position, or to use some form of compression so that the lesion can be projected on the film to best advantage (Fig 1).

Demonstration of mucosal relief.—This relatively new and very interesting method of investigation, sponsored especially by Knothe, Berg, Forssell and others, should be given a place among the valuable diagnostic procedures. Although workers in this field generally advise against the use of purgative agents when this method is employed, the examination of the mucosal relief can be carried on after the evacuation of the enema administered as has been outlined. Essentially the method consists of a study of the relief patterns assumed by the mucosa of the intestine covered with a thin coat of opaque material. The lumen of the colon must be thoroughly cleansed beforehand. The opaque enema is then administered under roentgenoscopic control after which the opaque material is evacuated. The mucosal relief is inspected both on the screen and on films. Experience at The Mayo Clinic with this procedure is too limited to permit a reliable opinion about its value. Correct interpretations of these not uncomplicated mucosal states will be born only of judgment acquired by long experience and carefully controlled observations.

The use of gases as contrast substances.—Long before the introduction of inert salts of heavy metals, investigations of the alimentary tract, especially of the stomach and colon, were carried on with the use of gases, chiefly air, as contrast substances. However, they never were universally employed. In special instances, when for some reason the use of opaque salts might be inadvisable or contraindicated, the inert gases may serve a useful purpose. It is possible to obtain a satisfactory outline of the colon by insufflation, but the picture lacks the distinctness necessary for accurate diagnostic work.

Combined methods of examination.—The first method, a combination of the opaque meal and opaque enema, hardly merits the name of a special procedure. It is applied only when the opaque meal has met with an obstruction and the opaque enema is used to determine the distal limits of the stenosis. The warning to exert every effort to prevent a large mass of insoluble and inert material from accumulating proximal to an obstruction bears repetition in a criticism of this practice. There is danger of impaction and complete intestinal obstruction.



FIGURE 1

The second method is a combination of the opaque meal and insufflation. Laurell, in 1921, described a method of examination of the proximal segments of the colon by administering the opaque meal, waiting until such time as the meal was transported to these segments (four to five hours), and insufflating with air. The same objections apply to this method as apply to the opaque meal when used alone. It has not received wide application, and is not nearly as useful as the following method.

The third method is a combination of the opaque enema and insufflation, or the "double contrast" method. Fischer, in 1923, described a method of investigation which will be found to be of greatest value especially for the demonstration of the nondeforming intraluminal lesion of the colon. Essentially the method is an attempt to coat the luminal surface of the bowel with a thin coat of opaque material, and then to distend the lumen with air. It thus provides what is in reality a transparent medium. Weber suggested several technical modifications which he believes makes the "combined method" more readily interpreted, and emphasized the value of stereoroentgenography with the technic. He pointed to the superiority of this method over all others for the demonstration of polypoid lesions and polyposis of the colon, and exhibited lesions not otherwise demonstrable roentgenographically.

The technic may be carried out to good advantage as follows: Complete removal of all solid, fluid, and gaseous accumulations is an unconditional prerequisite. The opaque enema is then administered under roentgenoscopic control. The colon is filled as rapidly as is compatible with the comfort of the patient and note is made of any abnormalities apparent. When the cecum has been filled the patient is allowed to evacuate the enema as completely as possible, and it is usually found that about the proper amount of the opaque material remains in the lumen of the bowel. No more than a uniform thin coat is desirable. If large collections of the material are

still seen after the attempt at evacuation the rectum can be insufflated with a volume of air sufficient to induce a desire for defecation, whereupon the patient will usually return with as near the ideal distribution and concentration of the opaque material as is possible in his case. A hand blower is used for insufflation. The colon is inflated under roentgenoscopic control, and care is exercised not to overdistend any of the segments. The procedure is facilitated by frequent rotation of the patient on the roentgenoscopic table, and by manipulation of the bowel through the abdominal wall. Insufflation carried out in this way has not been in any way more distressing to the patient than might be expected from the administration of the opaque enema.

As soon as the cecum has been moderately distended the enema tip is removed from the rectum and stereoroentgenograms are made with the patient in the prone position. The fluoroscopic image of the air-filled colon lacks sufficient detail to have diagnostic value. The grid diaphragm is of distinct advantage in educing the fine detail requisite for precise demonstration of the anatomic character of the lesions.

This technic is not recommended as a routine procedure. Compared with the barium enema it is cumbersome, relatively expensive, and may offer little additional information especially in those diseases which produce deformity of the lumen. Its greatest advantages lie in its adaptability for demonstrating otherwise obscure, small, nondeforming lesions, and those which may have been clearly and adequately visualized roentgenoscopically, but which are persistently obscured on the roentgenogram by overlying loops filled with dense opaque material. Unquestionably the method makes a valuable contribution to increased accuracy and general efficiency of diagnosis of diseases of the colon.

ROENTGENOLOGIC SIGNS OF CARCINOMA IN THE COLON

Early carcinoma.—Roentgenologic methods are expected to reflect only the gross anatomic characteristics of pathologic processes. From the histologic studies of Schmieden, Schmieden and Westhues, Doering, FitzGibbon and Rankin, and others, it is known that many polypoid lesions of the colon, benign grossly, are in fact carcinomas. Some of them have a tendency to develop malignant characteristics, and it has been shown very definitely that at least some well-defined malignant growths in the colon have their beginnings in these macroscopically benign polypoid lesions. The earliest stage of a malignant process, then, that the roentgenologic method is likely to uncover, is this type of lesion. The term "polypoid lesion" is used advisedly to include any sessile or pedunculated growth projecting into the intestinal lumen, without special reference to the his-

tologic nature of the tissue of which it is composed. It is not possible accurately to determine the cytology or the malignancy of such lesion without microscopic examination, but adenomas, fibromas, myomas and lipomas are the most common types encountered.

The significant roentgenologic features of these lesions are their intraluminal situation and their prevailing failure to produce a roentgenologically demonstrable deformity in the colonic contour. When these tumors are large and situated in segments accessible to palpation the roentgenoscopic examination will give reliable evidence of their presence. Without palpation a momentary split in the column of the enema as it ascends will most frequently be the only indication of the presence of a polypoid lesion. Approximating the walls of the colon, however, will serve to bring out the characteristic smooth, sharp, evenly rounded or ovoid contours of the central defect. The marginal contours of the colon may be unaffected. The wall of the bowel remains pliant, peristalsis is not hindered, and only rarely is a mass palpable in association. Ulceration, irregularity of contour of the polypoid lesion itself, evidence of induration or increased local rigidity of the wall of the colon at the site of the lesion, signify infiltration, hence malignancy. Thus it is apparent that the evidence for the presence of these lesions is largely roentgenoscopic. Roentgenography is successful only when conditions are favorable for approximation of the walls of the barium-filled bowel by compression. These considerations apply only to polypoid lesions which are large and which are accessible to manipulation at the time of roentgenoscopy. It is probable that polypoid lesions 2 cm. or less in diameter will almost always elude most careful roentgenoscopy, or will leave the examiner in an insecure state of mind regarding the reliability of his interpretation.

The opaque enema has not produced as reliable and accurate results in the demonstration of polypoid lesions of the colon as the opaque meal has yielded in the demonstration of similar lesions of the stomach. Before the "double contrast" method was available it seemed that the escape of many of these lesions especially of the smaller ones, from roentgenologic detection, was inevitable. But the use of this roentgenologic procedure has made it possible, not only to detect many more lesions of this type than was previously possible and to project them roentgenographically, but also to complement less decisive roentgenoscopic data with the precise intraluminal picture which the method provides. Polypoid tumors occurring singly or those relatively sparsely distributed, are visualized as rounded, soft projections into the intestinal lumen. Their contours are outlined vividly in the air-distended bowel, and it is possible, when sufficient care has been exercised in carrying out the details of the



FIGURE 2

technic, to determine the character of the surface contours of the growths (Fig 2). Properly applied, the method affords an estimate of the integrity of the interior of the colon attainable by no other method except direct visualization by the proctosigmoidoscope, or surgical or post-mortem exploration. Because the combination of air and a thin coat of opaque material applied to the mucosal surface provides what is essentially a transparent medium, the method is profitably extended to present more clearly a lesion which may have been more or less adequately visualized roentgenoscopically, but which is obstinately obscured in the roentgenogram by overlying loops filled with the dense opaque contrast material of the barium enema.

Mature carcinoma—Obviously most patients are sent for roentgenologic investigation of the colon when they have presented a syndrome directly or indirectly referable to a lesion in the colon. When carcinoma is responsible even for vague symptoms it has developed morphologically to the extent that it is not only roentgenologically apparent as a lesion but, with the exception of the polypoid lesions, its differential characteristics are manifest as well. This observation is based on experience with a considerable number of well-developed malignant lesions discovered roentgenologically in the course of routine examinations.

The filling defect is the essential roentgenologic sign which must be demonstrated before carcinoma can be diagnosed. The defect is defined as a subtraction from the normal outline of the colonic shadow, and may be central or marginal. It is produced chiefly by protrusion of the growth into the lumen of the bowel, and partly by diminished distensibility of the infiltrated wall. A certain amount of deformity is usually contributed by local spasm. The roentgenologic picture is in fact the shadow of a barium cast made with the lumen of the bowel as the matrix. Hence the filling defect produced by a given lesion will correspond with the luminal contours of the lesion. The extraluminal characteristics of the lesion are discernible only by inference from palpatory manipulation of the diseased area. It follows that the roentgenologic manifestations of carcinoma will vary within certain limits, depending on the morphologic character of the lesion encountered.

The filling defect of the scirrhous or fibrous carcinoma is short, and concentric. Its annular character is its most prominent feature. Ulceration is practically never demonstrable, and fixation to adjacent organs is rare, so that the lesion is uncommonly mobile. The tumor itself is usu-



FIGURE 3

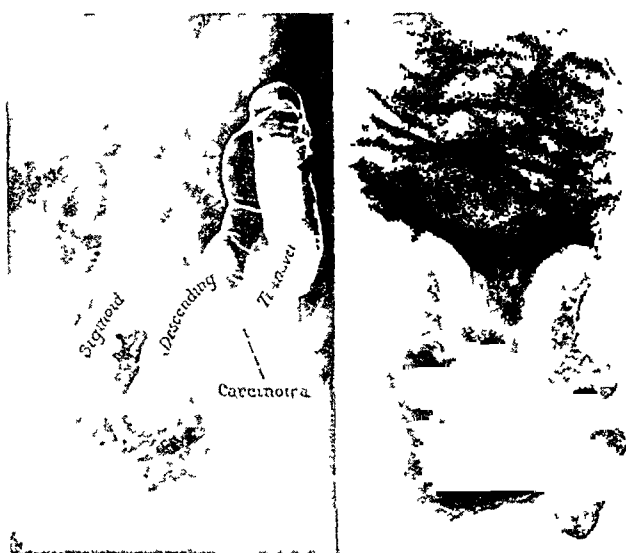


FIGURE 4

ally so small that it is not palpable. The mass clinically so frequently associated with this type of lesion usually cannot be discovered at the roentgenologic examination if the preliminary preparation has been carried out faithfully. As in all instances of carcinoma, but particularly in this type of lesion, the demonstration of the filling defect is conditioned on the degree of patency of the involved segment. When the constriction is pervious to the enema, and obstruction of sufficiently high degree exists, dilatation of the intestine proximal to the lesion is apparent (Fig. 3). With these small annular lesions complete obstruction to the enema is most frequently encountered and the canal of the filling defect is not visualized. In most cases, however, the constriction has permitted the fecal current to pass in the physiologic direction. Retrograde obstruction is caused either by a high-grade diminution in caliber of the affected segment, or by the establishment of a valve mechanism in which lateral pressure is applied to the constricted area as the medium accumulates under force in the normally distensible bowel immediately adjacent to the le-

sion. In the former instance the barium column terminates in a conical, usually smooth, although sometimes ragged, projection (Fig. 4); in the latter, it terminates in two convex smooth eminences on each side of the central constriction.

The appearance of the polypoid type of carcinoma varies within wider limits, depending on the size of the growth, the extent of ulceration, and the amount of mural infiltration. Deformity of the luminal contour is not the most striking feature of these lesions. More characteristic is the presence of lobulated, cauliflower-like masses projecting into the lumen (Fig. 5). Displacement of the opaque material from their surfaces by ap-

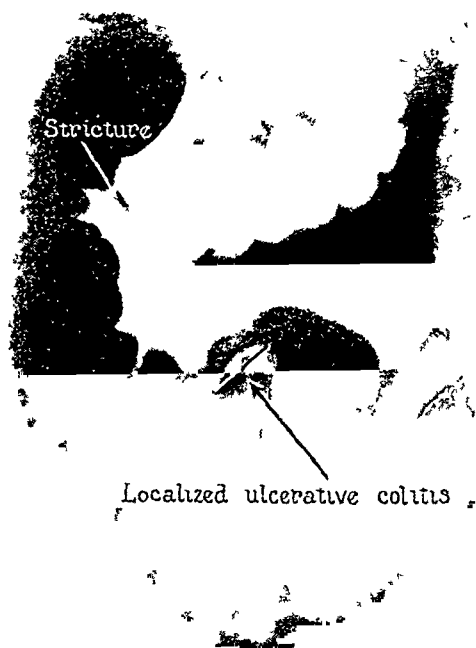


FIGURE 6

proximating the walls of the affected segment with manual pressure presents the characteristic picture. Ulceration is revealed by the mass of opaque medium adhering to the ulcerated floor of the crater which is usually deep and bounded by irregular, overhanging margins (Fig. 6). In the cecum and ascending segments of the colon, the polypoid lesion commonly involves only a portion of the circumference, in the narrower, more distal segments, however, the entire circumference is usually included.

The filling defect produced by the third type of carcinoma of the colon is again quite uniform in appearance. The tumor protruding into the lumen of the bowel produces a constriction which is longer in extent than that produced by the annular scirrhus type. The luminal aspect



FIGURE 5

of the tumor is denuded and rough, which is reflected roentgenologically by markedly irregular and jagged contours and the tortuous course of the channel (Fig 7). The demarcation between normal and pathologic tissue is very abrupt, hence the termini of the filling defect have sharp contours, and tend to have a barbed or gnarled appearance. The tumor itself is usually large enough to be palpable through the abdominal wall, and the mass has the indurated knotty consistency associated with malignant tumors. Fixation may be present or absent. Complete or incomplete retrograde obstruction sometimes takes place, usually by the establishment of a valvular mechanism similar to that formed with the short annular lesions. The roentgenologic appearance differs, however, in that the distal terminus of the process is represented as two symmetrically placed sharp prongs to each side of the channel through the tumor.

DIFFERENTIAL DIAGNOSIS

When irregularity in the outline of the colon distended with contrast material is encountered, the first problem is to determine whether the defect observed is real or apparent. Spasm is the one factor which is operative in producing distortion in the contour of the colon which is not real, although the appearance may simulate closely that of a genuine intrinsic lesion. Spastic filling defects often show their true character by changing their form or situation. At times, however, they may persist unchanged for a considerable period. Manipulation of the involved segment sometimes effaces them, often they are absent at the second examination. The effective use of antispasmodic drugs, however, is the most satisfactory method of determining the amount of spasticity operative in producing a given deformity. Not infrequently gross deformities in the outline of the colon are produced by acute or fulminating inflammatory processes in adjacent or contiguous organs. This is due either to an extension of the inflammation to the serosal surface of bowel, or to reflex spasm. At times the spasm is so marked that the lumen of the bowel is closed completely. Such a filling defect is distinguished from one due to an intrinsic lesion by the notation that it usually involves a relatively long segment, that its outline changes its form during the examination, and that evidence of mucosal change is absent. Localized areas of spasm are also encountered which are apparently reflex from acute or subacute inflammatory lesions in abdominal organs distant from the area of spasm.

Other causes of apparent rather than real filling defects are local accumulations of gas, fluid and fecal matter in the colon. These can usually be displaced by palpation during the roentgenoscopic examination, and they do not have a con-



FIGURE 7

stant outline. Irregularities in outline caused by pressure from other organs such as the spleen and gallbladder, from intrinsic tumors and from adjacent bony parts are readily distinguished from true filling defects by determining their extrinsic situation during the roentgenoscopic examination.

Carcinoma is not the only intrinsic disease of the colon which is manifested by the filling defect. Other tumefactive processes which produce localized deformities in the outline of the colon are diverticulitis, specific and non specific granulomatous lesions and benign organic strictures.

Diverticulitis is encountered practically only in the segment of the sigmoid. The filling defect produced by this disease is the result both of spasm which may be so marked as to produce complete occlusion of lumen and of the encroachment of the pericolic inflammatory tissue on the lumen of the bowel. It is usually possible to visualize diverticula in the more proximal uninvolved segments as rounded, knob-like projections from the lumen of the colon. Differential diagnostic points are the concentric serrated contours of the affected segment contrasted with the sharply irregular and eccentric contours of carcinoma, the maintenance of flexibility in the former compared with the stark rigidity in the latter, and the long segment involved with diverticulitis as opposed to the relatively short segment which carcinoma usually occupies (Fig 8).

Hyperplastic tuberculosis, amebic granuloma and the mycotic affections of the bowel, named in the order of frequency of occurrence, are grouped together under the general term 'specific granulomas'. They are much more readily distinguished from carcinoma than they are from each other and from nonspecific granulomatous lesions. They are precarcinomatous diseases of the 'ceccocolon' although non specific granulomas and the mycotic lesions and less frequently hyperplastic tuberculosis, are encountered in other segments, especially in the sigmoid. The principal differential characteristic which all of

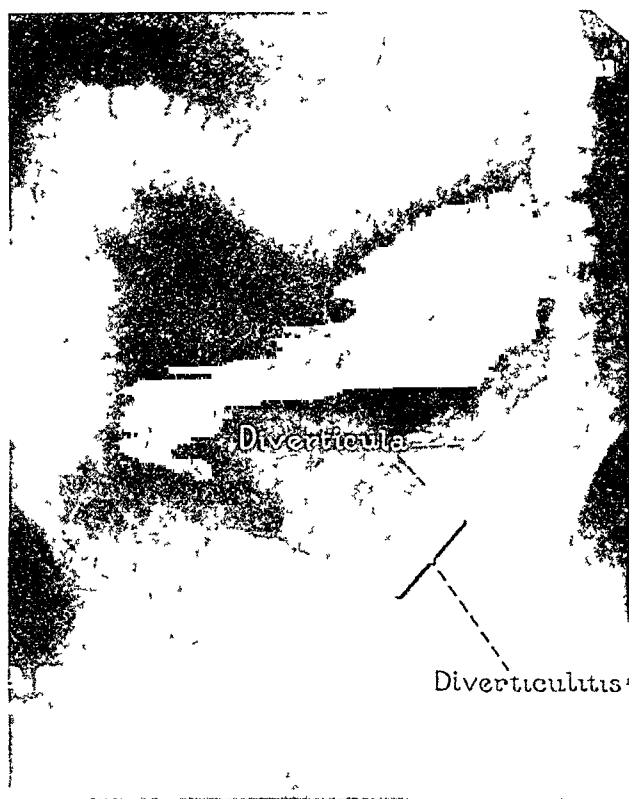


FIGURE 8

these lesions possess in common is the length of the segment which they encompass in their involvement. The demarcation between the normal and the pathologic is gradual rather than abrupt, the channel of the filling defect is concentrically placed, tends to have a smooth outline, or if irregularities in contour are present, they are rounded and bulbous rather than jagged and angular. When a mass is palpable with these lesions it does not have the indurated consistence of malignancy, but is boggier and more dough-like. The lesions usually are fixed, but pliable.

Quite rarely chronic ulcerative colitis, specific or non-specific, involves only a localized, short segment of the colon. An abrupt narrowing may be produced by such processes, and the moth-eaten appearance of the channel makes the lesion bear a strong resemblance to carcinoma. The divergence of the therapeutic procedure which hinges on the diagnostic decision makes the differentiation highly significant. This type of lesion usually shows marked irritability; its channel is relatively broad, its margins smooth, and the lesion is pliable in spite of the marked localized mural thickening.

Organic stricture is exceedingly uncommon except as a complication of chronic ulcerative colitis. A short segment is usually involved, but the narrowing is spindle-shaped, the lesion is pliable, and has a smooth and regular outline (Fig. 9).

Occasionally tumefactions extrinsic to the colon produce constriction of its lumen by completely or incompletely encircling it. Pelvic tumors and masses of metastatic nodes in the abdomen have been responsible for such localized encroachments on the lumen of the colon in our experience. In spite of the marked constriction, evidence of obstruction was entirely absent in the cases of this type which we have examined. The defect, however, has none of the characteristics which we have learned to associate with malignancy.

The roentgenologic profession points with just pride to the contribution its special method of observation has made to the diagnosis of carcinoma of the stomach. Contribution to the diagnosis of carcinoma of the colon is equally gratifying, and equally important, for 10 per cent of all malignant lesions which occur in the gastro-intestinal tract occur in the large intestine or rectum. Success in the treatment of patients affected with carcinoma of the colon may be expected to advance hand in hand with the development of refinements in diagnostic methods. It is probable that a great many of the failures in treatment are attributable primarily to the late stage at which the lesion was recognized. Roentgenologic methods make it possible to recognize carcinoma in its early stages, often before there is adequate clinical evidence for suspecting its presence. The message is obvious. The disease must be recognized earlier to permit the earliest possible institution of proper therapeutic procedures. Any changes in intestinal habit, evidenced by irritability, mucous diarrhea, alternating periods

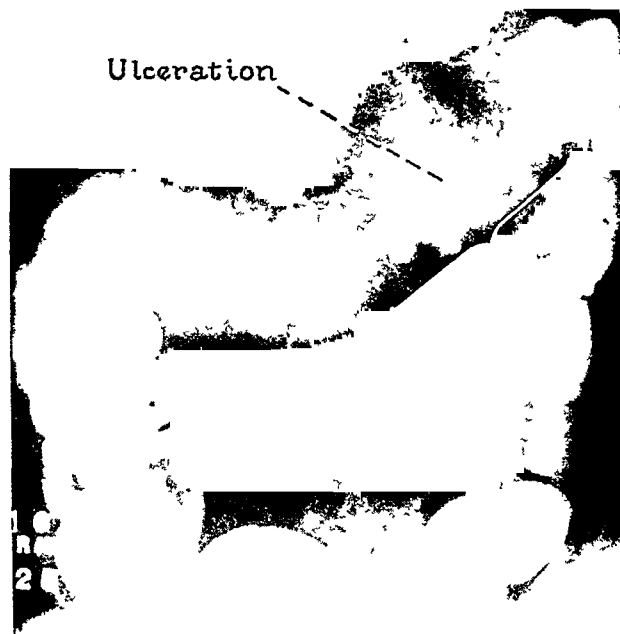


FIGURE 9

of constipation, localized pain and tenderness which do not tend to disappear not to mention tumefaction, anemias, and obstruction all are indications for a most thorough going roentgenologic investigation of the intestinal tract. It is not out of place to recommend that this investiga-

tion be included in the routine yearly examinations. Such measures are necessary to increase the operability of the malignant lesions encountered in the colon, and simultaneously will offer much more reasonable hope for satisfactory end results.

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THE SECOND DISTRICT BRANCH

The papers read at the scientific session of the Second District Branch of the Medical Society of the State of New York on November 19, 1931, have been assembled, and are printed in a group in this issue of the Journal. The complete program was as follows:

An address on Goiter by Dr. Martin B. Tinker, Ithaca, N. Y., guest speaker.

Three symposiums consisting of brief papers by physicians from Brooklyn:

- 1 The Polio Epidemic
 - (a) Statement of extent, mortality, etc. Herman T. Peck, M.D.
 - (b) Post-polio care from the standpoint of the 1. Pediatrician Benjamin Kramer, M.D.
2. Neurologist Harold R. Merwarth, M.D.
- 3 Orthopedist Herbert C. Fett, M.D.
 - 2 Pneumonia
 - (a) Types and typing Max A. Goldzieher, M.D.
 - (b) Serum therapy Thomas A. McGoldrick, M.D.
 - (c) Carbogen therapy John J. Wittmer, M.D.
 - (d) Supportive treatment Henry M. Moses, M.D.
- 3 Health Examination from the Standpoint of
 - (a) Urology Nathaniel P. Rathbun, M.D.
 - (b) Gastroenterology Albert F. R. Andresen, M.D.
 - (c) Ophthalmology John N. Evans, M.D.
 - (d) General Medicine Simon R. Blattes, M.D.
 - (e) Proctology Michael Canick, M.D.
 - (f) Cardiology William E. McCollom, M.D.

MEDICAL, SPECIAL, OR SURGICAL TREATMENT OF GOITER—A RECORD OF EXPERIENCE*

By MARTIN B. TINKER, M.D., ITHACA, N. Y.

THE best treatment of the vast majority of goiters is not medical or special or surgical only. Thyroid function has so important an effect on all organs of the body that no one man unaided can estimate all of its influences reliably. Decision as to the treatment suited to the case under consideration is best reached after group study, including an internist,

usually a roentgenologist and frequently other specialists. A capable, conscientious family physician is the key man in the case.

Preliminary treatment is frequently necessary and prolonged medical post-operative observation and care are almost always indispensable for the best results. A better understanding of the cause or causes of goiter is necessary before we can determine a logical form of treatment if a causative organism could be isolated it would make our problem much easier. Surgical treat-

* Read by invitation at the Meeting of the Second District Branch of the Medical Society of the State of New York at Brooklyn, N. Y., November 19, 1931.

ment is now generally accepted as giving the best results by the majority of progressive members of the profession. That there are still many who are reluctant to resort to surgery is evidenced by the fact that a considerable number of patients are allowed to go on to a hopeless condition before surgery is considered, if it is considered at all. Surgery in such desperate risk cases does not give as satisfactory results either as concerns danger to life or complete and permanent recovery. The unfortunate results in last resort cases, doubtless prevent many others who are good operative risks from coming for surgery at a time when a cure would be possible. Patients, and probably also many doctors, still overestimate the risk of surgery in uncomplicated cases. The question, often overlooked, is which really offers the greater risk; the disease or the operation which is under consideration for its cure. Many have come to me during the past 25 years with the statement "my mother died of goiter"; "my sister died of goiter"; "my friend died of goiter"; "my neighbor died of goiter." The number of these fatalities has been so great where there had been no surgical intervention of any sort that 12 years ago I decided to keep a list of such cases. The information given me is, I believe, authentic: in almost all cases we have the names and addresses of those who died; also the name and address of the person furnishing the information. In twelve years, 138 such patients have been reported to me. This is approximately five times as many deaths from goiter, the disease, without surgery as could be fairly attributed to my own operations in the same period of time. Seventeen of these patients choked to death; 44 of these patients have died from symptoms which have affected the heart; 68 have died of thyroid toxemia, and four have died of malignancy. In this same period four patients have developed gangrene of the extremities. Three of these patients were not operated upon: 2 died; in one of these cases the post-mortem examination showed a large clot at the bifurcation of the abdominal aorta which had caused gangrene of both legs in the short time after acute symptoms developed. In the third case gangrene of the left leg developed extending to the middle of the thigh and necessitating an amputation. This patient was in the hospital at the time her trouble developed but because of the development of gangrene she was sent back to her home city; the surgeon in charge waited several weeks until the line of demarcation formed and then amputated successfully; she has recently returned to me for removal of her goiter and returned home well 3 months ago. In these cases it seems likely that the cardio-vascular changes were the result of long continued thyroid toxemia. Early group studies and operation would probably have averted the unfortunate outcome in the vast majority of these 141

cases. The results reported from a number of clinics where careful methods and large experience have given the most favorable conditions, indicate that the mortality in goiter operations need not exceed one-half of one per cent.

Group study indicates that there is need for more or less prolonged medical or special care in preparation for surgery with at least 32.4% of the patients who come to us. Damaged hearts most frequently require attention. 6.7% have auricular fibrillation: a pulse deficit chart is kept as a routine in such cases. Rest in bed and the use of some digitalis preparation usually clears the pulse deficit within one or two weeks. If this condition or any other condition requiring preliminary medical care does not improve satisfactorily within ten days or two weeks we frequently send the patient back to his home under the care of the family physician. In a good many instances rest and care over a period of from two to six months will give such improvement as to warrant operation.

Apparent diabetes has been present in six cases during the past 22 months. These patients can be made sugar free by suitable dietetic care alone or combined with insulin. Some patients, who have seemed in the most serious condition and who have had a weakened heart muscle with auricular fibrillation as well as other symptoms of thyroid toxemia besides the glycosuria, have cleared all symptoms and have come back in apparently perfect health without diabetic treatment several months to a year or more following thyroidectomy.

A blood picture of pernicious anemia has been present in 3 cases during the past six months. This is a somewhat larger number than the average during the past 25 years. It has been possible to improve the blood picture sufficiently to warrant operation in all of these cases by conservative measures: iron and other tonics, beef juice, overfeeding, and rest in the open air. The permanent results seem to be satisfactory in all cases.

High blood pressure, above 200 systolic or 100 diastolic, should be brought down by preliminary treatment if possible. Low protein, salt free diet; rest in bed, and frequent saline purges have given us good results in many cases. Permanent satisfactory improvement following partial bilateral thyroidectomy in cases without serious organic changes has resulted in about one-third of the total number who have come under my observation. The blood pressure has remained at 150 or considerably lower for ten years or more with several patients who had a systolic pressure of 250 before operation.

Gastro-intestinal symptoms associated with goiter may be chronic or acute. Chronic symptoms may require a barium meal and enema with Graham test x-ray, protoscopic examination or other special studies to determine whether the trouble is caused by some organic lesion. Atten-

tion has been called in previous papers to the fact that pronounced gastro intestinal symptoms contraindicate surgery, most frequently persistent nausea and vomiting or persistent diarrhoea

Nervous and mental conditions occur with considerable frequency, but do not always require the attention of a specialist. Many of these patients have been treated for neurasthenia, others have a good deal of nervous and mental instability which has never been given special treatment. The various neuroses and psychoses are probably generally considered the result of disorders of the vegetative nervous system. Epilepsy associated with goiter is occasionally seen. Four such cases have come for operation during the past ten months. There is the usual temporary benefit following any major operation, but nothing can be promised as regards permanent relief. The associated thyrotoxicosis doubtless aggravates the condition in many instances and with the advice and treatment of a competent neuro-psychiatrist a number of these patients have remained well for several years. Parkinson's Disease with toxic goiter is a relatively rare condition. Wechsler and Savitsky *Jour Am Med Assn*, p 1283, vol 97, 1931 has recently reported two cases and given a satisfactory review of the literature. The results of surgery in the cases reported in the literature and my own experience have been satisfactory as regards improving the patient's symptoms and general condition although a complete cure would, of course, not be expected.

Patients who are actively insane or who have been inmates of hospitals for the insane doubtless come to the attention of most men who see large numbers of goiter patients. Several psychiatrists who have referred patients to me believe that thyrotoxicosis is the important causative factor. A number of cases have been seen with members of the staff at Willard State Hospital where I have been consulting surgeon for several years. Five such cases have come under our observation during the past year. If first the mental condition can be fairly satisfactorily cleared, operation seems to be followed by satisfactory results, a considerable number of these patients remaining permanently well. The results of operating upon patients actively insane have not been encouraging, however. Akromegaly is occasionally seen in association with goiter. This is not surprising considering the well known relation between the pituitary and the thyroid. Sutherland Simpson found definite hypertrophy of the pituitary in animals, an increasing weight of several grams being noted in animals that had had the thyroid removed. The akromegaly patients should, of course, have the benefit of preliminary study and post operative supervision by a competent neuro psychiatrist. With such co operation the results are frequently far better than one would dare to expect.

Preliminary study by an ophthalmologist and oto laryngologist is desirable in the majority of cases and post operative care is frequently important, during and after hospital treatment. The importance of eliminating focal infections of sinuses, nose, throat (especially tonsils) and teeth need special emphasis. Unless such infections are cleared patients frequently fail to get permanent satisfactory results. The condition of the vocal cords is also highly important. Occasionally patients come in with paralysis of one cord and it is important to know this rather than to have it attributed to operation. Bilateral paralysis, a rare complication, is, of course, a serious matter. Ulceration of the cornea deserves special mention. I have seen several bad cases. It is certainly too dangerous to vision to warrant care by any except specially trained men. In one instance, with loss of an eye, the condition unfortunately affecting a physician, came to my attention, although this patient was not under my care at the time.

X-ray is of great value in pre operative diagnosis and radium or X ray are essential in the treatment of most cases of malignancy post-operatively. It is also highly important to know the amount of compression or displacement of the trachea which may exist before operation. Frequently these patients breathe fairly well unless there is slight increase of obstruction, such as comes from some inflammatory condition or slight compression during operation. It is especially important to know the location and size of intrathoracic goiters, for if this is known plans can be made for their successful removal.

The cases of malignancy are clinically of three kinds: those patients in which the diagnosis seems reasonably certain before operation, those in which the diagnosis is made by pathological examination after operation, and those in which the goiter is apparently benign, both as concerns clinical symptoms before operation and pathological examination after operation, but in which there is metastasis, most frequently affecting the flat bones, the growth having the gross and microscopic characteristics of a benign goiter. Many of these patients make satisfactory progress with radium treatment combined with surgery as noted in several previous papers. In a majority of cases the condition is adenocarcinoma which metastasizes quite late and is decidedly radio sensitive. A considerable number of my patients have remained well for from 5 to 15 years following excision and later radiation.

The deplorable remote results of long continued medical treatment which have been enumerated, especially long continued iodine treatment warrant a more active policy on the part of a certain number who have such patients under their care. The results of co operation in the study and treatment of such cases are certainly most gratifying.

THE POLIOMYELITIS EPIDEMIC

By HERMAN T. PECK, M.D., BROOKLYN, N. Y.

I HAVE been asked to give you a statement on the extent and mortality of the recent poliomyelitis outbreak in New York City. There are three diseases which, while endemic, require close observation and intensive action from a preventive viewpoint, and in connection with which we chart the daily incidence on pin maps, changing the color of the pins at regular intervals to indicate evidence of grouping and the possible increase in incidence. One of these diseases is poliomyelitis.

While poliomyelitis had not visited the City in epidemic form since 1916, we are continually on the alert concerning its prevalence, and the more so in 1931, for the reason that during 1929 and 1930, the incidence was especially low.

During the first half of 1931, the normal endemic incidence prevailed. Early in July, the reported cases began to be more frequent and evidence of grouping was noticed in certain locations where the 1916 epidemic first appeared.

Whether the virus of poliomyelitis is widely disseminated as it is generally believed and the majority of the population have become immune due to a previous infection not leading to paralysis, or whether it is an actual contagious disease transmitted by contact, the Department felt that all precautions should be taken not only to prevent the transmission of the disease but, also to see that all the sufferers were placed as early as possible under the most competent medical supervision to avoid the possible after-effects of the accompanying paralysis.

The first step after devising plans was for the Commissioner to call a meeting of the Medical Advisory Board of the Health Department and the representatives from the five County Medical Societies, for discussion of these plans, and to receive such suggestions and advice as they might desire to give. The plan suggested by the Health Department was approved and it was also agreed that before any publicity should be given to our campaign, that the individual physician in New York City should be notified of the increased incidence of this disease, and the possibility of an outbreak occurring during the Summer, and his cooperation and assistance requested. Although this meeting was held on Thursday, a circular was prepared and addressed to every physician in New York City, forwarded and received by them by the following Monday morning. Their cooperation in notifying the Department of all suspected cases in the pre-paralytic stage was urged, and a corps of especially trained physicians familiar with the operation of lumbar puncture and the injection of convalescent's serum was placed at their disposal through the Department's Meningitis Division.

In order that no hidden cases might exist throughout the City, we caused a survey to be made by the nurses of the Department in those areas showing the increased incidence, and while about 15,000 families were visited, only three cases of actual poliomyelitis, not previously reported, were found.

With this cooperation of the medical profession and all the allied nursing and social service organizations and the public press, we were able to hand the 4,080 cases which were reported up to November 1st, without the fear and apprehension which pervaded the country during the 1916 epidemic.

Of these 4,080 cases reported up to November 1st, only 34 cases occurred previous to July 1st.

It is gratifying to report that of these 4,080 cases, 3,112 or over 76% received hospital treatment, and only 466 resulted fatally which is slightly over 11%, in contra distinction to a mortality of 27% for 9,023 cases in the 1916 epidemic.

Another interesting thing confirming the alertness of the medical profession in their cooperation with the Department during this outbreak was that Dr. James D. Smith, Medical Director of the Contagious Disease Hospital of the Department of Hospitals reported in the September 5th Bulletin of the Department of Health that only about 17½% of the cases treated in the Contagious Disease Hospitals during the pre-paralytic stage actually developed paralysis.

We have kept from week to week a tabulation showing the age groupings of the cases by years from 1 to 10, at 5 year intervals between 10 and 35, and from 35 years of age and up, as well as by sex of the cases.

Of the 4,080 cases reported, there were 182 in which the age was not given, the tabulation therefore being for 3,898 cases. This tabulation shows that the disease was considerably more prevalent among males than females, 2,255 males as against 1,643 females. It also shows that over 53% of the cases were under 5 years of age, that slightly less than 31% were between the ages of 5 and 10 years; in other words, 84% of the reported cases were under 10 years of age, and that only about 16% were over 10 years.

Of this 16%, over 10 years, 13% were in the age groups between 10 and 20, leaving only 3% of the reported cases that were over 20 years of age, and these gradually diminished as the age increased.

While poliomyelitis is recognized to be a communicable disease, the prevailing theory that the virus is wide-spread and that the majority of adults at some time have acquired immunity through an actual invasion with the virus with-

out terminating in paralysis, would seem to be borne out by the above figures showing the great majority of the cases reported in 1931 to have been borne since the epidemic of 1916 15 years ago, and by the further compilation made by the Department which shows that of 4,080 cases reported only 95 families had two cases, and 3 families had 3 cases during the present outbreak.

Now, if we consider 10 to 14 days as the incubation period, it is interesting that 85 of these 101 cases developed within 10 days which would

indicate a source of infection other than actual contact infection from the original case, 10 cases developed between the 10th and 14th days and are therefore doubtful and only 6 developed after 14 days. In other words, there are only 6 cases out of 4,080 reported that could be considered purely contact cases according to our present conception of secondary cases as applied to other contagious diseases. Poliomyelitis having now returned to its normal endemic state, the next speakers will tell you about Post Poliomyelitis care.

ACUTE ANTERIOR POLIOMYELITIS

Preliminary Report

By BENJAMIN KRAMER, M.D., BROOKLYN, N. Y.

THE epidemic of 1931 afforded an opportunity for a more complete understanding of the nature of this disease and made possible an evaluation of certain suggestions for its treatment. Our efforts were concentrated upon three things: First—the recognition of the disease in the pre-paralytic stage; second—the study of the value of a tested convalescent serum; third—an evaluation of the Drinker Apparatus in the treatment of respiratory paralysis. The present communication is concerned with the presentation of statistical data and with a preliminary report of our results with the use of serum in pre-paralytic cases.

Our patients may be divided into two groups: (1) those studied during the early part of the epidemic, in which serum obtained from the Board of Health, New York City, and the N. Y. Academy of Medicine was used; (2) those studied in collaboration with Dr. S. D. Kramer, representing the Harvard Infantile Paralysis Commission. The latter group will be reported in detail by Dr. Kramer and his co-workers. Our report is a preliminary one and includes all the patients admitted to the Infantile Paralysis Service of the Jewish Hospital of Brooklyn.

The total number of patients admitted was 98. These were equally divided between the sexes, there being 48 males and 50 females. The age distribution in our small group ran parallel to that in the city as a whole. Ninety per cent of the patients were less than 10 years of age. More than 50% were less than 5 years of age, the highest incidence being between 2 and 5 years. Fifty-four of our patients were observed in the pre-paralytic stage. Forty-four had more or less paralysis, varying from slight weakness of one limb to severe bulbar involvement, at the time of admission to the hospital. During the latter part of the epidemic we confined ourselves chiefly to the treatment of patients in the pre-paralytic stage. Patients with respiratory paralysis were admitted in order to give them the benefit of

treatment with the respirator. Of 24 patients in the pre-paralytic group who received no serum, 18 recovered without paralysis and 6 developed paralysis. Of the 30 who were treated with serum 18 recovered and 12 developed some form of paralysis. Of the 44 patients admitted in the paralytic stage 8 showed a purely bulbar type of paralysis, 12 a bulbo-spinal and 24 a purely spinal involvement. The extent of involvement and the outcome in these patients are indicated in the charts.

In the Drinker Respirator, Dr. Drinker has given us a new instrument to combat respiratory paralysis. The indications for the use of this instrument, the management of the patient while in the respirator and a detailed discussion of the results will be presented in a later communication. Here, I merely wish to summarize our results.

We offer the following conclusions, some of which may be modified by a more complete study of our data.

1. In our small series 90% of cases occurred in children less than 10 years of age.

2. The condition was diagnosed in many before paralysis developed.

3. The incidence of paralysis in the treated cases was certainly not less than in the untreated.

4. Comparative mortality statistics of treated and untreated cases are of no value, cases insufficient in number.

5. Respirator of value only in spinal type of respiratory paralysis, not in the bulbo-spinal or bulbar type.

6. Ten patients were treated in the respirator. Of these 2 improved and 8 died. The two who recovered were of the spinal type.

It is indeed a pleasure to express our appreciation of the invaluable cooperation given to us during this study by the Board of Health of the City of New York, particularly by Dr. Peck and those physicians working under his direction, and by the physicians in charge of the hospitals for

contagious diseases under the Department of Hospitals. Needless to say, this work could not have been done without the consent and cooperation of the President and Board of Directors of the Jewish Hospital and also the Director of Professional Activities, Miss Pillsbury.

Summary of Poliomyelitis Cases

The following is a preliminary summary of the infantile paralysis cases admitted to our wards during the summer of 1931. A more detailed and minute analysis is to follow.

I. Total number of patients admitted—98.

Female—50.

Male, 48.

		Age Incidence		
		(7 mos.—10 mos.)	(10 mos.—11 mos.)	(11 mos.—12 mos.)
0-1	5	51	(1)	(2)
1-2	3			
2-3	10			
3-4	16			
4-5	17			
5-6	7	37		
6-7	9			
7-8	9			
8-9	5			
9-10	7			
10-11	1	10		
11-12	1			
12-13	1			
13-14	1			
14-15	3			
15-20	1	10%		
20-25	1			
30 yrs.	1			

Total 98

II. Types of Cases

1. Preparalytic 54

2. Paralytic 44 (a) Bulbar 8
(b) Bulbo spinal ...12
(c) Spinal24

Pre-paralytic Cases (Treatment and Results)

(a) Treated with serum 30

Recovered (without paralysis) 18

Developed Paralysis 12(40%)

Bulbar (died) 1

Facial weakness (unimproved on discharge) 3

Right upper and lower extremity .. 2

Right lower 1

Left lower 1

Both lower 1

Both lower and shoulder 2

Quadriplegia 1

12

(b) Treated without serum 24

Recovered 18

Developed paralysis 6(25%)

Weakness of ant. abdominal muscles. 1

Right upper extremity 1

Left upper extremity 1
Left upper and lower extremity 1
Both upper extremities 2
—
6

Paralytic Cases—44

(a) Bulbar—8

1 died in respirator

1 recovered completely

1 only right 6th nerve involved—unimproved

1 right facial-nasal voice—improved

4 facial nerve weakness alone—unimproved

—

8

(b) Bulbo spinal—12

5 died in respirator

2 (a) 9th and 10th nerves and (b) 2 extremities—(a) recovered, (b) improved

1 (a) 7, 9, 10th nerves, (b) 1 extremity—all improved except facial

2 (a) 7th and (b) 2 extremities—(a) 7th same, (b) improved

2 (a) 7th and (b) 1 extremity—(a) 1 improved 1 same (b) improved

—

12

(c) Spinal—24

2 died in respirator

2 improved in respirator

5 developed progressive paralysis

(a) 2 quadriplegia

(b) 3 three limbs involved

1 recovered completely

6 improved considerably by time of discharge

8 unimproved

—

24

Respirator Cases—10

Bulbo spinal—5 died

Bulbar 1 “

Spinal—4 2 “

2 improved.

III. Final Summary of Results

Completely recovered 46 47.0%

Died 9 9.2%

Residual facial weakness on discharge 7 7.1%

Residual 6th nerve palsy on discharge 1 1.0%

Residual quadriplegia 4 4.0%

Residual involvement of 3 limbs.. 4 4.0%

Residual involvement of 2 limbs.. 12 12.2%

Paralysis with atrophy.. 6

Weakness only 6

Residual involvement of 1 limb... 15 15.3%

Paralysis with atrophy .. 7

Weakness only 8

Conclusions

- 1 In our small series 90% of cases occurred in children less than 10 years of age
- 2 Condition was diagnosed in many before paralysis developed
- 3 The incidence of paralysis in the treated cases was certainly not less than in the untreated

4 Comparative mortality statistics of treated and untreated of no value, cases insufficient in number

5 Respirator of value only in spinal type of respiratory paralysis, not in the bulbo spinal or bulbar type

POLIOMYELITIS: NEUROLOGICAL COMMENTS

By HAROLD R MERWARTH, M.D, BROOKLYN, N. Y.

WE are face to face with a *public enemy*, one ever with us, slinking, unsuspected often unrecognized, when striking out of season (sporadic cases). It is a fearsome, sinister shadow bringing terror in a well-guarded mansion, or skulking unrestrainedly in the darkest recesses of the humblest home. What a mysterious rambler! It is ever puzzling in its wanderings now weaving bizarre patterns in the most congested sections of the crowded city, or in a devilish fashion invading an apparently well-isolated homestead.

This enemy, playing so cruelly on our heart strings is a general systemic infection, fundamentally lymphogenous. In epidemic form it is widespread in the number involved without paralysis. Fortunately only in a small percentage of cases does it occupy the center of the stage, because of the crippling effects, resulting from the involvement of the central nervous system.

So much attention has been focused on the most striking feature of the disease, the paralysis, that equally distressing symptoms due to involvement of the autonomic nervous system receive little attention. We are all familiar with the mottled, bluish discolored, cold, paralyzed extremity. Complaints of the leg feeling cold or of contrasting cold and warm spots, or even of dull burning sensations, are received. Objectively the surface of the extremity may feel cold or warm to the touch. This vasomotor disturbance may be mild or severe, of brief duration or persistent. In some cases there may be vague annoying gastrointestinal disturbances of a prolonged, harassing nature. It is known that the motor cells in the lateral horns of the thoracic cord, the governing cells of the sympathetic system, show pathologic changes. Also chromatolysis has been observed in the extraspinal autonomic ganglion cells, which control visceral function. Many symptoms of a rather intangible nature are probably due to changes in the "vegetative system." Possibly the cases of pronounced fatigability on exertion, which otherwise seem well, may be so caused.

The return of the deep reflex tendon response is looked upon justly as an indication of improvement, just as its loss is concrete evidence of the establishment of the disease in the central ner-

vous system. However, there are a few cases in whom, despite the apparent return to normalcy of the affected muscles, the deep reflex tendon response remains lost. The exact mechanism of the phenomenon is not clear. As is well known there are a small number of adult humans, otherwise normal, who have lost, or possibly never had, deep tendon reflex responses. I have known two members of the medical profession who regarded their lost quadriceps and Achilles jerk with a sort of pride and challenged their production. We must place the failure of the deep reflexes to return in the same unexplained category.

The finding of an isolated, complete, peripheral facial paralysis is a rare occurrence. I have seen cases so diagnosed but subsequent careful investigation proved other causes. One such case in a child proved to have a definite loss of taste on the affected side. In company with other cranial or somatic nerves during the acute phase, it is not uncommon.

It is possible to have it persist as an entity after the other paralyzed nerves recover.

The facial nucleus is rather extensive, and may be but partially involved. When this situation occurs, the result may simulate a supranuclear type of facial palsy. However, in the latter the discovery of other pyramidal tract signs or the preservation of the emotional control should make the localization clear. As a rule most of the facial palsies recover.

Pain may be completely absent throughout the illness or it may dominate the picture. It is well known that in the pathologic analysis the essential lesion is in the motor cells in the anterior horn but is not limited to these cells. Destructive changes are found in the posterior ganglion cells, despite which shingles is rare. Inflammatory reactions occur in the meninges and in the posterior roots. To the implication of the sensory side are due many of the early diagnostic signs—stiff neck, stiff back (spine sign) and the lower leg resisting hyperextension.

In the first few days of the acute phase, firm pressure over the muscles may be exquisitely painful. Much of the anxiety of the patient is due to the fear of harsh handling of these muscles. That pain exists in the muscle, and

that careless handling is objected to, is shown by the following instance:

A boy of fourteen, the son of a physician, was suffering from a cervical bulbar type of paralysis. Vomiting was extreme. The patient persisted in turning over on the side to vomit. In so doing it was necessary to support his head. On one occasion the usually vigilant nurse withdrew her supporting hand from beneath his forehead. His head fell forward. At once he screamed to have the head held up, and yelled that the pain in the back of his neck was awful. His agony for this brief moment was pitiful. At the same time it was impressive. Passive forward flexion of the neck had not been resisted (stiff neck sign). It was only when unexpected tension had been put on the weakened muscles and ligaments that excruciating pain developed. This pain seemed to be due to intimate changes in the muscles rather than stretching of the posterior roots.

The chronic pains persisting for weeks or months after the subsidence of fever may be due to one or several factors—a residual on the sensory side, painful weakened muscles, contracted muscles placed on the stretch, or unduly relaxed ligaments. The exact nature will have to be determined by a careful examination. In some cases despite the best of care and obvious progressive improvement, dull intractable pains may form an awkward phase of the case.

An undergraduate nurse, in intimate contact with "a polio ward" was taken ill with the disease. It was easily recognized and immediately treated. Muscular weakness developed, which under appropriate physiologic rest recovered completely. General diffuse pains persisted throughout her course in the hospital, was present on discharge and still complained of on her return in three months time. She had gained in weight, improved in her morale, and seemed anxious to return to nursing duty. After one day's nursing duty intense muscular soreness developed associated with a feeling of intense fatigue. Examination at this time, showed absolutely no muscular weakness, or change in the deep reflexes. All tests were normal except for a slight muscle tenderness. The symptoms of pain and exhaustion following moderate exertion are indications for a more prolonged rest. It is interesting that for a period these pains were thought to be psychogenic in character.

The psychic aspect of this disease in the acute phase has received much attention from many observers. In this stage the extreme degree of morbid anxiety is recognized as one of the classical symptoms. A vague apprehension, an unexplainable feeling of impending disaster are commonly experienced in those capable of explaining their reactions. A never-ending curiosity is frequently found in the older child, while even in the very young, the inarticulate, we find an ever-alert watchfulness, which we recognize as a fea-

ture of this illness. Certain physical accompaniments such as ill-appeared restlessness, and fine muscular twitchings, preparalytic forerunners complete the picture.

As contrasted with many acute illnesses in children there rarely is any clouding of the higher centers except when the child is on the brink of disaster. Then only may lethargy, stupor or coma supervene. Picture the rarity of convulsions in this illness. A full retention of consciousness is characteristic. To me the child is alert, and impressive with its mental keenness in the presence of fever. A marked irritability, a general resentfulness are found but are an expression of a strong desire to be left alone.

In the chronic phase in those who have a residual paralysis the psychic picture varies. In the very young there is no real appreciation of the disability or its significance. As the child grows older complications arise. There is a period especially in boys when an apparatus such as the spectacular airplane splint for a weakened shoulder group, is worn proudly in the spirit of a hero. This period of glory is brief. The glamour fades quickly. In the passage of time the immediate natural sympathy for another's distress is forgotten. Children are notably straightforward, at times cruel, and particularly apt in their descriptive nicknames. The child may be neglected or taunted for its awkwardness. Fortunately with the improvement in the average general care throughout the community the percentage of those with extreme disabilities is lower.

When the full significance of the ailment penetrates the child's consciousness an adjustment must be made. In our present system in the various relations, social, economic and with the opposite sex the advantage lies with the boy. On the particular dominance of the constitutional personality traits in the "long thins" or the "short thicks" depend much of the innate ability to make a readjustment. The former already shy, retiring, sensitive, requires more careful watching. The child may shun society, become depressed, and develop severe introversion. A spirit of combativeness, marked self assertion, so often seen in the male of slight physical structure may mar the personality.

This illness can and does cause a permanent physical disability. In no way does it impair the pure reasoning powers. Man's power to think, invent, create, or legislate, is at the same high level. I have yet to see one case of undoubted polio with any change in the mental status. This disease with its pure physical manifestations should not, because of a weird twist of fate, embarrass a person's chances for any executive position, even that of the presidency of the United States. In our own profession there are a few, crippled from childhood, whose accomplishments under great handicaps, reflect great glory on us all.

THE ORTHOPEDIC TREATMENT OF ANTERIOR POLIOMYELITIS

By HERBERT C. FETT, M.D., BROOKLYN, N. Y.

MUCH has been written recently of the after-care of the victims of Anterior Poliomyelitis and very little has been added to the routine treatment which was carried out after the epidemic of 1916. Our experiences in 1916 taught us a few essentials which I would like to stress in this short paper.

First—That orthopedic treatment should be started as soon as possible after the disease is recognized. I stress this point for several reasons, primarily because of the relief from pain. The painful extremity which accompanies the paralysis can be almost completely relieved by immobilization in a plaster of paris cast or some other means of satisfactory splinting. Plaster of paris is very satisfactory because one can be sure of complete immobilization and the maintenance of the proper position. The warmth of the cotton and flannel used under the plaster is a great aid in overcoming the accompanying neuritis.

Secondly, because we have learned that in order to obtain restoration of muscle function it is absolutely necessary to relax the muscle which has been paralyzed so that its origin and insertion are brought close together. The immobilization mentioned above will accomplish this very satisfactorily. It is very difficult early in the course of the disease in some cases to differentiate the various group paralyses, so that in order to relax the muscles it is safe to put the extremity in a neutral position. Later the cast can be changed and the muscles involved further relaxed.

Thirdly—Immobilization early in the disease by lessening the pain greatly facilitates the nursing care.

Fourthly—Immobilization early in the disease in the proper position prevents the development of deformities which is one of the most important duties of the orthopedic surgeon. Once deformities have occurred it is usually necessary to resort to some form of painful cure by manipulation or the stretching under anesthesia or surgery.

Fifthly—By relieving the pain of our little patients we earn their sincere gratitude which is a valuable aid to us later in the treatment when their earnest cooperation is absolutely essential.

And lastly I stress the point of early orthopedic care because the general opinion seems to be that the acute stage of anterior poliomyelitis is wholly a problem for the Pediatrician.

The second point which I would like to stress is the care during the convalescent stage. You are all familiar with the various forms of treatment, namely massage, muscle re-education, diathermy, and other forms of electricity, infrared ray and hydrotherapy. I shall not go into the details of these various forms of therapy but

I would like to dwell on the practical use of the hydrotherapy. I usually instruct the parents to fill the bath tub with hot water 95 degrees to 100 degrees and to add some sea salt about two tea-cupful. The child is placed in the tub and the exercises done with the extremity under water, care being taken not to overfatigue the muscles. Much more motion can be obtained while the extremity is under water because of the buoyancy of the salt water. The hot sea salt bath is also a valuable aid in overcoming the neuritis. The use of the bath at home avoids transportation to a pool or tank with the consequent chilling of the body when the child is taken home and undoubtedly avoids the contracting of colds, pneumonias, etc. It also saves wear and tear on the parents.

Hydrotherapy may be safely started as soon as the febrile stage has subsided and the pediatrician feels that it is quite safe from a constitutional standpoint to move the child from the bed to the bathtub. A posterior splint may be made of the plaster cast to facilitate the bathing. The hydrotherapy should be continued throughout the convalescent stage. Baths may be given daily. The child remains in the bath for twenty minutes to three quarters of an hour. Hydrotherapy is useful in the chronic stage after muscle transplantation.

I also wish to impress the necessity for the greatest patience and gentleness in the handling of these children by the physician, nurse and physiotherapist. As has been previously mentioned we must obtain and maintain the confidence of these children in order to get their best cooperation for the muscle re-education as they are all highly excitable and apprehensive. We therefore must eliminate any measures which are painful such as forceful stretchings, deep massage, strong electrical currents, etc.

It has been my practice to precede the massage and muscle re-education by the use of the infrared ray lamp for fifteen minutes at a distance of about twenty four inches. The muscles respond better if the extremity is warm. To further carry out this principle the parents are instructed to keep woolen stockings on the lower extremities. For protection of the upper extremities, back and abdomen a woolen sweater is used.

Massage and muscle re-education should be given by trained attendants only. These attendants must know anatomy and physiology as well as a thorough knowledge of the art of massage. Much damage can result from overfatigue of muscle or the stimulation of the wrong groups of muscles. The use of the electrical currents should not be countenanced unless the individual giving these treatments is a physician well trained

in anatomy and physiology therapy or by an attendant trained by a physician and the treatment carefully supervised by a competent physician.

Rest during the convalescent stage cannot be overemphasized whether the involvement is in the back, abdomen, upper or lower extremities. This applies particularly to the back because of the possibility of developing a scoliosis which is one of the greatest "bugaboos" of the orthopedic surgeon. Where paralysis of the back muscles is present a scoliosis will often develop in spite of the best of care. During this period of rest the paralyzed muscles must be carefully protected against cold and the development of deformities. It is difficult to state how long this period of rest should last but it has been my custom to have these children refrain from weight bearing until I have obtained what I consider the maximum amount of return of function in the paralyzed muscles. This may extend over a period of two years or more. During this time the child's general condition must be carefully observed particularly in reference to its weight because of the tendency to obesity as a result of the inactivity. The Pediatrician can be of considerable service in solving this problem. Much difficulty is encountered while enforcing this rest as the parents are always anxious to see the child stand and walk and therefore are frequently putting the offspring through a series of stunts. Naturally the child finds out that it can stand or walk and consequently thereafter the parents find it practically impossible to control the child's activity. It is therefore mandatory that proper instructions be given these parents along these lines as soon as treatment is started.

It is a well-recognized fact that no massage or muscle re-education should be started in these cases until all pain on motion, muscle tenderness and nerve trunk tenderness have completely disappeared. In some cases this pain and tenderness may extend over a period of two to three months. In most cases it will have completely disappeared after four or five weeks.

During this stage the Bradford Frame is an excellent piece of apparatus for enforcing rest,

particularly for the back. An aeroplane splint serves the same purpose in cases of upper extremity paralysis. If one chooses to use a brace for the lower extremity it is usually necessary to attach some form of stabilizer to prevent external rotation of the leg, such as a spike which projects from each side and rests on the bed. Aeroplane splints and foot supports can be attached to the Bradford Frame if necessary. For the abdominal paralysis it has been my custom to use a canvas abdominal binder.

The treatments can best be carried out at home where the child is most comfortable and composed. This eliminates transportation and exposure to cold and insures complete relaxation and rest after the treatment. The treatments should be given on a smooth top table which will eliminate all resistance. The case should be assigned to a worker who treats the child throughout the entire convalescent stage. Changing of workers is not conducive to the best end results.

The third point which I wish to emphasize is the operative treatment for the correction of deformities. This phase of the treatment is usually reserved for the chronic stage of the disease which has been known as the two-year period. It is not absolutely necessary to wait until two years have elapsed before deciding to operate for the correction of a deformity. If we find that a child is developing a curvature of the spine in spite of the best possible treatment I feel that one is justified in suggesting a spine fusion to prevent a progression of the curve. The same applies to the other extremities. An operative procedure is justifiable after the observer feels that the maximum amount of improvement has been obtained.

Stabilizing operations produce excellent weight bearing feet. Stabilizing operations produce excellent functional upper extremities. Stabilizing operations on the spine and extremities have made it possible to discard many braces, crutches and plaster of paris casts. Muscle transplants have done likewise.

Combinations of these procedures have made it possible for otherwise hopeless cripples to walk.

TYPES AND TYPING IN PNEUMONIA

By MAX A. GOLDZIEHER, M.D., BROOKLYN, N. Y.

THE common etiological factor in lobar pneumonia is the *Pneumococcus*. Microscopic examination and cultural methods do not help us much in distinguishing between the various types which are found to exist among pneumococci. Immunological methods had to be resorted to in order to establish differences between the various types of pneumococci. By means of the agglutination test, applied first by

Neufeld and later by Cole, Dochez and others, it could be shown that four large groups can be distinguished. Immune sera obtained against three of these groups are strongly specific and it seems that the pneumococci, which we classify as belonging to type I, II, III, represent well-established types of this microbe. Group IV, however, is so to say, a wastebasket for all the other much less common and much less definitely dif-

ferentiated pneumococci. Recent investigations have shown that it is possible to subdivide this group, IV, into at least 11 subdivisions.

For practical purposes, however, the division into four groups seems to be sufficient. The most common cause of lobar pneumonia is the type I and type II pneumococcus, which among themselves cause about 65% of all cases of pneumonia. Type III represents only 9%, while type IV occurs in about 20%. Types I and II are responsible for a rate of mortality from 25 to 30%, type III seems to be much more dangerous with a mortality over 45%. On the other hand, type IV, gives the lowest rate of mortality, estimated at about 12%.

In order to make serum therapy successful, it seems imperative to diagnose the type of causative agent at the earliest possible moment. Various methods have been applied for this purpose. Dochez and Avery have shown that the urine in cases of pneumonia contains a specific substance which can be precipitated by the corresponding immune serum, thus identifying the type of pneumococcus. However, this precipitin reaction is obtained only in about 65% and therefore has no real practical value. Demonstration of precipitin in the blood serum is a more promising method but requires further research. The most commonly practiced method for typing pneumo-

cocci is the mouse test. White mice are injected intraperitoneally with sputum containing pneumococci. The latter multiply quite rapidly in this susceptible animal, and as a rule within 24 hours, sufficiently large amounts of exudate have accumulated in the peritoneal cavity. This exudate contains large quantities of pneumococci, which are obtained by centrifugalization and their type is demonstrated by agglutination with the specific immune serum. The drawback of this method is the delay of some times as much as 24 hours. Much more rapid although not quite as satisfactory is Oliver's method in which the sputum or exudate is treated with bile which dissolves the pneumococci. A clear fluid, obtained by centrifugalization is used for the precipitation test with the immune serum. The most rapid and still perfectly reliable and, therefore, ideal method for typing is that of Rosenthal and Sternberg, as shown in our own laboratories. The sputum, or other material, which contains the pneumococci, is dissolved by means of a solution of borax. A clear fluid is obtained by centrifugalization and the precipitation is made on a glass slide under the microscope. The whole test requires only a few minutes and gives us the benefit of the opportunity for the practically immediate administration of the antipneumococcus serum.

SERUM THERAPY IN PNEUMONIA

By THOMAS A. McGOLDRICK, M.D., BROOKLYN, N. Y.

IT IS difficult to state definitely the mortality of lobar pneumonia. The time of the disease when treatment was first instituted, the age and habits of the individual affected, the presence of systemic diseases, the number of lobes involved, the changing virulence of the disease in different years, in different seasons of the year, yes, in different countries, all enter into that answer. Formerly patients cared for at their homes had a mortality rate about one quarter that of those treated in hospitals. A series of 1,107 cases treated (without serum) at Bellevue Hospital showed a death rate of 30.8%. In St. Peter's Hospital, Brooklyn, all lobar pneumonia cases admitted for 39 years, nearly 2,000 cases, gave a death rate of 27%. In Great Britain in 500,000 cases collected for the literature it was 20%. Scotch recorders placed it in their country at 21-22%. With types I, II, III of pneumococci, the rate differs from 20 to 44.3%.

While we have of value many remedial measures, these death rates have stressed the need and encouraged workers to find a specific for this disease. The pneumococci produce no endotoxin nor exotoxin and antitoxins are accordingly valueless. Antibacterial serum or sera must be obtained which acting through the blood stream

would there increase the antibodies. On the consolidated lung itself they too, have no effect. When one recalls that 28 different types of pneumococci have now been isolated the task of preparing a serum polyvalent for all is very great.

Undaunted, workers have sought to prepare serum for specific types and in types I and II have had a measure of success. In animals (monkeys) curability has been had in 100%. The earlier serum (Cole of Rockefeller) was applicable to type I cases and while helpful it was of low potency (titre), had to be used in large quantities at a dose (200 c.c. intravenously), frequently had reactions of much discomfort at least, and was restricted in usefulness to the very earliest time of the disease—first or second day. Six years ago Felton produced a serum for type I and II cases, and as modified by Bullowa is more concentrated. The usual amount of a dose is 15 c.c. and contains 20,000 units. In fact, it has been reported as concentrated to 50,000 units to 1 c.c. A unit being the amount of serum that will protect a mouse against a million fatal doses of P culture.

Concentrated in this way those distressing reactions, allergic thermal and serum sickness are less likely to occur, and if occurring are not

severe. It will be recalled that more than 55% of all cases are of types I and II.

Not waiting for typing, the patient is given immediately a dose of 5,000 units, followed in two hours if there be no untoward reaction by 20,000 units. Before the next dose is given the type of organism should have been learned. If of type I or II and the toxemia has not lessened and fever abated 20,000 more units are given every six hours for twenty-four or forty-eight hours. If crisis has not then occurred it may be continued in smaller doses. There has been reported a method by Sabin of great promise whereby on a glass slide the agglutinating power of the patient's serum to the causative type may be learned in a few minutes. It has been shown that the antibodies rise in number in fairly constant relationship to the agglutinating properties and by this information the dosage (of serum) may be better regulated and increased or discontinued earlier than when guided only by clinical findings.

It is hardly necessary to say that at administration the serum should be warm and injected very slowly, taking five minutes for the first c.c., and ten minutes more for the remaining 14 c.c.

By learning from the history of the patient if there have ever been any allergic reactions, by testing for sensitiveness on conjunctiva, intradermally or subcutaneously and the use of this serum so prepared and concentrated, the draw-

back of horse serum generally may be averted—drawback, let me add, which has caused one death in 70,000 cases.

The cost too, is frequently prohibitive. Some Departments of Health furnish it free under certain conditions, to certain hospitals. The usual retail price is \$18.00 for 20,000 units and for one day over 100,000 units may be needed. The serum as marketed is composed of equal number of units for type I and type II.

Notwithstanding the liability to err with statistics and especially with lobar pneumonia cases, definite and trustworthy results have been obtained. In several series reported by different observers the death rate was reduced in type I cases 33%, and even as much as 42%. In type II a reduction in death rate of 22%. More than 55% of all cases belong in these two classes. Besides accurate typing the method of control was to treat every alternate case admitted to the hospital suffering from pneumonia with serum. In no other respect did the care of serum treated patients and non-serum treated patients differ. Only patients moribund on admission were excluded from these series. Serum, I repeat, cannot prevent complications, cannot cure anoxaemia or cardiac failure nor existing systemic disease, but if increasing numbers of cases prove the promise now held forth, in New York City the reduction in number from 10,000 deaths annually from lobar pneumonia will be remarkable.

CARBOGEN THERAPY IN PNEUMONIA

By JOHN J. WITTMER, M.D., BROOKLYN, N. Y.

THE localized changes in pneumonia result in mechanical interference with circulation and respiration, and produce toxic reactions throughout the body. Combined with this there is organic embarrassment which primarily is induced by the consolidation and closure of a part, or all of the lobe, or lobes of the lung.

The actual aeration space is much decreased, not only because of the temporary incapacitation of the part actually involved, but also due to the partial atelectasis in the contiguous areas. This decreased area of ventilation causes increased cardiac strain, especially at a time when the patient demands an abnormal supply of oxygen, to take care of increased combustion during the disease.

The liver-like heavy material in the affected part also narrows the capillaries in the alveolar tissue and definitely impedes the circulation. This causes an additional strain on the heart, since the damming of the blood in the congested lung tissue does not allow a free flow from the right ventricle, which in turn does not allow complete evacuation of the right auricle.

We believe, with Drs. Henderson, Coryllos, Birnbaum and others that carbon dioxide and

oxygen inhalation not only relieves cardiac strain, by hyperventilating the remaining normal alveoli and overcoming the concomitant atelectasis, but the work of Dr. Charles S. Danzer suggests that CO₂ also stimulates peristaltic contractions of the small blood vessels with resulting increased circulation in the consolidated area.

It is apparent that the impedance of the circulation occurs in the involved area soon after the onset of the disease. Some physicians feel this condition need not be materially corrected until cyanosis, and usually marked cyanosis is manifest. Carbogen or oxygen is then used and the cyanosis is quickly dissipated. Inhalation is then too often stopped until cyanosis reappears. If inhalations of carbogen do relieve cardiac strain, and in our observations it definitely has, its use should not be postponed until actual embarrassment is present, or stopped, when the severe strain is over.

To compensate for the decreased lung area the patient must breathe faster and harder. This difficulty makes the individual uncomfortable, and, even more important, taxes the energy which we all know should be conserved. The use of carbogen, causing greater expansion of the

lungs, with increased lung capacity and the added supply of oxygen, relieves the anoxemia and minimizes the patient's efforts.

Pneumonia cases demand unusual attention during the entire course of the disease. When the carbogen treatment is instituted, it, in addition to routine pneumonia procedures should be watched constantly by the doctor and the nurse. The proper inhalational treatment is not merely to place a mask or tent over the patient and hope that he will be relieved of the extreme condition which exists. The flow of gas and the proportions of carbon dioxide and oxygen should be very carefully regulated according to the changes in pulse, and respiration which occur.

In administering carbogen inhalational treatment for pneumonia the best results may be obtained,

By using carbogen inhalational treatment as soon as pneumonia is suspected so as, if possible, to abort the fulminant inflammation.

By administering the inhalational treatment continuously, rather than spasmodically or symptomatically.

By continuing inhalational treatment until resolution sets in, and then, for periods of half an hour at hourly intervals until resolution is complete.

By administering the carbogen by the use of a tent rather than by face piece or mask.

The usual carbogen mixture is 7% CO₂ and

93% oxygen which actually provides the patient in most tents with 5% CO₂ and 45% oxygen. This proportion should be varied in accordance with the patient's condition. Tanks of 10% and 20% carbogen should be kept available for emergencies.

The temperature within the tent can be kept lower than the outside atmosphere. This can be accomplished by an injector at the top of the tent, drawing out the warm air in the tent, mixing it with fresh carbogen through a tube, and circulating it through a container which holds either water ice, or about a container of "dry ice."

The air thus mixed with new carbogen then flows back into the tent at the desired temperature. Wet ice will quite consistently keep the temperature 2 to 4 degrees lower than the outside atmosphere and with dry ice eight or ten degrees lower.

The relative humidity is maintained below fifty by the exposure of the air to the water ice or dry ice in the container.

Pneumonia to my mind must be treated the same as any other infection. The usual pneumonia procedures should be instituted, and in addition, carbon dioxide and oxygen will overcome the pathology in this localized lung area by overcoming atelectasis, promoting drainage, and aids the heart in bearing its terrific burden while the body is building up its corps of anti-bodies to neutralize the effects of the disease.

SUPPORTIVE TREATMENT IN PNEUMONIA

By HENRY M. MOSES, M.D., BROOKLYN, N. Y.

IN the supportive treatment of pneumonia, whether lobar, caused by the pneumococcus or the pneumococcus plus the tubercle bacillus, the typhoid bacillus, the streptococci, Pfeiffer's or Friedlander's bacillus, or broncho, caused by practically anything, we are using the most important factor in the care of the patient as an individual. Specific vaccines, or sera made to combat specific causes of pneumonia may be useful in lessening the severity of the attack or increasing the immunity of the patient, but we must recognize that immunity depends upon a number of different factors, the discussion of which is out of place at this time. While we acknowledge the benefits which may be derived from the use of sera in appropriate conditions, we recognize, also, that all forms of supportive treatment, needed by the individual patient, are used in addition to specific treatment. So long as the term "pneumonia" is an all-inclusive term for any inflammatory process in the lung, from many different causes, just so long will it be impossible to discover any serum or vaccine which will act as a specific to cure all forms of pneumonia. Some such media will no doubt be found,

in addition to our present known sera and vaccines, which will cure pulmonary inflammations from specific infections. Until the nomenclature of pneumonia has been improved, however, the supportive treatment is the treatment in pneumonia.

We know that the presence of any diseased condition, and the severity of any attack in an individual is determined by the following factors:

- (1) The number of the infecting organisms,
 - (2) The virulence of the infecting organisms,
 - (3) The immunity of the individual, whether natural or acquired.
- Treatment depends, also, upon these factors. Supportive treatment consists in stopping or diminishing the first two of these factors, and in increasing the third factor. Supportive treatment is modified according to the age of the patient, which is of prognostic importance in pneumonia. Notwithstanding excellent physical condition, the treatment must be influenced, also, by the toxemia and the extent of the lung involved. We recognize that pneumonia is a general disease, with its localized symptoms usually in the lungs. Consequently,

support of all systems must be considered in the supportive treatment. The patient's energies must be saved in every way. We must remember that we are dealing, especially in the lobar form, with a violent disease which in a few days usually terminates in recovery or death. During these few days, the resisting factors of the individual are strained to the utmost and he often becomes dehydrated, emaciated and otherwise greatly under normal. We must support the nutrition of the body by aiding the digestive system to function with the least effort, by supplying a nourishing, easily-digested, non-putrefactive, small residue diet, such as fruit juices, diluted milk, and cereal gruel, in patients between the ages of ten years and fifty years. A diet of this nature will support the patient during this short disease, will not form much residue in the intestinal tract, will not necessitate enemas, and will save the strength of the patient. Also, this diet will not add burden to the kidneys, which are our greatest aids in elimination. The younger and older patients may have a more liberal diet for support, if considered necessary. In bronchopneumonia, which is a longer condition than lobar, the diet may contain more calories. Give water and other fluids freely, in not too large quantities at a time. In considering physical rest for the patient, we must avoid all unnecessary movement by the patient, many of the physical demands by the patient can be lessened by the attention of a careful nurse. It is an important factor to arrange all medication, diet, and other attention to fall at the same time on a two- or three-hour schedule, and thus allow the patient to rest completely during the interval. To all patients with pneumonia, always give food and medication at regular intervals during the twenty-four hours. Be careful not to over-medicate. Judicious neglect, under constant observation, often accomplishes much for some patients.

The poisoning, or toxemia, in pneumonia acts not only on the heart, but also, on the respiratory and the excretory systems. With these systems below normal, their dysfunction must be aided by us, in addition to directing our efforts against the acute condition in the lungs. Frequently, dyspnea is out of all proportion to the amount of lung involved, and is due to the general poisoning, cyanosis is marked, and is due to anoxemia—the treatment of which is a mixture of oxygen and carbon-dioxide in an oxygen chamber or tent. The benefits of its use are:

- (1) The disappearance or diminution of cyanosis;
- (2) The slowing of the pulse, with improvement of the quality;
- (3) The slowing of the respiratory rate;
- (4) A decrease in the restlessness, or delirium, if present;
- (5) There is a subjective improvement in the

patient. This treatment, when once begun, should be continued throughout the course of the disease. The combination of oxygen and carbon-dioxide is certainly a valuable addition in treatment when its use is begun early, prescribed judiciously and continued throughout the attack, instead of being tried as a last-resort measure, when the patient is moribund.

Support of the heart is essential—the condition of the circulation is important. The object in supporting the heart by drugs is to prevent heart failure from over-exertion, caused:

(1) Mechanically, in trying to carry on the circulation through the solidified lung;

(2) By the poison of the disease;

(3) By myocardial failure, due to old valve lesions, or to an under-nourished, sclerotic myocardium.

Many careful observers consider that death attributed to heart failure is due, in many cases, to vasomotor paralysis instead of myocardial failure. It has been demonstrated that in a number of cases, uncomplicated by chronic disease of other organs, death occurs not directly as a cardiac failure, but as a result of paralysis of vasoconstrictor nerves resulting in a visceral dilation, with the blood remaining in the organs, and leaving the heart actually without blood to keep in circulation, in other words, we have medical shock. Vaso-motor paralysis is shown by:

(1) Low blood pressure;

(2) Profuse perspiration;

(3) The other symptoms of shock.

The treatment of this condition is by adrenalin; usually 5 c.c. is given every twenty minutes for six doses, then continued every two hours. Ephedrin is used also in this condition. The question of the use of digitalis, in small or massive doses, for cardiac support or stimulation, is still a debated one—it is not to be given in every case as a routine measure. In youth, with a normal heart, it is seldom necessary; after thirty-five years of age, it may be given if indicated. It is usually given throughout the disease in chronic valvular conditions, and in cardiac irregularities, especially in auricular fibrillation. Strychnine and camphor were much used formerly in pneumonia, but at the present time, the use of these drugs is not so general. Caffeine is considered a valuable heart stimulant. The use of whiskey is a debated question. To the writer it has seemed to be of benefit to those over sixty years of age, and serves to help the chronic alcoholics during an attack of pneumonia. The dose does not have to be large.

It seems hardly necessary to mention that in these rapidly changing physical conditions in pneumonia patients, close daily observation of the various organs such as the heart, pericardium, kidneys, veins and lungs, should be made so as to recognize quickly intercurrent changes and to treat these appropriately.

PROCTOLOGY IN THE HEALTH EXAMINATION

By MICHAEL CANICK, M D, BROOKLYN, N. Y.

NO one would fail in the course of a special or a general examination to investigate the condition of the mouth, nose and throat, since it has been established that they are potent foci of infection, and since their detection can be obtained without an elaborate expenditure of time and material. A similar if not a more potent source of infection in the body is the ano-rectum which, because of its accessibility and the ease and simplicity of its examination should be investigated in nearly every patient presenting himself for examination. Obviously, when the complaint is directly referable to the rectum such as pain, protrusion, bleeding or discharge of mucus, our attention will naturally be directed to that organ but it is a good policy to have it examined routinely in all constitutional derangements of the body and in complaints referable to adjacent organs such as the genito-urinary tract. The frequency with which one notices pain on urination caused by fissure in ano, or a persistent morning drop promptly clear on the removal of an infected crypt or after the cure of a proctitis is truly surprising. In an experience of many thousands of cases I have met with most any pathological condition which was directly or reflexly caused by pathology in the rectum such as asthma, eczema, arthritis, nervous disturbances, etc. But a rectal examination is imperative in the following conditions:

(1) Constipation, whether due to dietetic or habitual errors should never be treated without an investigation of the organs which fails in performing its duty, namely the rectum. Very frequently a spastic sphincter is the sole cause and often the passing of the procto-cope results in a cure by breaking the spasm.

(2) Gastro intestinal complaints. Most cases

of nausea, pyrosis, and dyspepsia are due to antiperistalsis occasioned by a spastic sphincter. Gall-bladder disease are frequently associated with fissure in ano. The patient will tell you that when the fissure is painful they are free from gall-bladder pains, while when the fissure heals over they become conscious of pain in the gall-bladder region, undoubtedly due to the fact that when the fissure heals over there is no more drainage of the infection from the base of the fissure and it is absorbed into the portal system.

(3) Cases of arthritis, rather peri-arthritis especially of the wrists and ankle are frequently associated with ulcers of the rectum or colon.

(4) Many obscure cases of melancholia have been cured after the removal of foci of infection from the ano-rectum.

As to examination, an ordinary table, good light, and a finger cot will be found to be all sufficient in the majority of cases, since over 75% of the pathology in that region is either near or just within the anus. Gentle retraction of the buttocks, while the patient, in left Sim's position, is bearing down, will disclose prolapsing and bleeding hemorrhoids, fissure, and fistula, while the right index finger passed through the anus will palpate any deviation from the normal velvety feel of the mucosa such as the internal opening of a fistula, infected crypts, enlarged anal papillae, polyp and cancer. One cannot emphasize too much the importance of distinguishing between external or skin covered hemorrhoids and internal or mucous membrane covered hemorrhoids for while the latter belong inside the cavity the former ought to stay out. Failure to distinguish this fact is responsible for external thrombotic hemorrhoids being forced into the anus, causing pain and strangulation.

THE HEALTH EXAMINATION FROM THE STANDPOINT OF THE CARDIOLOGIST

By WILLIAM E. McCOLLUM, M D, BROOKLYN, N. Y.

IN the consideration of the patient to determine whether or not heart disease is present, perhaps one's first thought should be to exercise as much care in not making a diagnosis of cardiac disease upon insufficient evidence as in finding it when it is present.

Cabot in the first pages of his book (*Facts on the Heart*) emphasizes the harm often done to the patient by a wrong diagnosis. Heart disease is sometimes believed to be present upon insufficient evidence, such as attacks of dizziness, fainting, or slight precordial pain, in the presence of

a harmless systolic murmur, or in patients with the effort syndrome complaining of dyspnea, cardiac pain and palpitation.

Cabot says "The fears, disappointments and ailments resulting from an unwarranted diagnosis of heart disease may make a person's life miserable, all of which may be swept away by a positive assurance based upon a careful examination."

The classification of the American Heart Association in approaching heart disease from the standpoints of etiology, anatomy, physiology and

functional capacity, is very useful in any consideration of the subject.

There is no organ in the body where etiological factors are of more importance. With the exception of thyroid heart, congenital lesions and those known to be due to bacterial infection, all heart disease generally falls into one of three types—rheumatic, syphilitic, and hypertensive or arteriosclerotic.

Before commencing the physical examination it is most desirable to attempt to determine the presence or absence of any of these three factors as valuable clues may often be obtained: for example, with a history of rheumatic fever, the presence of even a systolic murmur makes a most careful examination necessary.

Passing over findings in the general examination, such as an enlarged thyroid gland, edema, cyanosis, jaundice and abnormal pulsations in the peripheral vessels, it may be stated that the estimation of the blood pressure may direct attention to hypertensive heart disease or to aortic regurgitation when a high pulse pressure is found, or to auricular fibrillation when particular difficulty is encountered in estimating the pressure.

In the examination of the heart itself the usual sequence is best. On inspection localization of the apex beat, when this is possible, is of the greatest help. An enlarged heart is almost always a diseased heart. Palpation may enable one to localize the apex beat when not possible by inspection. The presence of a systolic thrill in the aortic area is a sign of value in the diagnosis of aortic stenosis, and a presystolic thrill in the mitral region, felt before a strong apical thrust, usually means mitral stenosis. A diffuse and unusually forcible apex beat is often a sign of disease.

Percussion of the heart borders, especially the right, is a difficult procedure, and probably most examiners will get more information from a localization of the apex beat.

Auscultation should be performed with the patient sitting, lying on the back, and on the left side. Disturbances of rate and rhythm are better determined by auscultation than by any other method except the electrocardiographic. The most common arrhythmias are the physiological sinus arrhythmia, premature contractions, which usually are not signs of organic disease, and auricular fibrillation which is most commonly found in mitral or in hypertensive or arteriosclerotic heart disease.

Sinus irregularities occur principally in children and are usually related to respiration, the pulse rate quickening with inspiration and slowing with expiration. When this relationship is evident, the diagnosis is clear. A gradual waxing and waning of rate is important. All sinus irregularities are due to alterations in vagus tone and are abolished by anything as exercise, fever,

or atropine, which increases the pulse rate. Premature beats usually disappear or diminish in frequency upon increasing the rate of the heart by exercise, and the absolute arrhythmia of auricular fibrillation increases on exercise. In auricular fibrillation the unequal force of the beats is best appreciated when taking the blood pressure. When the irregularity is very marked, a true blood pressure estimation cannot be made. In exceptional instances an electrocardiogram may be necessary to distinguish between premature contractions and auricular fibrillation.

The character and relative intensity of the first and second heart sounds at apex and base should be noted. In young people the second sound is generally loudest in the second left interspace near the sternum. In middle age it is about of equal intensity to right and left of the sternum. In old age it is usually loudest to the right. A snapping accentuated first sound at the apex should make one think of mitral stenosis, although it may occur physiologically with exercise or excitement. An accentuated aortic second sound suggests hypertension and an accentuated pulmonic second sound mitral disease or some condition increasing the work of the right ventricle, as emphysema.

As causes of decrease in the intensity of the heart sounds may be mentioned increased musculature of the chest wall, obesity, pleural or pericardial effusions, circulatory failure due to collapse with peripheral dilatation, and failure of the heart from intra-cardiac causes.

When a murmur is heard, its time in the cardiac cycle should be determined by placing one finger on the apex beat or carotid artery. The radial pulse follows the apex beat at enough of an interval to confuse the time. It has been repeatedly emphasized that a systolic murmur does not necessarily indicate cardiac disease. The presence of an etiological factor and of enlargement of the heart is here of importance. It is sometimes very difficult to decide whether a systolic murmur is organic or functional. Diastolic murmurs are less common than systolic, more significant and often more difficult to hear. The murmur most often overlooked is that of mitral stenosis. This is low-pitched and usually best heard at the apex or over a small area toward the sternum from the apex with the patient lying down. Sometimes it is best heard with the patient lying on the left side. It may be very faint and occurs late in diastole.

The murmur of aortic regurgitation is generally best heard with the patient sitting up and leaning forward. It is blowing in quality, often very gentle, and usually best heard over the mid-sternum or to the left of it, less commonly to the right.

Degenerative lesions of the myocardium probably offer the most difficulty in diagnosis as they

may occur, as is well known, with slight or no changes in the heart sounds. Here the electrocardiogram may be indispensable for accurate diagnosis. Conduction disturbances, T wave changes, or changes in the Q R S complexes may indicate the pathology present.

If the history and physical examination are not completely satisfactory in any case where heart disease is believed to be present, the routine employment of the Wassermann test, x-ray with two meter plate, or orthodiagram and electrocardiogram is desirable.

UROLOGY IN THE HEALTH EXAMINATION

By N. P. RATHBUN, M.D., BROOKLYN, N. Y.

ACAREFUL history is of paramount importance and should, in addition to an inquiry into any previous diseases or present distress referred to any portion of the urinary tract, include also a careful inquiry into any variations from normal in the act of urination or character of the urine as noticed by patients themselves, such as undue frequency, pain, difficulty in starting, feeble stream, persistently cloudy urine, foul smelling urine or blood in the urine.

Frequency of urination, worse at night, in a young adult suggests renal tuberculosis, the same symptom in an elderly man suggests prostatism. Pain suggests a lesion at or about the bladder neck with perhaps a background higher up. Difficulty in starting and feeble stream suggests urethral stricture in a young male and prostatism in an older man. Persistently cloudy and foul smelling urine means infection above the bladder neck. A history of bloody urine is of tremendous importance. It means tumor in exactly half of the cases and demands a prompt investi-

gation to determine its origin and nature, even if the urine is normal at the time of the examination.

In addition to the routine laboratory examination of the 24-hour specimen, one should require their male patients to void their urine in two glasses as a part of the examination. A cloudy second glass, excluding phosphates, means infection in the upper urinary tract. If the laboratory reports pus in the urine of a female patient, it should be checked by examining a catheterized specimen to exclude contamination.

No physical examination is complete in the male patient which does not include a rectal examination. Prostatic carcinoma in its early stages when it is readily amenable to radical surgery often gives no symptoms.

Any leads suggested by the history or physical findings as previously outlined should be followed through to an accurate diagnosis in some cases involving the employment of more complicated technical procedure such as x-ray and cystoscopy.

HEALTH EXAMINATION FROM THE STANDPOINT OF GASTROENTEROLOGY

By ALBERT F. R. ANDRESEN, M.D., BROOKLYN, N. Y.

REALIZING the importance of a careful history in the diagnosis of gastrointestinal diseases, it must be emphasized that some questioning in regard to gastrointestinal symptoms must be a part of a health examination. The common gastrointestinal symptoms of belching, regurgitation, dysphagia, heartburn, nausea, vomiting, constipation, diarrhea and chest or abdominal pain, call for a more complete investigation than is done in an ordinary health examination—they require gastric and duodenal analyses, studies of the feces, x-ray, proctoscopic and at times esophagoscopic studies. In a person of middle age, such symptoms, especially if of recent origin, should occasion a suspicion of an early malignancy. In order to recognize malignancy at its earliest stages it has been suggested that a complete gastrointestinal x-ray study should be a part of every health examina-

tion, but the necessarily high cost of such an examination restricts it in most cases to those having at least some gastrointestinal symptoms.

Actual physical examination of the gastrointestinal tract is only possible at its upper and lower extremities. Considering the mouth as the upper end of the tract, it is essential that the examiner realize the importance and potential danger from the focal infection standpoint of gum edge and apical infections, of devital or even carious teeth, of infected tonsils, and of post-nasal drip, as indicating possible serious nasopharyngeal infections. A careful search for cancerous or precancerous lesions is of course important. In the presence of painful or difficult swallowing or of regurgitation of foods, with some delay in the passage of the small stomach tube, esophageal x-ray study and esophagoscopy are indicated.

Although the proctologist will point out its importance, I believe it cannot be too strongly emphasized that at least a rectal digital examination should constitute a part of every health examination, and it would be well if the use of the anoscope and procto-sigmoidoscope were more generally resorted to.

Abdominal examination may show such re-

lievable findings as lax abdominal wall, postural deformities or hernias, may show the presence of ascites or dilated superficial veins indicating cardiac decompensation or portal obstruction, may determine enlargement of some abdominal organs, or may disclose tenderness, rigidity or tumors which call for an intensive gastrointestinal study or operative interference.

OPHTHALMOLOGY IN THE HEALTH EXAMINATION

By JOHN N. EVANS, M.D., BROOKLYN, N. Y.

MODERN ophthalmology, through its rapid progress, is able to offer you much more than the conventional eyeground studies as an aid in the health examination. It supplies data on functional as well as organic changes.

We are so apt to think of *eyeglasses* as related only to visual efficiency, yet we must realize that variations of the index of refraction and changes in muscle tone are often the earliest manifestations of diabetes, lues, acute infections and other disorders.

You are all familiar with the paramount value of *visual field* studies in the demonstration and localization of cerebral lesions but we must not forget that this means may also detect, measure and record the effect on the end organ of various toxins and circulatory disturbances.

Besides these methods, a vast armamentarium of functional tests and improved methods have enabled us to draw data for your use. Ex-

amination with the *corneal microscope* permits us to see the individual red and white cells, single nerve fibers and the earliest pathological changes.

Eyeground studies have become more refined. We now use various *color filters* to make more prominent minute details. We measure *blood pressure* within the retinal arterioles and we may make a permanent record of changes with the *fundus camera*. *Colorimetric measurements* of optic nerve are possible, and the *campimeter* records minute derangements of function and structure of the retinal and choroidal elements.

It thus becomes apparent that the ophthalmological examination should supply you with information comparing very favorably with the finest type of laboratory data. Its findings are recordable for comparison at later dates and it will continue to supply material evidence for the health examination.

GENERAL MEDICINE IN A HEALTH EXAMINATION

By S. R. BLATTEIS, M.D., BROOKLYN, N. Y.

PART of a discussion on a symposium of Health Examinations held at a meeting of the Second District Branch of the New York State Medical Society, at the Hotel St. George, November 19, 1931.

The campaign for Periodic Health Examinations has been carried on intensively enough to have acquainted the members of the medical profession with the technical details of the *modus operandi*.

There is one feature of these examinations about which little has been said and yet which must confront every examiner; that feature is "How much shall the patient be told." It is because of the diversity of opinion expressed by men of large experience at a meeting of the first committee appointed by the Kings County Medical Society on Health Examinations that one feels justified in expressing definite opinion even

though it may vary widely from opinions held by others.

I should adopt as an axiom the general proposition: The patient should be told as little as possible.

As a rule those who present themselves for health examination consider themselves in average good health. They come with the expectation to receive a clean bill of health. It certainly is not obligatory on the part of the doctor to guarantee this; and yet the examiner must appreciate the difference in the psychological attitude between the sick patient expecting some verdict from the doctor and the apparently healthy individual who prides himself that he is wise enough to follow advice which will keep him well for a long time.

In the one a certain disappointment is experienced if no definite findings of illness are an-

nounced, while in the other it would come as a shock. Certainly if some one should appear for a health examination who is found to be suffering from an acute or uncompensated chronic heart failure, or one showing a severe nephritis, or another with marked vascular disease, another with cerebral symptoms having a four plus Wassermann, these of course would have to be told, but these are not the individuals who appear for a health examination. They come who, unconscious of any defect anywhere in their system are found to have, let us suppose impurity of a heart sound at one or the other orifices. Even if it be assumed that it is the result of some organic change in the valves but which is found to be perfectly compensated and has stood the test of all the requirements of the individual through many years, it is my opinion that this individual should not be told he has an organic heart disease and be required to change his routine of living. This information, told the patient bluntly, as it often is, produces in him or her an effect which no amount of assurance as to its mildness and unimportance can dispel. A cardiophobia rapidly develops and with it a mental and physical breakdown.

Surely every physician possesses enough ingenuity to meet such a situation tactfully and sympathetically. The argument put forward that if you don't tell, some other doctor will can be met, if deemed necessary, by giving the information to some responsible member of the family

Another common question confronting the examiner is the one of "Blood Pressure." What shall the answer be to the question so often put to us, "Doctor what is my blood pressure?" My attitude is not to tell the figures, I contend that is information for the doctor. I tell the individual that as a rule the figures by themselves have little significance and can be interpreted correctly only by a doctor, and that in some instances high figures are necessary to keep the system at its best, at other times the reverse is true. Some amplification of this idea usually proves satisfactory.

Many doctors take pleasure in telling a patient that the lungs are all right, that while one or the other of the apices shows a perfectly healed lesion, there is no suspicion of any trouble in the lungs now. The reaction to this statement is in the main a bad one. The patient interprets it that he at one time had the disease (Tuberculosis) but that by some chance of fortune recovered, but he isn't sure that it won't return, he feels himself susceptible to the disease; and no amount of assurance can remove this impression.

The patient should not be told he has a healed lesion. If he has a suspicious active lesion no matter how small, that cannot be disregarded.

Many similar analogous instances can be cited and while no hard and fast rule can be laid down to serve on all occasions time will vindicate the practice that the patient shall be told as little as possible.

OBSERVATIONS ON THE DIAGNOSIS OF EARLY SYPHILIS

By ALBERT PFEIFFER, M.D., ALBANY, N. Y.

Director, Division of Social Hygiene New York State Department of Health

WHILE syphilis is still commonly classified as a matter of convenience into primary, secondary and tertiary stages, a more correct designation from a pathologic, morphologic and therapeutic standpoint, which is our main concern, is 1, early, and 2 late syphilis. For prognosis, the main factor is whether the patient is in the sero negative or sero positive stage.

The early lesion of syphilis is seen today can no longer be accurately described in the classical manner as it was in the distant past by the renowned John Hunter. It does not visibly portray a uniform picture and such characteristics as Hunter expounded regarding its appearance and feel, and for these reasons apparently many chancres have been unrecognized.

A small macule or papule which later ulcerates often goes unnoticed, without arousing suspicion except to the vigilant patient or the

observant diagnostician, because of its painless nature, and its disappearance in many cases within a few weeks with little if any scarring. Laboratory tests in both primary and secondary syphilis are essential to check the clinical diagnosis.

Additional reasons for not making an early diagnosis are the location of the primary lesion within the urethra, on the labia or cervix, and its appearance sometimes in multiple form. Any non-healing sore wherever located should arouse suspicion. The possibility of an intra-urethral chancre should be borne in mind in any patient with a urethral discharge. One's suspicion should always be aroused in patients presenting a scanty but persistent discharge, and possibly having a negative smear. The intraurethral chancre can often be palpated and the enlarged lymphatics and inguinal lymph nodes seen and felt as hard and shotty. Fournier's slogan "Suspect syphilis" and Ric-

ord's startling remark "Cherchez la bubo" are commonly ignored.

The chances for cure in the sero-negative stage are enormously better than after the blood shows a positive Wassermann reaction when the disease has advanced from one to four weeks, sometimes five or more, since the appearance of the lesion. Many physicians depend entirely upon the Wassermann report for their diagnosis of syphilis and are content and satisfied with but one blood examination which often is made too early for the reaction to be positive. This happens particularly when blood specimens are taken as a routine

our recent survey in which it was ascertained that only 42.1 per cent of the patients came for treatment within the first 12 months of having the disease, while 63 per cent of the women were not diagnosed within the first year. Men, of course, seek treatment earlier; they are conscious of the possibility of something being wrong, due to visible signs. We have found in our survey of upstate New York that gonococcal cases seek treatment much earlier than syphilitic cases; as high as 72 per cent of the males and 62 per cent of the females applied for treatment within the first three months of the gonococcal infection, and many of these would undoubtedly also have had syphilis.

While the laboratories throughout the state that are approved for dark-field examinations are strategically located and offer a fairly complete service for the state in general, there are many sections where it would not be particularly convenient to have immediate examinations made.

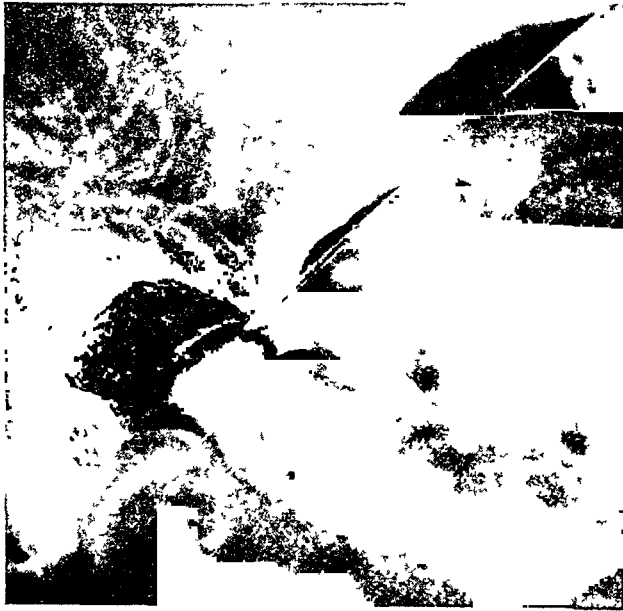
Again many patients through a desire for privacy would much prefer to have their own physicians make the examination rather than to go to a technician and a stranger.

The following cities have approved laboratories for dark field examinations: Albany, Auburn, Batavia, Bath, Belmont, Binghamton, Buffalo, Canandaigua, Clifton Springs, Cooperstown, Corning, Cortland, Dobbs Ferry, Geneva, Glens Falls, Gloversville, Hornell, Hudson, Kingston, Ithaca, Jamaica, Mount Vernon, Newburgh, New Rochelle, Niagara Falls, Olean, Oneida, Oneonta, Ossining, Penn Yan, Plattsburgh, Pomona, Poughkeepsie, Ray Brook, Rochester, Saranac Lake, Saratoga Springs, Schenectady, Syracuse, Tarrytown, Troy, Trudeau, Tuxedo Park, Utica, Valhalla, White Plains, Yonkers.

As an aid primarily to the general practitioner in rural sections, an outfit for the dark-field examination consisting of three capillary tubes and a small vial of sealing resin has been designed by the State Health Department. It has been found that spirochaetes will live in the capillary tubes for several days, and the use of the outfit has become a practical and established diagnostic measure by the Department. The outfits can be obtained at local supply stations or from the Department in Albany.

Explicit directions for collecting the serum from suspected lesions are supplied with the outfits, but a few high points might be mentioned.

1. Wear gloves for self-protection.
2. Apply a preliminary compress of novocaine to the lesion.
3. Obtain serum from the deeper tissues.



PHOTOGRAPHS

Patient, age 39, primary lesion, maculo-papular rash just appearing and enlarged bilateral inguinal glands. Primary lesion self-treated with many applications. Picture shows capillary tube being held in an approximately horizontal direction to facilitate the passing of the serum into the tube.

on all patients with a urethral discharge. Blood tests should be repeated at weekly intervals for several consecutive visits until the possibility of syphilis has been eliminated.

The actual and moral responsibility of effecting a cure and preventing infection of others rests to a great extent with the physician who first sees the patient. The main factor in the attack on syphilis is to establish the earliest possible diagnosis and institute immediate effective sterilizing treatment.

Our studies show that about 60 per cent of patients with syphilis are under the care of private practitioners, and probably a larger per cent are first seen by a private physician and given one or more treatments before they become clinic patients. That additional vigilance should be adopted is strikingly shown by

Spirochaetes are most abundant at the periphery close to the margins and slightly beyond, therefore considerable rubbing with gauze is necessary

4 Press the lesion between the fingers to stop bleeding and force the serum from the deeper tissues

5 Stroke with a capillary tube held preferably in the horizontal direction as shown in the photograph

6 Obtain one-half to one inch of fluid if possible, and gently shake the serum toward middle of the tube Apply the vial of resin against each end to seal the capillary tube effectively before placing it in the miling tube

In many instances various ointments and other applications have been applied by the patient, and then it becomes necessary to use a preliminary normal saline dressing for 12 to 24 hours before taking the specimen The additional tube furnished with the outfit are for a second specimen and for gland puncture When the lesion has been extensively self-treated, the spirochaetes might be obtained from a neighboring lymph gland In those cases where there is a superimposed pyogenic infection, a balanitis, or possibly phagedena, it might not be possible to get at the hidden chancre previous to a dorsal slit or circumcision, and the lymph gland offers the best site for obtaining the suspected serum

THE SIMPLIFICATION OF NASAL PLASTIC SURGERY*

By C R STRAATSMAN, MD, NEW YORK, N Y.

PERHAPS I might better have entitled my paper "The Standardization of Nasal Plastic Surgery" because I want to submit to you certain procedures which I feel must be followed to successfully carry out reparative work on the nose It has been our specific aim during the last few years to work out certain principles based on extensive practice and observation in handling nasal deformities All new developments in medicine and surgery begin with complicated methods and as experience is gained the technique tends to simplify itself This is especially true in nasal plastic surgery If one should compare the armamentarium of a nasal plastic case of a few years ago with that of today, he would find a considerable reduction in the number and kind of instruments used because the procedures are now more certain and the results obtained more uniform

I will now take up in a general way each type of nasal deformity and give you what I consider the best method for its repair Although every nasal deformity is a problem of its own, I feel that certain working procedures have been formulated for each type The most usual type of nasal deformity is the saddle nose, of which there are the mild and severe types We find that the small saddle is usually due to a distortion of the nasal elements, with little or no loss of tissues, and this type can be nicely repaired by the rearrangement of the nasal tissues, a procedure worked out in the clinic of Dr Sheehan—while the severe type is always due to a loss of substance which must be replaced by a transplant larger than can be obtained by the utilization of the upper two thirds of the lower lateral cartilages

The following substances are used to build up

the nose Cartilage, bone, ivory, celluloid and paraffin Of these the rib cartilage is the best because it is easily obtainable, easily shaped, and remains "as is" in its host Always remove all perichondrium

Bone transplants are most valuable when the loss confines itself to the bony bridge, as it is a known fact that if a bone graft is to live it must be so placed that there are bony attachments at each end of the transplant Therefore, in large saddle defects where there is a loss of the cartilaginous septum as well as of the bony process, the lower end of the graft, having no bony attachment, usually becomes fibrotic, which procedure tends to produce a sagging of the nasal tip due to lack of support This, however, never happens with a properly prepared rib cartilage

Ivory has its merit only as a temporary framework in infected cases, or in intermediate stages of a total rhinoplasty I feel justified in making this dogmatic statement because I have seen several instances where nature has treated it as a foreign body and has cast it off, leaving more severe destruction of the nose than was present before its insertion

Celluloid has been used but discarded for the same reasons as ivory, with the added hazard that the tissues are even less tolerant to celluloid than to ivory

Paraffin is mentioned only to condemn it, since we have all seen the condition known as paraffinoma, due to the ravages of injected paraffin with its resulting slough

Let us now consider the covering of the nasal framework, for due to its peculiar quality and firm attachment, it is almost impossible to repair losses of the skin or soft tissues by undermining and stretching—a method so successfully used elsewhere in the body When attempts have been

* Read before the Nassau County Medical Society Wednesday November 4 1931

made to forcibly lengthen the columella by the insertion of an oversized transplant—thus putting the skin of the tip under too great a tension—it has resulted in either a twisting of the transplant or a sloughing of the soft tissues covering it. Therefore before attempting to elevate the nasal tip the surgeon must determine the length of the finished columella so that he can take whatever tissue he needs from the lip at the time he makes his initial incision.

Tip losses are best repaired by attached grafts because of the difficulty in maintaining firm, even pressure in this region. Of the attached grafts, the tube-pedicle graft has proven most satisfactory, and for minor losses one taken from the arm is easily manipulated and there is no resulting forehead mutilation.† For complete loss of the nose the method of Blair—consisting of the forehead flap—is the best.

In cases of luetic disfigurement where there is a loss of the nasal lining, may I state that at present I am working on a method of using a tube flap from the arm to reline the nose, and, if necessary, this same flap can be utilized to repair any other losses which so often appear concurrently with destruction of the lining. A detailed report of this method will be given at a later date after more data have been obtained. Specific destruction of the framework of the nose without loss of the soft tissues is handled in the same manner as severe saddle deformities.

Another phase of this work deals with the oversized nose, and our problem here is a simpler one because it is easier to remove than to replace. Nasal enlargements group themselves into bone, cartilaginous, or tip hypertrophies. These may occur singly or in combination. In dealing with bony humps of any size, it is generally best to narrow the nasal process, otherwise the nose is apt to be too broad from the front view which offsets the improvement gained in the profile. In the removal of excess cartilage, it is best to slightly overcorrect because cartilage has a tendency to spring back—thus impairing the end result. In reducing the hypertrophied tip, it is best to excise sufficient soft tissue and cartilage so that the elements assume their new shape without the use of force.

Furthermore, it is always advisable to build the nose to fit the face and to conform with the patient's wishes whenever possible.

In conclusion, gentlemen, may I say that careful manipulation of tissues, accurate bandaging, and meticulous after-care all play an equally important part in the production of a satisfactory result.

† Plastic Repair of Partial Losses of the Nasal Tip, C. R. Straatsma, *Annals of Surgery*, May, 1930

The following are three typical examples of nasal deformities, and at the same time give you a brief idea of the method of procedure in each case.

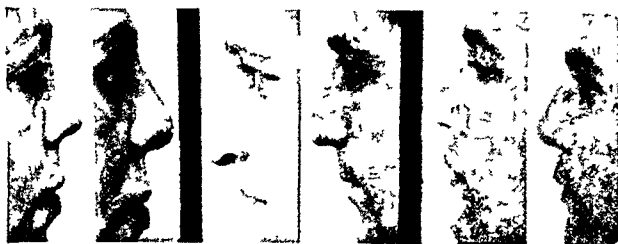


FIG. 1 FIG. 2
CASE I

FIG. 1 FIG. 2
CASE II

FIG. 1 FIG. 2
CASE III

CASE I—FIGURE 1

Presents a typical nasal deformity following a septal abscess which was caused by an injury. As can be seen there is very little loss of the nasal elements so that repair could be accomplished by the rearrangement of the tissues. In doing this an intra-alar incision was made through the skin and cartilage about $\frac{1}{4}$ inch posteriorly to the anterior edge of the nostril, beginning at the junction of the septum and the inner border of the ala and extending laterally to the junction of the middle and lower thirds of the ala. The incision was not carried down further because in so doing the alar branch of the facial artery is generally cut and annoying bleeding results. The upper $\frac{2}{3}$ of the lower lateral cartilage was then removed and saved along with its fellow from the opposite side which was removed in exactly the same manner as the first one. The soft tissues were then undermined and the nasal bony ridge narrowed and the cartilages placed in the depressed area, giving the result seen in Case I, Fig. 2.

CASE II—FIGURE 1

This is a typical specific saddle nose which was produced by destruction of the framework of the nose without destruction of the nasal lining except in one small area which can be detected by the small depression over the remainder of the right nasal process. In this case a supporting framework had to be supplied by a rib cartilage. A columellar incision was made, the soft tissues of the nose undermined and a cartilaginous ridge and buttress support were inserted, giving the result seen in Case II, Figure 2.

CASE III—FIGURE 1

Shows a typical hypertrophied nose which was repaired by the removal of the excess bone and cartilage, giving the result shown in Case III, Figure 2.

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THE SUMMER MEDICAL JOURNALS

Whatever may be the date of the beginning of the official year of a State Medical Society, the summer season is a time of comparative quiet in society activities, because of the vacations of the officers and committees. But the few weeks just before the summer are usually times of in-

tense activity, because of the annual meetings, and the summer time affords the opportunity to bring the reports of Society activities up to date. The summer journals are thus as important as those of other seasons. Medical editorship is in evidence in the summer as in the winter.

DR. JOHN A. CARD

Dr. John A. Card, Speaker of the House of Delegates of the Medical Society of the State of New York for four years, died in



Photograph by Dr. O. S. Wightman

DR. JOHN A. CARD, 1877-1932

his home city of Poughkeepsie on June 28, 1932, after a brief illness. Dr. Card brought to his high office a rare combination of technical ability and friendly humanity. Quick and accurate in his decisions, terse and acute in his announcements, he was always fair and considerate of the feelings of others, both supporters and opponents. His acts were dominated by a dual motive of truth, cold and mechanical, tempered with friendliness, warm and personal.

Dr. Card's dual temperament found a perfect outlet in two complementary lines of professional action. His friendly characteristics were expressed in the practice of his chosen specialty of pediatrics, while his irresistible trend toward truth and justice was revealed in his deep interest in criminology and psychiatry. It is probable that Dr. Card himself could not have stated which branch of practice he preferred. Each afforded the opportunity for the exercise of a dominant trait without the danger of a mental conflict.

The charm of Dr. Card's personality expressed itself in the way he took his part in the State Medical Society. Easy of approach, anxious at all times to be of assistance, he always had time to explain to a fellow physician the value of insurance, or patiently help him solve his problem.

He had that rare quality of inspiring confidence which children as well as physicians are the first to discover. Only an intelligent life, properly guided by experience, can bring to anyone this treasured combination.

Much might be said of his lending a helping hand to those in need, always in a most unobtrusive way. Dr. Card loved to live, and was most generous in sharing his life with others.

HEALTH PUBLICITY IN KANSAS

Most State Medical Societies are giving serious consideration to the problem of informing the people in regard to the preservation of their health. The problem has two distinctive phases:

1. Private instruction by individual doctors.
2. Public instruction by medical societies, nursing associations, and other health organizations.

Physicians in private practice constitute the largest and most efficient group of instructors of the people in health subjects. Their work is efficient because the persons whom they instruct

are in a receptive mood to carry out the advice. But at any given time physicians reach only that minority of the people who happen to be sick; and the subjects of their instruction are those applying only to that particular form of sickness which they may be treating. Yet the total amount of effective instruction imparted by family doctors is greater than that of all other groups. Physicians in general practice will continue to be the most important group of health teachers in a community.

Many States have organized systems of teaching pupils and students in schools and colleges with special emphasis on the individual in correcting physical defects and training the body in strength and grace.

The schools also give class-room instruction along all lines of health. The principal difficulty is that of the multitude of subjects which must be taught in order to touch upon the more common conditions which affect one's health.

Physicians realize the importance of applying the principles of school health instruction to the people generally. They take cooperative action through their County and State Medical Societies, and plan to give instruction on general health topics. The three principal means of instruction are the daily newspaper, the radio and the moving picture. The popularity and effectiveness of the hygienic instruction by these means are indicated by the fact that the owners of the distributing agencies find it profitable to use the instructive articles and pictures.

The leaders of the Medical Society of the State of Kansas felt that the continuance of the demand for health instruction was sure enough to justify their publication of a monthly journal of popular health. They had the precedent of the American Medical Association in publishing its popular health journal, *Hygienic*, which is now in its tenth year. With prompt courage the Kansas leaders prepared and issued the first number of

their own State publication, *Folks* in August, 1931. The birth of *Folks* was told in several articles in the Journal of the Kansas Medical Society which were abstracted in the New York STATE JOURNAL of April 15, 1931, page 504, and November 1, page 1366.

The July, 1932, issue of *Folks* completes Volume I, and affords an opportunity to judge its value. Its popularity in Kansas is indicated by the fact that its monthly circulation is 6,900 and is constantly increasing.

Each issue of the new magazine consists of sixteen pages slightly larger than those of the New York STATE JOURNAL. Only two pages of advertisements are carried. The articles are short, each less than five hundred words, and an average of twelve leading articles are contained in each issue. Nearly all the articles are written by Kansas physicians. Explanations of common medical conditions predominate. The Journal reflects the prevailing thought and attitude of the practicing physicians, and is well suited to enhance the respect of the public for the medical profession.

Folks is successful from a medical point of view, and any physician interested in popular medical publicity will do well to send fifty cents, the price of a year's subscription, to the Kansas Medical Society, 700 Kansas Avenue, Topeka, Kansas.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Hypodermic Syringes This Journal of July, 1907, contains an article by Dr. Martin B. Tinker, of Ithaca, on "Local Anesthesia" which illustrates the great progress made in hypodermic syringes in a quarter of a century. Dr. Tinker describes the syringes available in 1907.

"Among the materials to be used should be mentioned a syringe that can be readily boiled. Leather packed syringes are unsatisfactory because the packing shrivels when a high degree of heat is applied. The asbestos or rubber packed syringes I have found most satisfactory. A special form of hypodermic syringe supplied by Sharp & Dohme, of Baltimore, is one of the best, and for more massive infiltration I have found a 5 cc. rubber packed syringe, which is manufactured by the Randall Faichney Company, of Boston, perfectly satisfactory. There should be no leakage about the washer or packing, and in order that we may see that there is no leakage back of the piston, a glass barrel is essential. Some of

the solid metal syringes are very satisfactory at first, but with wear I have found that most of them leak when pressure is used for infiltration, the leakage cannot be seen, and of course fluid that leaks out around the piston is of no effect in relieving pain. The solid glass syringes are seldom strong enough to stand the pressure of infiltration. A sharp needle is more comfortable for the patient not only at the first prick but throughout the infiltration, and the location of the point can be much more certainly controlled. At present I always freeze an area the size of a dime with ethyl chloride at the location where I wish to begin infiltration. This prevents even the slight pain of the first prick of the needle; the succeeding pricks are painless because the needle is inserted in infiltrated areas and the fluid is injected ahead of the needle as it is pushed along the line of incision. A sharp jab from a hypodermic needle is not a good beginning for a major operation with a nervous patient."



MEDICAL PROGRESS



Vaccinia and the Paschen Body.—G. Hardy Eagles and J. C. G. Ledingham describe infection experiments with centrifugalized virus filtrates which afford evidence in support of the claim put forward by Paschen, as long ago as 1906, that the elementary bodies discovered by him in material from vaccinal lesions might prove to be the actual etiological agents. The experiments are substantially amplifications of those reported by Ward (1929) and Tang (1930) who followed up their successful filtrations of vaccinia virus through low-grade candle filters by centrifuging the filtrates and demonstrating a concentration of virus in the bottom layers. The authors have carried out their work with Berkefeld "V" filtrates of vaccinia virus which have been submitted to centrifugalization with a new model high speed centrifuge capable of speeds up to 14,000 revolutions per minute with a 10 c.c. load. A speed of 10,000 to 11,000 revolutions per minute acting for one hour has been found to result in a concentration of the virus in the lower layer of the fluid or in a deposit which is so lightly attached to the glass that the supernatant fluid cannot be removed without disturbing the deposit. If a small quantity of gelatin is placed in the tip of pointed tubes before the virus filtrate is added the elementary bodies can be held. Experiments in which the deposits were subjected to repeated washings in saline solution are particularly convincing, inasmuch as the stained preparations of the potent fluids showed rich carpets of the elementary bodies and an almost complete absence of other stainable material, formed or amorphous. As the saline menstruum itself contained almost no virus the conclusion is irresistible that the infecting agent is the Paschen body. In this connection it is interesting that Bedson (1932) has been able, by very similar means to those employed in this work, to obtain evidence that the minute bodies found in psittacosis represent in all probability the actual infective agents in this disease. It remains to be shown that artificial cultures starting from pure seedings of Paschen bodies are possible.—*The Lancet*, April 16, 1932, ccxxii, 5668.

General Pneumococcal Infection in the Negro.—According to G. Bouffard, frank pneumonia localized in the pulmonary tree is exceptional in the Negro, the pneumococcus in the great majority of individuals of this race being localized in important organs such as the liver and brain, with manifestations of a veritable septicemia. This is true not only of Negroes migrating to Europe, but also of those in sub-

tropical regions, where lobar pneumonia without pneumococcemia continues to be an exception. In such cases bacteriological examination reveals only a meningeal or hepatic pneumococcosis, whose etiology must be sought in the exposure to cold which lets loose the first cases in an epidemic. The pneumococcus, either because it develops in fatigued persons with little urge to work, or because it finds in the Negro a particularly favorable soil, becomes very virulent, acquires a great power to infect and promptly shows itself contagious. Septicemia is the rule; the bloom swarms with parasites and the blood culture is positive in nearly all cases during an epidemic. The affection is attended by a high mortality, reaching 25 to 70 per cent, despite the most active therapeutic measures, including serotherapy, intravenous injections of sodium salicylate and camphor in large doses. These cases occur as the result of the lessened resistance produced by the sudden transplantation of a race used to a tropical temperature into temperate zones. Prophylaxis consists in avoidance of chills, fatigue, and overwork. Work should be so adjusted as to prevent fatigue. But it is difficult to avoid imprudence on the part of natives who, accustomed to living in a nude state, do not know how to adjust their clothing to their needs. It may sometimes happen that groups of workmen in a community are infected by the arrival of recruits who are carriers of virulent germs. This is difficult to prevent, for such carriers seem able to pass through the best sanitary barriers that can be conceived. In groups of contaminated individuals who have been isolated there are phases of silence sometimes of a month, suggesting that an epidemic has been arrested, when suddenly there appears a recrudescence which can only be explained, in the absence of newcomers, by the hypothesis that very virulent pneumococci remain in the mouths of certain laborers. Sanitary measures, wearing of suitable clothing, and the strengthening of the resistance of the individual by proper diet, rich in protein and vitamins and by chemotherapy and vaccination, constitute the minimum of prophylaxis.—*Bulletin de l'Académie de médecine*, March 15, 1932.

Yawning.—The nature and physiological significance of yawning is not yet fully understood, says Albrecht Peiper, writing in the *Deutsche medizinische Wochenschrift* of April 29, 1932. The theory that yawning represents a reflex attempt of the body to overcome fatigue is not well founded, for it fails to accomplish this. It is a matter of daily experi-

ence that one yawns not to prevent tiredness but because one is already tired. Disregarding all secondary phenomena, it is at once evident that the respiratory musculature, that is, the musculature of the thorax and mouth, participates in the act of yawning. The individual who yawns inspires deeply with his mouth wide open, the inspiratory position of the thorax and the wide-open mouth is maintained for a few seconds after which expiration follows and the mouth is closed. At the close of the yawn there is often a brief standstill of respiration and a half suppressed act of swallowing. That yawning constitutes a lower reflex is seen from the fact that children quite prematurely are able to yawn quite distinctly. The known facts can be resumed in the theory that yawning is nothing more than a respiratory movement, and that it is founded on a lowering of the nervous excitability of the respiratory center by which the yawning center is inhibited. During yawning the breathing falls to a lower stage of evolutionary development. In accordance with this view the yawning center must be regarded as habitually an inhibiting constituent of the respiratory center, in the neighborhood of which it has its seat. The breathing center and the swallowing center were originally closely related. Lower animals have a "swallowing respiration," that is they breathe while they swallow. The swallowing movement that closes the act of yawning shows the close relation between these centers for in human beings too swallowing represents the lowest form of breathing. Peiper thinks that yawning occurs as the result of a transitory failure (verfall) of the respiratory center, by which the yawning center is ordinarily restrained. Whenever, as the result of weariness, this inhibitory power lets up, the released yawning center transitorily assumes control of the breathing. Hence individuals yawn not to counteract weariness but as a result of weariness already present.

Vasovagal Syncope and the Carotid Sinus Mechanism—Under the term "vasovagal syncope" Sir Thomas Lewis discusses the mechanism of common fainting attacks which usually affect the young but by no means exclusively. In uncomplicated cases patients do not speak of precordial distress or constriction. From the start there is a progressive lowering of blood pressure and usually a steep fall of heart rate to 40 or 50 (occasionally to 30 or even 20) beats per minute. Pallor becomes extreme, and is of the type associated with simple drainage of blood from the skin to dilating visceral vessels. The slow pulse is due as has been shown polygraphically, to

a slowing of the whole heart, irregularity, a common feature of vagal slowing, is often displayed. The proof that slowing is vagal is given by atropine, which promptly drives the rate to levels usual under this drug. The slowing of the heart is insufficient to induce unconsciousness. Undoubtedly, the main cause of the fall of blood pressure in these attacks and the enfeeblement or loss of pulse is independent of the vagus, and lies in the blood vessels. Atropine, while raising the pulse rate, leaves the blood pressure below normal, and the patient still pale and not fully conscious. Thus the syncope in such cases is vasomotor and not vagal, but the vagus adds to the clinical picture by inducing conspicuous slowing of the heart and gastric manifestations.

A discovery which is possibly relevant to the pathology of these attacks is that of the carotid sinus reflex. A rise of pressure within the carotid sinus results in a reflex lowering of the heart rate and of systemic pressure, the former is produced through the vagus, the latter through vasomotor channels and through an effect on suprarenal secretion. The carotid sinus reflex contains the receptor part of the mechanism, the glossopharyngeal nerve conveys the impulse to the medulla, here the impulses inhibit the heart and depress the vasomotor tone. Given this linkage it seems highly probable that the central and efferent parts of this mechanism are disturbed in the clinical syndrome of vasovagal syncope. This explanation is further supported by the fact that pressure on the carotid in man gives rise to gastrointestinal manifestations. According to this view, it is legitimate to suggest that this mechanism can be set in motion through many afferent channels other than those at present recognized by physiology. There may be an objection to the use of the term vasovagal because Gowers has used it to denote a type of attack bordering on minor epilepsy or migraine, in which the attack is entirely different from that of fainting, there being nothing in the description that justifies the use of the adjective vagal. Nothnagel has also used the term vasovagal to describe attacks which show no conclusive evidence of vasoconstriction. In both cases the use of the term is based upon guesswork and tends to confuse our thoughts.—*British Medical Journal*, May 14, 1932, 1, 3733.

A Peculiar Laboratory Sickness—According to R. Doerr, E. Berger, W. Jadassohn, and G. W. Schmidt, there appeared in 1930 and 1931 at the Hygienic Institute of the University of Basle and at the Dermatological Clinic of the University of Zurich attacks of

sickness of a hitherto unknown nature among the physicians and technicians, the peculiarity of which lay in the symptomatology and the epidemiological behavior. Clinically these were recurring attacks of fever of brief duration, lasting but a few hours, followed regularly by a stage of marked exhaustion and prostration lasting a few days. These secondary effects were the stronger, the greater the number of the attacks suffered by the individual, amounting in some cases to a complete incapacity for work and to marked psychic depression. The other symptoms were not universal, so that it remains uncertain whether they were germane to the nature of the disease, or were accidental. Such were nausea and vomiting, observed in a considerable number of cases, as well as diarrhea and anorexia. It may be recalled that this triad of brief chills and fever, a postfebrile phase and gastro-intestinal disturbances is characteristic of three infectious diseases: yellow fever, dengue, and pappataci fever, all of which are caused by some ultramicroscopic virus. It was rather frequent, but not constant, to observe between the attacks as well as during the fever a painful, dry, barking cough, different in character from that of influenza. The intermittent, cyclic course of the affection makes it possible to exclude grippe. At Basle all the cases began with a chill, followed by fever reaching 39.2-39.8° C., which fell to normal five hours later. At Zurich, while the same high temperatures prevailed, they were not present to the same degree in all the attacks of any one individual. The intervals between attacks averaged seven days at Zurich, nine to eleven days at Basle. The process conferred no immunity, the same individual being liable to a fresh cycle after an interval of 28 days. The affection was not contagious, and was confined within the institutes named. In Basle the entire six individuals affected fell ill on the same day, but their cycles were different in periodicity. The fact was brought out that at both institutes extensive experimentation with tubercle bacilli and preparations had been in progress when the attacks occurred, and that no further attacks occurred after these manipulations ceased. This coincidence may, however, have been accidental. All attempts to find a causative agent proved negative, and the attacks remain unexplained.—*Schweizerische medizinische Wochenschrift*, April 23, 1932.

The Treatment of Cardiac Dyspnea.—Convinced that if any progress was to be made in the treatment of cardiac dyspnea it was necessary to learn how to measure this symptom, T. R. Harrison devised a method by which

this can be accomplished. In a former article he showed that the degree of dyspnea was related to the nearness which the volume of breathing per unit of time approached the maximum possible value. The actual volume of breathing can be easily measured and the vital capacity is a measurement of the maximum possible volume. The degree of dyspnea, being directly proportional to the ventilation and inversely proportional to the vital capacity, can be expressed by the formula:

$$\text{Dyspnea} = \frac{\text{Ventilation}}{\text{Vital capacity}}. \text{ This formula ap-}$$

plies equally well to the resting and the active state. By means of this method a demonstration has been made of the value of such well accepted therapeutic measures as rest and venesection. It was shown that the slightest muscular exertion predisposes to dyspnea in persons with cardiac disease. Digitalis was found to be the most potent single weapon available in combating cardiac failure. There has been no general agreement as to whether digitalis is of value in patients with cardiac disease and no symptom other than dyspnea. A study of the effect of the drug in 42 cases showed that patients with paroxysmal attacks of nocturnal dyspnea were very much benefited. The effects in patients whose only symptom was dyspnea on the performance of muscular work were less dramatic, but in two-thirds of the cases subjective improvement was obtained. In obese patients reduction of the body weight was followed by improvement in the dyspnea. The value of theophylline was demonstrated, not only as a diuretic, but in combating dyspnea in persons with no edema. On the basis of these findings a plan of treatment has been developed. Asymptomatic patients who have definite signs of heart disease, are given a diet to reduce weight gradually, but are never given drugs. In patients with limited cardiac reserve, in whom dyspnea results from minimal bodily effort, digitalis is indicated in amounts of 1.5 to 2 grams in four or five days. Following this a daily dose of 0.1 to 0.2 gm. should be given and continued during the rest of the patient's life. If digitalis fails to relieve the patient's symptoms theophylline is administered; subjects vary greatly as to the amount of the drug they will tolerate. Most patients take 0.3 gm. after supper and after breakfast. This drug should be discontinued when dyspnea is relieved. In patients with congestive heart failure with edema, the Karel diet, salyrgan, and venesection are often especially helpful. Morphine may be used occasionally, but codeine is preferable.—*Southern Medical Journal*, June, 1932, xxv, 6.

Cerebral Impaludation—Ducoste, in a paper read before the *Academie de médecine* on April 12, 1932, reports that he has up to the present time treated 108 cases of general paralysis with cerebral impaludation, by which term he means, in contradistinction to ventricular impaludation, the injection directly into the frontal lobes of 2 to 5 cc citrated malarial blood. He had previously proved that injections into the white substance cause no pain or shock, having employed the method not only in animal experimentation but also in cases of dementia præcox, encephalitis, and manic depressive psychosis. He had also demonstrated that good results are obtained only from the use of the blood and not of the spinal fluid or serum, of malaria patients, the latter having no therapeutic effects and causing no reaction. Cerebral impaludation, like simple impaludation, causes crises of fever, the time of incubation is on the average a week. The tertian type is the most frequent, with the temperature rising spontaneously to 41° C (106° F). Irregular curves are not infrequent. As a rule there are 10 to 15 chills, the fever burns itself out, quinine is generally useless. Cerebral impaludation is better tolerated than simple impaludation. Destructive effects upon liver and spleen are rare although the spleen can be percussed and the liver may exhibit some congestion. Cardiac complications are exceptional and there are no gastroenteric disturbances. The mortality is much lower than in classic impaludation, and amounts to 1.4 per cent. A certain number of paretics, however, were in the last stages of their disease, and would probably not have tolerated simple impaludation. The general condition of these paretics is always very favorably influenced by the cerebral injection. But it is the mental effects that are especially brilliant, particularly in those patients who are not yet profoundly affected by the disease and who are treated at the outset. Even in the least favorable cases the course of the disease is arrested and stabilized, while the mental faculties may remain weak, the incontinence ceases and the agitation or torpor disappears, in many cases the general condition is remarkably improved. In 21.4 per cent of the 80 cases of which a special report is made the patients were completely cured so that it might be said that their paresis became only a memory. In 45 per cent improvement was sufficient to admit of the patients resuming their occupations, especially if the work did not demand much initiative. Ducoste is convinced that while most of the symptoms dur-

ing cerebral impaludation are due to general infection, there is a specific encephalic process evolving at the same time, to which results are attributable.

Epidermophytosis (Athlete's Foot) a Cause of Serious Streptococcal Infections.—John Homans, writing in the *New England Journal of Medicine*, May 19, 1932, cvvi 20, asserts that streptococcal infections, entering by way of local lesions of epidermophytosis, are now so very common that any lymphangitis or cellulitis of the leg not clearly traceable to infection of a hair follicle or some trivial wound is almost certain to be due to this cause. Medical men are by no means aware of the frequency of these infections. At the time this paper was written there were in the wards of the Peter Bent Brigham Hospital two boys incapacitated for several weeks by streptococcal infections grafted upon epidermophytosis. Such lesions are by no means confined to boys and girls, but are seen in adults as well. The chain of events in a case described by Homans was as follows: epidermophytosis secondary hemolytic streptococcal infection, acute lymphangitis and lymphadenitis, cellulitis, secondary abscess of the inguinal and popliteal lymph nodes and a deep abscess of the thigh. This represents, short of a fatality, the high water mark of such infections. A mild form of the disease might be marked by a few days of lymphangitis of the blushing reticular sort without extension to the groin, or of the common tubular sort leading to a swollen inguinal lymph node. Even in such cases, chills and considerable fever would be expected but, more often than not, no local change in the region attacked by the epidermophytosis would be evident. The cure of epidermophytosis is notably difficult, but its spread can undoubtedly be checked if not altogether controlled by certain preventive measures. These include the general use of a powder containing 20 per cent sodium thiosulphate in boracic acid, the installation of a shallow pool, filled with an appropriate fungicide, through which everyone using swimming pools and showers must walk, the use of rubber slippers, the prolonged steam sterilization of towels, etc. A more general realization of the dangers attendant upon the disease should lead to a widespread support of such precautions and a continued search for the ideal treatment of the local lesions. Honan describes the method of identifying the fungus by means of direct microscopical examination of material from the eruption and by means of cultures.



LEGAL



DR. JOHN A. CARD

Dr. John A. Card, Speaker of the House of Delegates of the Medical Society of the State of New York, died at his residence in Poughkeepsie on the 28th of June. It is almost impossible to believe that John Card has left us forever. In his death every member of the State Society has lost a true friend, and the Society itself has sustained an irreparable loss. It is only fitting and proper that in this issue of the Journal the column assigned to your Legal Counsel for the presentation of legal topics should contain a remembrance of our deceased friend. He was extremely interested in the Legal Department of your Society.

For many years, as Chairman of the Insurance Committee he rendered magnificent service in the many problems that came before him, and he was especially active and interested in educating the members of your Society in the benefits of our group plan of insurance. It was his custom to go about the State every year and speak to the various County Societies and District Branches on this subject.

When the late lamented Dr. E. Eliot Harris was compelled by declining health to resign the office of Speaker, the mantle which he had worn so ably for many years was placed on the shoulders of John Card. How well he performed this arduous and difficult task is known to all of you. He possessed the faculty of breaking the

tension of any situation with a well-chosen, timely and humorous remark.

Dr. Card was indeed a lovable character. Thoughtful, kind and generous, he spared neither time nor energy in his devotion to the ideals for which your Society was founded. As a physician he was very highly regarded in his chosen field, that of pediatrics, and he won the respect, admiration and affection of his patients and his colleagues. He served the County of Dutchess for many years as Coroner, and only recently had been appointed to the post of Medical Examiner in that County. In the capacity of Coroner and of Medical Examiner, he was called upon to testify many times in the courts of this State in important criminal cases, and his character, integrity and ability won him the respect of judges and juries alike.

In his personal life John Card was a delightful social companion. It was a treat and a pleasure to watch him play the role he loved so well and filled so delightfully, that of host to his numerous friends. John Card is dead, but the memory of our associations with him will live forever.

"Green be the turf above thee,
Friend of my better days,
None knew thee but to love thee
Nor named thee but to praise."

FRACTURE OF TIBIA AND FIBULA

In this case a seventeen year old girl had met with an automobile accident and was taken to a private sanitarium where a local physician examined her, and finding her leg to be severely fractured called upon the defendant, a specialist in orthopedic work, to take charge of the case. He examined her and found a compound fracture of the tibia and fibula. As there was no x-ray available at the said sanitarium, he had her removed with the leg in temporary splints to another sanitarium where an x-ray and a fluoroscope were available.

X-rays showed a marked compound comminuted fracture of the tibia and fibula. The tibia showed an oblique fracture with displacement anteriorly and inward with a small piece lying between the two fragments. The fibula showed a double fracture with displacement and

overlapping. The doctor considered an open operation but decided to attempt closed reduction under the fluoroscope. While complete anatomical reposition was found impossible, the last position under the fluoroscope showed correction of the lateral displacement, with but slight overlapping on lateral view. A plaster cast was applied extending from the toes to the knee, and an x-ray taken through the cast showed satisfactory position.

The doctor saw the patient the next day, bivalved the cast, found no bleeding and the leg in good condition. The doctor ordered the wound to be dressed daily and an application of light to be given to avoid possible infection. The patient remained in the hospital for about two weeks and was seen daily by the doctor. During this time the wound was dressed daily and lamp

treatment and short time exposures to the air were given. Before the patient left the hospital other x-rays were taken which showed that the position obtained at the reduction was retained. The patient then returned home under the care of her family physician. About a month later the doctor next saw the patient. His examination then showed a straight leg, no swelling, and freedom of the ankle. He took the leg out of the cast and tested it, and it showed some evidence of union. He advised further baking and massage and ordered a brace. He also ordered x-rays but the patient did not have them taken.

About three weeks later the doctor next saw the case, and upon a physical examination he found some union, good shape and no shortening. With a brace the patient at that time was able to walk. Again the doctor ordered x-rays, and again they were not taken.

Four weeks later the patient was again seen by the doctor and at that time she had had x-rays taken. She was then walking with a cane, and had against the advice of the doctor attempted to dance. She was able to bend down; her knees were at the same level; there was no lateral deviation; but there was some shortening. The

x-rays showed all the fragments in place and callus formation. There was evidence of the beginning of bony union, and no evidence of osteomyelitis. There was, however, an overlapping. He at that time informed the patient that the shortening might be bettered by an open operation.

Some days later she went to another specialist in orthopedic surgery and an open operation was performed, and some months thereafter a bone graft operation.

Suit was brought against the doctor for malpractice, claiming that through his entire treatment he had failed to properly care for the case so that as a result at the end of about three months there was still no union in the leg and there was malposition of the fragments so as to require subsequent operations.

The case was tried before a judge and jury and the testimony took three days to be put in for both sides. At the conclusion of the entire case the judge directed the jury to take a recess, so that counsel could argue the defendant's motion to dismiss. After an extended argument the court granted the motion to dismiss, thereby concluding the suit in favor of the doctor.

REMOVAL OF APPENDIX DURING OPERATION FOR HERNIA

A young man consulted the defendant physician with respect to a condition of hernia from which he was then suffering, and the doctor on examining him found that he had an inguinal hernia and suggested an operation. The patient consenting, the doctor had him enter a hospital where he was put under a local anaesthetic. The doctor made an incision into the sac and found the patient's appendix badly inflamed. The patient at that time was completely conscious, talking with the doctor, so the doctor told him that the appendix was in the hernial sac and would have to be removed. The patient told the doctor that he should by all means take it out. The doctor thoroughly cocaineized the area around the appendix and removed it. He then closed the wound without a drain, and the patient remained under the doctor's care for the next three weeks, at the end of which time the patient went home from the hospital with the wound completely healed.

The patient thereafter started suit against

the doctor, setting up two separate causes of action. The first claim of the patient was that the doctor had advised him that the hernia operation would be a simple one and would require only a few days' hospitalization, but that the defendant negligently cut too deep into the plaintiff's body so as to cause inflammation for a period of several weeks, with resultant permanent injury. The second claimed cause of action against the doctor was that the doctor, without the consent of the patient, improperly and unlawfully removed the patient's appendix although he was not suffering from any appendix trouble at the time.

The case was noticed for trial, and when reached for trial on the calendar call the plaintiff was not prepared to proceed with the trial of the action. The defendant's attorney, therefore, moved to dismiss the complaint and the motion was granted, thus terminating the matter in favor of the defendant.



NEWS NOTES



JOHN ALLING CARD, M. D.

Doctor John Alling Card, who died on June 28, 1932, was born in Poughkeepsie, N. Y., May 20, 1877, the eldest son of the late Silas E. and Eva Belle Alling Card. After graduating from the Poughkeepsie High School at the age of 16, he entered Columbia University. He completed his medical course in the New York University Medical College in 1898, and served as an interne on Blackwells Island and Bellevue Hospital. In the fall of 1898 he returned to Poughkeepsie as a general practitioner. He served as physician for the City of Poughkeepsie, and made a special study of pediatrics, doing bedside work with the late Dr. Holt at the Babies Hospital in New York for eight years.

Dr. Card was attending pediatrician on the staff of Vassar Brothers Hospital and consultant in this specialty on the staffs of St. Francis and Bowne Memorial Hospital, Poughkeepsie, N. Y., and Northern Dutchess Hospital at Rhinebeck, N. Y. He organized the child welfare work of the City of Poughkeepsie during 1907, and gave of his time liberally in developing well-baby clinics. For many years he had been in charge of the well-baby clinic sponsored by Mrs. Vincent Astor, at Rhinebeck, N. Y. He was a member of the American Society of Teachers of Pediatrics.

When the Poughkeepsie Board of Health developed a department of Child Hygiene in 1907, he was made its Director and held that position until the time of his death.

He was elected Coroner of the County of Dutchess, November, 1917. He held this office, or that of Medical Examiner, up to the time of his death.

Dr. Card served in many legal cases throughout this section as an expert witness and was considered by the legal profession as well as by physicians, to have great ability along that particular line and to render testimony which was just and impartial. Both lawyers and judges often sought his advice, and gave great weight to his opinions in the adjustment of their cases.

Dr. Card had been an outstanding man in the Dutchess-Putnam Medical Society since the early days of his practice of medicine in Poughkeepsie, and had served as its secretary, president, chairman of the Committee on Legislation, and chairman of the Committee on Public Relations. Seldom was he absent from a meeting. He was first secretary, and then later president, of the Poughkeepsie Academy of Medicine which some years ago was merged with the Dutchess-Putnam Medical Society. His leadership was recognized by all members of the Society.

In 1925 he was president of the Second District Branch of the Medical Society of the State of New York.

He has served continuously as member of the House of Delegates of the Medical Society of the State of New York from the Dutchess-Putnam Medical Society for the last sixteen years. When he was president of the Second District Branch in 1925 he was appointed to the Executive Committee of the Medical Society of the State of New York, and has been continuously reappointed year by year, and was serving in that capacity at the time of his death.

He was elected Vice-Speaker of the House of Delegates of the Medical Society of the State of New York in 1926 serving two years, when by reason of the illness of the Speaker, Dr. E. Eliot Harris, he was advanced to the office of Speaker at the annual meeting in Albany in May, 1928; and has since been elected annually to that office. He has served continuously as a Delegate to the American Medical Association since 1926.

The social side of Dr. Card's life was expressed in his membership in the leading fraternal and civic organizations of his native city.

The medical profession and the people of Dutchess County will miss Dr. Card; and it will be a long time before the community can develop another such masterful leader in professional, civic, and social life.

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DR. GEORGE W. ROSSMAN

Dr. George W. Rossman, who was identified with the practice of medicine in his native village of Ancram, Columbia County, for three score years, died on June eleventh, aged

ninety-one years. His father, Dr. Peter P. Rossman, had begun the practice of medicine in Ancram in 1825; and the son of Dr. George W. Rossman, Dr. Clark G. Rossman, still

practices in Hudson. The practice of the three generations of doctors therefore extends over a period exceeding a century, all spent in Columbia County. (See this Journal, February 1, 1929, page 174)

The *Hudson Register* of June 11, 1932, contains the following note regarding Dr. Rossman's character:

"Dr. Rossman was zealous in educational matters and good government. He kept aloof from office holding, his chief desire being to maintain a foremost position in his profession, which he did for many years, before his advanced years brought about retirement. He took much interest in historical matters of this section."

SUFFOLK COUNTY

The regular semi-annual meeting of the Suffolk County Medical Society was held at the Brunswick General Hospital, Amityville, N. Y., Thursday, April 28, 1932. President Dr. Charles C. Murphy, presiding. About 75 members and guests were in attendance.

Dr. W. H. Ross, for the Committee on Medical Economics, reported on the agreements with the County Commissioner of Welfare in regard to the treatment of the poor by private doctors and hospitals, and the excellent results that have been attained.

Dr. Frank Overton, for the Committee on Public Health and Medical Education, reported as follows:

"The Public Health Committee of the Suffolk County Medical Society has two functions:

"1. To suggest the measures which public officials should adopt in order that medical service shall be available to all classes of people.

"2. To promote the practice of preventive medicine by physicians.

"The first has been carried out to perfection by the accomplishments of the Suffolk County Medical Society along three major lines:

(a) The establishment of the County Tuberculosis Sanatorium.

(b) The establishment of the County Health Department.

(c) The development of a workable agreement of the physicians with the Commissioner of Welfare in regard to the care of the indigent.

"The County Health Department provides a way for giving forms of medical service to those who formerly could not obtain such service. The best example of such action during the last six months has been that providing clinics for treating crippled children. The committee considered and approved a plan by which Dr. F. S. Child of Port Jefferson should conduct clinics for crippled children at the expense of the County. This work is done in Suffolk County more smoothly and efficiently than in any other county.

"The County Health Department has relieved the medical profession of Suffolk County of the exasperating details of medical administration.

If the Suffolk County Medical Society suggests a necessary method in medical administration, the County Health Department adopts it.

"The second object of the Public Health Committee—that of the practice of preventive medicine—has consisted largely in education. The Suffolk County Medical Society has never adopted the methods of super-salesmanship. It has not made extravagant promises of super-health to follow the observance of ritualistic precautions. It has not adopted catchy slogans of half truths, such as 'Sickness is a crime.' It has made its appeal along the lines of scientific medicine, and the people have responded because they have faith in their physicians, and believe that they can do what they say they can do. The faith of the people in the medical profession of Suffolk County is the best guarantee of a high standard of public health."

Dr. L. F. Garben, for the Child Welfare Committee, reported on diphtheria prevention.

The following doctors were elected to membership:

Drs. Thomas Mumford Winston, Sayville; Isadore Schnap, Kings Park; George E. Carlin, Amityville; Joseph L. Byrne, Bay Shore; and William A. Gollick, Kings Park, and by transfer from Kings County Medical Society, Dr. Joseph H. Kris, of Eastport.

Dr. W. H. Ross read tributes to eight members who had died during the past year.

Dr. J. B. Healey reported for the Public Relations Committee and said:

"The best and only way to provide for the well being of the citizen is to see that we look out for the well being of the physician. Organized health work is important and must go on, but just as important is the individual work of the practitioner, whose efforts are not to be hampered by too much competition in the way of free and nominal pay clinics. Many of the hospitals today have gone into the business of the practice of medicine. They contract with corporations to provide medical care at a fixed rate. All this is done at the expense of the doctor. It is not fair."

The members dined together at noon as guests of the Hospital.



NEWS NOTES



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KINGS COUNTY

From the June Bulletin of the Medical Society of the County of Kings .

The Month of May: Over the desks of the personnel of the County Society flows an ever-increasing amount of work. The activities of the offices of the Secretary, the Treasurer, the Librarian, the Committee on Public Health, the Committee on Medical Economics, the Committee on Legislation, and of the Committee on Illegal Practice increase as the committee work increases, and the profession expresses its opinion of what should constitute the County Medical Society's procedure. The increasing number of committee meetings and conferences shows no signs of abatement and indicates that committee work will continue during the summer recess.

The Director of Medical Activities was in the field a considerable portion of the month of May. He visited farms whose milk is certified by our Milk Commission; attended the annual meeting of the American Association of Medical Milk Commissions in Washington, D. C.; attended the annual meeting of the State Medical Society in Buffalo; visited a section of Brooklyn in which it is rumored that a dispensary is to be established; addressed the nurses of the Metropolitan Life Insurance Company; addressed a luncheon group on the subject of medical facilities of the Bedford section in which our building is located; and moved around quite a bit in planning for the Spring meeting of the Second District Branch.

The Society office has not been informed whether appropriations will be made available for the City to provide for a continuance of home relief and thus maintain service to the acutely ill. But very few bills for professional services have been submitted for approval of payment.

The month has been no different than usual with regard to inquiries from the laity. Some have been answered, some have been referred to committees for consideration and some have been forwarded to the State Department of Education by the Committee on Illegal Practice. The Department has continued its cooperation with this Committee, reporting from time to time.

The Brooklyn Cancer Committee received the resignation of Mr. Matthew Sloan as Treasurer at its last meeting, and elected the Director of Medical Activities to this position, as well as that of Secretary of the Committee.

The Coordinating Committee of the Five County Medical Societies did not hold its regular meeting in May because of the State Society meeting in Buffalo. It will meet in June. The Coordinating Committee's statement with regard to the Cullman report was submitted by the House of Delegates of the State Society following its approval by the various individual county societies. The Coordinating Committee, at its April meeting, appointed the President of Kings County chairman of a subcommittee to consider the municipal hospital law. This subcommittee met at the chairman's office and was composed of four representatives from New York County, three from Bronx, three from Queens and seven from Kings. The subject is being considered for the purpose of reporting to the June meeting.

The Committee on Medical Economics has held one meeting since the Society meeting in May, and is working on the many suggestions received from the Society and individual members of the profession.

ROCKLAND COUNTY

The June meeting of the Medical Society of the County of Rockland was held on Wednesday, June 22, 1932, at the Rockland State Hospital, Orangeburg, and was unusually well attended by the physicians of the county. There were also present an invited group of hospital workers and public health nurses.

Following a delightful luncheon provided by the hospital staff, the scientific program was presented.

Dr. Russell E. Blaisdell, Superintendent, gave the address of welcome, and described the history of the hospital and the function of the various units in the institution, as well as the future plans for development.

Dr. Henry M. Chandler, First Assistant Physician, explained the importance and proper use of

the forms for commitment of the insane prescribed by the Department of Mental Hygiene, copies of which were distributed to all present. Dr. Chandler showed that there are several methods of entering patients in the hospital besides a formal commitment on an adjudication of insanity. Patients may be admitted on their voluntary consent, provided the physician makes the proper application, as he would to an ordinary medical and surgical hospital.

Dr. A. M. Stanley, Clinical Director, and his staff, gave a clinical presentation of typical types of the more common mental disorders.

Following the scientific session, many of the physicians and guests accepted an invitation to inspect the institution.

W. J. RYAN, *Secretary.*



THE DAILY PRESS



EXPERIMENTAL WITCHCRAFT

Governmental authorities three or four hundred years ago did not put the theory of witchcraft to the test of actual experiment, probably because they feared that the test would really work. But the *New York Herald Tribune* of June 20 describes two tests which have been made recently as follows:

"The experimenters who gathered last week atop the Brocken in Germany to try to turn a goat into a man by ancient witchcraft, the directions for which were dug laboriously out of long forgotten tomes, were the second modern group to take witchcraft seriously enough to try it.

"A few weeks earlier, in Accra, Africa, authorities of the Christian religious denominations offered a prize to any native wizard who could make good in the presence of a Christian committee the wizards' familiar claims to open locked boxes, to eat fruit without approaching it or to turn themselves into animals. According to latest reports, no wizard has taken up the challenge. Perhaps, like the experimenters on the Brocken,

the wizards were persuaded really to try their spells in preparation for the test and found them worthless.

"It is a significant philosophic landmark that people of some distinction would think it worth while to try the goat-man metamorphosis, not because they either expected it to work or expected it not to, but because they deemed the result of a trial of some importance. Whatever men may say nowadays that they deem the test of truth, it is evident that the world finds this test more and more in the simple device of try it and see.

"There is deep interest for the student of folklore in this myth of metamorphosis which lies behind both the Brocken experiment and the challenge to the African wizards. Every race has this myth, much as all have their myths of fire and of the flood. It is coming to be believed too, that there is no widespread myth without some kernel of truth behind it. Ogres may be recollections, Mr. Wells tells us, of Neanderthal man."

INFLUENZA SET TO MUSIC

The *New York Herald Tribune* of June 23 has the following comments in an attempt at a musical interpretation of the symptoms of influenza which won a place in the exhibit of the Canadian Medical Association:

"Complaints that modern jazz is irritating enough to induce a nervous headache or an attack of St. Vitus's dance are not uncommon. But to reverse the situation and find a disease honored with a musical interpretation is a rarity. With influenza as his theme, a Canadian doctor has written a piece of music in symphonic form called 'Influenza—a Tone Poem.' The manuscript is exhibited in Toronto as part of a 'hobby display' in connection with a meeting of the Canadian Medical Association.

"Its four movements are described by the composer as: Preliminary symptoms; Onset of the disease; The disease, and Convalescence. Clarinets interpret the 'chills-and-fever motif' of the early stages. A jew's-harp vividly suggests a pounding headache. The third movement reaches its climax in a brilliant 'delirium crescendo.' The weary but peaceful atmosphere of convalescence is expressed in the 'stately and noble' measures of the finale.

"If the popular success of 'Influenza' depends on the number of people who have suffered from attacks of it, the tone poem should be an instant hit. Were it possible to play the music in a realistic enough way to insure immunity for the audience, the doctor's fortune would be made."

AUTOMOBILE DANGERS IN NEW YORK CITY

The *New York Times* of July 7 describes the excellent record of New York City in fatalities caused by automobiles, and makes the following comment:

"While there were a few more deaths here in the first four months of this year than in the

same period of 1931, New York still seems able to keep down motor vehicle casualties better than most of the other big cities. The 1932 rate for the twelve largest cities, as quoted in the latest Police Department Bulletin, is shown in the following table:

MOTOR VEHICLE FATALITIES

Cities	1932	Rate
1 Boston, Mass	107	10.7
2 New York City	145	14.5
3 Buffalo, N. Y.	153	15.3
4 Milwaukee, Wis.	155	15.5
5 Philadelphia, Pa.	170	17.0
6 Baltimore, Md.	179	17.9
7 Detroit, Mich.	200	20.0
8 San Francisco, Cal.	204	20.4
9 Cleveland, Ohio	218	21.8
10 Pittsburgh, Pa.	220	22.0
11 Chicago, Ill.	263	26.3
12 Los Angeles, Cal.	302	30.2

"The rate is based upon the fatalities for each 100,000 of population. Only Boston has a better record than New York. That city has had the

benefit of expert traffic advice from Professor McClintock and his Harvard associates, and of continuing police efforts at improved control. Considering the intricate street pattern of Boston, they seem to have been remarkably successful.

"Whatever may be said in criticism of this city's plan from the point of view of housing, esthetics and even transportation, the shuttle system of traffic control to which it readily lends itself does appear to make for greater traffic safety.

"The efforts of our police officials are to be commended. Amateur traffic reformers from the West often write letters to the editors of Eastern newspapers describing how much better they order these things in California cities, especially Los Angeles. Unfortunately, the statistics are against them."

CHOLERA A CENTURY AGO

The New York *Sun* of July 1 has the following editorial on the observance of Independence day a century ago:

"Of another July 4, that of one hundred years ago, Philip Hone made this regretful entry in his diary:

"It is a lovely day, but very different from all previous anniversaries of our independence. The alarm about the cholera has prevented all the usual jollification under public authority. There are no booths in Broadway, the parade which was ordered has been countermanded, no corporation dinner, no ringing of bells. Some troops are marching about the street, upon their own hook. I suppose most of the stores are closed and there is a pretty smart cannonade of crackers by boys, but it is not a regular Fourth of July. The disease is here in all its violence and will increase. God grant that its ravages may be confined and its visit short!"

"It was a sad year for New York. The cholera

having swept Europe, had reached Quebec from Ireland and spread with terrifying rapidity. It first appeared in New York in a house on Cherry Street near James Street on June 25. By July 3 the Board of Health felt it necessary to appoint a special medical council consisting of Dr. Alexander H. Stevens, Dr. Joseph Bayley, Dr. Gilbert Smith, Dr. John Neilson, Dr. William J. McNeven, Dr. Hugh McLean, Dr. Richard K. Hoffman and Dr. Anthony L. Anderson. New York's population had just turned 200,000, there were 5,835 cases of cholera with 2,996 deaths, although thousands of persons left the town. Mayor Walter Bowne had a hard job. He and his fellow citizens did their work to the best of their ability. Wilson wrote, in the 'Memorial History': 'The conduct of the gentlemen of the city in this time of distress was beyond all praise.' If the gentlemen of the city in the present time of trouble continue to follow the course they have kept, another historian will write as well of them."

THE PSYCHOLOGY OF MUSIC

If you were asked to make out a program for an outdoor concert in the Park and wished the music to comfort and cheer the listeners in this time of depression, would you choose sad or lively tunes? A Boston conductor approaches the problem in a scientific way with the result that is described by the *New York Times* of July 7, as follows:

"Arthur Fiedler, conductor who is preparing for Boston's open air Esplanade concerts, has been deluged with suggestions for his programs. Among the hundreds of letters received have been many dealing with the depression and a proper musical recognition of it in concerts.

"Instead, Mr. Fiedler visited a psychologist of note, who, to his amazement, suggested that "sad music" was most fitting to those who feel depressed and worried.

"A grieving person is to be compared with a person in a depressed mental state," said the psychologist. "A grievous person desires to be alone with his grief-stricken thoughts or in sympathetic company."

"Play gay music to cheer him up, and instead of cheering him you outrage his feelings just as much as if you introduced frivolous music at a funeral of one of his dear ones."



BOOK REVIEWS



MANUAL FOR THE JEWISH DIABETIC. By WILLIAM S. COLLENS, B.S., M.D. Octavo of 138 pages, illustrated. New York, Bloch Publishing Company, 1931. Cloth, \$2.00.

In the older routine diabetic diets one almost invariably encountered bacon as part of the daily allowance. To the orthodox Jew this was just adding insult to injury. Recently high fat diets have not been so much in vogue and it is quite easy now to arrange a diet for a Jewish diabetic without using bacon and without adding cream or butter to the meat meal. Now along comes Dr. Collens and adds gefilte fish, Hungarian goulash and blintzes. This ought to make the Jewish diabetic live to eat instead of just eating to live.

This book contains one whole chapter entirely devoted to typical Jewish recipes which not only satisfy the mandates of the Jewish religion, but tickle the Jewish palate. This will be of distinct help to the patient, the doctor and the dietitian.

The rest of the book contains the material usually found in most books of this nature. This is presented in a clear intelligent manner and makes easy reading. The illustrations are well done and are extremely helpful.

The only criticism one could make would be that in some parts the information is too technical for the average patient.

BENJAMIN DAVIDSON.

THE NOTE-BOOK OF EDWARD JENNER. In possession of the Royal College of Physicians of London. With an Introduction on Jenner's Work as a Naturalist by F. DAWTREY DREWITT, M.D., F.R.C.P. Octavo of 49 pages, illustrated. New York, Oxford University Press, 1931. Boards, \$1.25.

This historic manuscript Note-Book of the celebrated Edward Jenner, has now appeared in printed form for the first time. The original was presented to the Royal College of Surgeons by Dr. Jeffrey Marston in 1888, but there is no record of how Dr. Marston came into possession of the Note-Book.

The notes made by Jenner covered the period extending from the year 1787 to 1806, and contain his important contribution as a naturalist, namely, the study of the habits of the cuckoo. With infinite patience and minute observation, he worked out the manner in which the young cuckoo ruthlessly destroys young birds of other species by throwing them out of their own nests. Jenner also records certain observations on distemper in dogs and on the occurrence of hydatids in various animals. In neither case, however, did any important addition, to our knowledge, result from these last two studies. The book is of interest to the medical historian and to the naturalist.

JOSEPH C. REGAN.

NOTES ON CHILDREN'S NURSING. By MARGUERITE C. ERXLLEN, R.N., B.S. Octavo of 242 pages, illustrated. Philadelphia, F. A. Davis Company, 1931. Flexible cloth, \$2.00.

This is an excellent book for the guidance of nurses in the care of children. It is the result of eight years' intensive study and observation of children's nursing by the author.

The book is divided appropriately into three main parts. Under General Routine Duties is appropriately grouped description of the Admission and Discharge of Patients, Daily Hygienic Procedures, Charts and Reports, Bed-Making, Methods of Bathing the Child, and of making the child comfortable, and finally, Special Nursing Technique under various conditions.

The Preparation of Foods includes two chapters, one dealing with Infant Feeding and the other the Preparation and Serving of Food. The third portion of the book, devoted to Procedures and Treatments, is particularly important, and gives an excellent description of the various methods used in the nursing of children.

This is a timely and a useful book that should be of value to all those who are responsible for the care of convalescent and sick children. It is attractively printed and bound.

JOSEPH C. REGAN.

ALLERGY AND APPLIED IMMUNOLOGY. A Handbook for Physician and Patient, on Asthma, Hay Fever, Urticaria, Eczema, Migraine and Kindred Manifestations of Allergy. By WARREN T. VAUGHAN, M.D. Octavo of 359 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, \$4.50.

While intended solely as a hand book for the patient and not as a text book for the physician "ALLERGY" by Warren T. Vaughan, is a book well worth reading for both. It is written in a clear, distinct style with a delightful vein of humor.

The discussion of hay fever is very complete and answers all possible questions. He describes the phenomenon of Pollination and shows photographs of the common plants. Charts describe the geographic distribution and pollinating seasons of plants. He describes the pre-seasonal and perennial types of treatment.

The chapters on foods are fascinating. He groups the foods according to evolutionary relationship and shows the advantages of group testing. The Elimination Diet and Food Diaries will prove helpful and instructive for cases of food sensitization.

The chapter on general instructions should be read and re-read by Allergic patients for it contains simple and sensible rules. It is a delightful and instructive treatise that can be easily understood.

DOROTHEA E. CURNOW.

HANDBOOK OF SKIN DISEASES. By FREDERICK GARDNER, M.D. Third edition. 12mo of 283 pages, illustrated. New York, William Wood & Company, 1931. Cloth, \$3.50.

This book of 273 pages has for its purpose the giving of general information regarding all but the rarer skin diseases to the general practitioner and the medical student. It is intended that here one shall find sufficient information to differentiate these various diseases, and includes a few suggestions as to their treatment. Having arrived at the diagnosis, reference may readily be made to the more comprehensive texts in dermatology for a more complete description and discussion of the varied types of therapy considered to be effective.

The book is well printed in good type which tends for easy reading.

E. ALMORE GAUVAIN.

MAN AND MICROBES. By SIANHOPE BAYNE-JONES, M.D. 12mo of 128 pages, illustrated. Baltimore, The Williams & Wilkins Company, 1932. Cloth, \$1.00. (A Century of Progress Series.)

This little book is one of the Century of Progress Series, the purpose of which is to "depict the last hundred years of intellectual endeavor."

It is written for the intelligent layman, who can understand the chemical and physiological terms the author uses, and will enable such a reader to understand the useful and necessary things accomplished by bacteria, as well as the destructive ones.

ISIDOR COHN.

A TEXT-BOOK OF PSYCHIATRY FOR STUDENTS AND PRACTITIONERS By D K HENDERSON MD FRPS and R D GILLESPIE, MD, MRCP Third edition Octavo of 595 pages New York, Oxford University Press 1932 Cloth, \$4 50 (Oxford Medical Publications)

This book from the first created upon the reviewer a favorable impression which gained strength with the progress of the review. The first six chapters are devoted to useful preliminary considerations covering a review of the care and treatment of mental cases, classification, etiology, examination methods, general symptomatology, and psychopathology, all of which quite logically lead up to a consideration of the definite reaction types. The latter, it is believed should have a strong appeal, particularly to those who have studied in the New York State Hospitals.

The psychotic reactions are discussed from a broad and conservative viewpoint with ample attention to various influencing factors and the interpretation of mechanisms involved. The organic syndrome is expressed in a way to give the reader a good understanding of the fundamental changes in these cases.

A chapter on Psychiatry of Childhood should be a useful guide to the care and treatment of problem children. Occupational Therapy is given a place of deserved importance and many useful suggestions are made. The book is conveniently arranged for reference or study purposes and should be a most helpful addition to any library.

A E SOLER

RECENT ADVANCES IN BACTERIOLOGY AND THE STUDY OF THE INFECTIONS By J HENRY DIBB MB FRCP Second Edition Octavo of 476 pages illustrated Philadelphia, P Blakiston's Son & Co Inc 1932 Cloth, \$3 50

The excellence of the previous volume with the same title published in 1931, has been surpassed in the 1932 edition. The present volume accomplishes somewhat more than the title indicates since most valuable reviews of current topics in the fields of bacteriology and infections are discussed. The subjects are presented in the author's lucid, terse and entertaining style. They are not colored by opinionated or personal reactions, and impress the reviewer as a fair and unprejudiced service of the facts as they exist, predicated on knowledge at hand. The reading matter is refreshingly free of speculation and imagination. Of especial interest are the chapters on the filter passing viruses and Rickettsia. For the physician and bacteriologist who wishes to keep acquainted with up to the minute knowledge in progressive medicine, this work is invaluable.

MAX LEDERER

THE NURSE'S MEDICAL LEXICON For the Use of Graduate and Student Nurses of Premedical and Dental Students of the General Public By THOMAS LATHROP STEEDMAN A.M. MD Octavo of 629 pages New York William Wood and Company 1931 Cloth \$2 00

The author has succeeded in his effort to perfect a practical medical dictionary, applicable to all branches of nursing.

The book is attractively bound and contains an appendix of Weights and Measures, Temperature Scales, Poisons and Antidotes and a Time Table of Infectious Diseases.

The words and terms are simply defined direct and easily interpreted. They include descriptions of various recognized methods of operations and treatments for correction diseases, medications, and their use and many other expressions pertaining to medicine and nursing.

In only one instance does the reviewer question the adequacy of a definition and that is the one given for 'public health nurse'. The author has not defined the accepted conception of this type of nurse, which should

include the functions of the 'health nurse' and "district nurse."

However, the reviewer does feel that the book is a fine contribution to the profession and to those outside who have occasion to consult it.

MARION BALLANTYNE.

PSYCHOLOGY AND PSYCHIATRY IN PEDIATRICS The Problem Report of the Subcommittee on Psychology and Psychiatry Bronson Crothers, MD Chairman White House Conference on Child Health and Protection Octavo of 146 pages New York, The Century Company, (c 1932) Cloth, \$1 50

This volume is just what the title implies—a report. One of its contributions is the attempt made to partially defend the general practitioner, in stating that they are capable of doing considerable good, while at the same time they are criticized because they so often neglect the emotional problems of children. It recommends that the large group of general practitioners make some effort to deal with the adjustment problems of their families under their professional care.

In the appendix excellent descriptions of outstanding groups and clinics are given. Particular reference is made to The Merrill Palmer School—Institute for Child Guidance—and Essex County Juvenile Clinic. The reviewer found these outlines to be highly instructive reading.

H R MERWARTH

CLINICAL ATLAS OF BLOOD DISEASES By A PINEL, MD MRCP and STANLEY WYARD, MD, MRCP Second edition Octavo of 105 pages, illustrated Philadelphia P Blakiston's Son & Co Inc, 1932 Cloth, \$4 00

The essential features of this valuable little book of 105 pages are its glossary, the beautiful illustrations of typical blood pictures and the conciseness, brevity and clarity of the text.

The glossary is of inestimable aid to the busy clinician or surgeon. In it one discovers clear word pictures of haematologic conditions only to be found hidden among the maze of facts in the larger volumes and likely to be overlooked. The illustrations are true to the slide. No greater tribute can be given.

It may be pointed out that the picture (plate 10) designated Chlorosis looks to all intents and purposes like Pernicious anemia. It were better that it be left out because it is confusing. It would be less confusing also that the term 'Glandular Fever' be confined to the entity discovered by Pfeiffer in 1889, in which there was a leucocytosis and neutrophilia as a part of a Grippe or influenzal epidemic with glandular enlargement and fever. The terms Infectious Mononucleosis and agranulocytosis should not therefore be confused with Glandular fever.

One may say that the clinician who is without this little volume is certainly without that last concise word in Haematology.

MAURICE MORRISON

MANUAL OF BACTERIOLOGY By ROBERT MUIR MA, MD and the late JAMES RITCHIE MD MA Ninth edition revised by CARL H BROWNING MD, DPH, and THOMAS J MACKIE, MD DPH 12mo of 866 pages, illustrated New York Oxford University Press 1932 Cloth, \$4 75 (Oxford Medical Publications)

This is the ninth edition of the British text book brought up to date by Professors Browning and Mackie. It covers all the usual ground very carefully and completely—morphology, biology, methods of cultivation and study etc.

Included in the study of the individual bacteria is a description of the immunological reactions, uses of vaccine and antisera, and methods of diagnosis.

In discussing classification of bacteria the authors briefly mention the classification of the Society of American Bacteriologists, but throughout the book, use both the old and the new terminology.

ISIDOR COHN



OUR NEIGHBORS



COLLECTION AGENCY, LANE COUNTY, OREGON

The June number of *Northwest Medicine* contains an article on what the Lane County Medical Society, Oregon, does for its members. Lane County has a population of about 55,000 scattered over an area of 4,000 square miles. The principal activity described is that of cooperation with the Dental Society in the collection of bills. Out of this grew the establishment of headquarters for the societies and educational work among the people. The article says:

"In the latter part of 1929 conferences were held by the officers of the Lane County Medical Society and the Southern Willamette District Dental Society with a view of combining forces to effect a new organization which would more nearly approximate present day needs. The recommendations which were finally adopted were briefly that space for a permanent central headquarters for the two societies be secured in a ground floor location on one of the principal downtown streets of Eugene, and that a beginning be made toward the development of a strong economic and public relations setup for the two societies.

"The first economic problem which was attacked was the improvement of collection methods for the physicians and dentists of Lane County by the establishment of a centralized credit and collection bureau in the headquarters office, under the name of the Doctor's Official Credit Bureau.

"As delinquent accounts were turned in for collection a master credit file card was made up and placed in the bureau files. Subsequent accounts concerning the same individual are recorded and put on these master cards. The information in the bureau files was then made available to the supporting physicians and dentists by telephone or mail upon their request.

"In order to facilitate further the dissemination of credit information, the publication of a mimeographed monthly bulletin was begun. This bulletin is issued in the joint name of the medical and dental societies. The secretaries act as news editors with our office manager serving as the managing editor and preparing the material. A list of the names of all delinquent debtors whose accounts have been received for collection by the bureau during the previous month, together with the amount of their indebtedness, is published in a special section of this bulletin. The bulletin also carries notices of the medical and dental societies and hospital staff meetings, news concerning the activities of the two societies and various other

items of interest to physicians and dentists. At the end of six months a special bulletin is issued, giving a list of all debtors which the bureau records show as owing two or more physicians or two or more dentists.

"As a further feature of our campaign to educate the public to pay their physician and dentist promptly, several paid advertisements were run in the local newspapers, announcing our intention of publishing in the near future a medical and dental credit rating book, and urging people owing their physician or dentist to make immediate arrangements regarding payment.

"To further assist the physician and dentist in our community to improve the business methods used in their own offices and to correlate more closely the business office of the doctor with our central bureau, a study was made of the procedure in use by the various physicians and dentists. Out of this study a suggested uniform business procedure, including a set of office forms and stationery, was devised. All the physicians and dentists were urged to adopt this procedure, so that the people of our community and their business contacts with professional men, would be received with a practically uniform approach as to the manner of arranging and paying their medical and dental obligations.

"A neat card was also devised and placed in the physicians' offices, announcing that the doctors of the county had adopted a uniform business policy, and particularly suggesting that office consultations be paid for at the time of the consultation. An important feature of this uniform procedure was the announcement to the public that physicians and dentists would expect payment on all accounts or the adoption of a definite installment plan within ninety days, and if this were not done, the account would automatically be turned over to our credit bureau for collection and entry in the master credit file.

"Coincident with the opening of our central credit bureau a public health information bureau and reading room was established in our headquarters. The Christian Scientists have long used the plan of having their literature available to the general public in a prominently located free reading room, and it seemed to us that this plan could well be adapted to the education of the public in our field. This reading room was attractively arranged with store windows for display purposes as well as wall space for exhibits of the best health education and anti-quackery material

(Continued on page 892—Adv. xii)

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(Continued from page 890)

available. A complete stock of pamphlets posters were also provided. In addition, information was compiled concerning our local facilities, including accurate information regarding physicians and dentists, as well as hospital and nurses, so that our headquarters might come to be the accepted clearing house for medical health information.

"Since our headquarters has been in operation we have conducted the following lay educational activities:

"1. Annual health exhibit at the county fair in charge of our Woman's Auxiliary and Graduate Nurses Associations.

"2. Weekly health news stories carefully prepared by our headquarters committee and released to all county newspapers.

"3. Establishment of a Speaker's Bureau, in which the physician and dentist members are classified as speakers according to the topics in which they are most interested.

"4. A semi-weekly radio health program on our local station.

"5. A periodic health examination week, held once a year, in which talks on this important topic are made before all the service clubs and college fraternities; motion pictures are shown in all theaters and daily news stories are carried in newspapers.

"6. Periodic classes on prenatal care in cooperation with the County Health Unit, in which patients sent by all supporting physicians receive a course of instruction approved by our headquarters committee.

"After our headquarters had been in operation for a year, the suggestion was made that we provide twenty-four-hour emergency telephone service for our physicians and dentists. The cooperation of the local graduate nurses organization was sought, as they were interested in establishing a central nurses' registry. The two projects were combined under the name of the Doctors' Office Telephone Exchange and Nurses' Registry.

"In a small community such as ours such a program can be carried on with limited financial resources. The office staff should consist (1) a capable, full-time, lay secretary, trained from the viewpoint of organized medicine, dentistry and nursing with such additional clerical assistants as necessary, (2) a field collector, (3) an attorney for collection work on a part-time basis. We have worked out the problem of providing assistants to care for the day and night telephone service by providing sleeping quarters in our offices for two premedical students, who care for the calls on Sundays, holidays and at night. In the virtue of their training these young men are especially qualified to care for this type of work.



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MONONGALIA COUNTY MEDICAL SOCIETY, WEST VIRGINIA

The June issue of the *West Virginia Medical Journal* contains a paper read before the Conference of Secretaries of the West Virginia State Medical Association on January 18, 1932 by Dr. G. R. Maxwell, of Morgantown, West Virginia, describing the work of the county society of which he is secretary. Monongalia County is in the center of the northern tier of counties of West Virginia, and its principal city, Morgantown, which has 16,000 inhabitants. Dr. Maxwell says:

"The Monongalia County Medical Society was organized almost thirty years ago. It has been one of the most active and aggressive societies in the state, and has always made its influence felt in local and state activities on behalf of organized medicine.

"In the early history of our society when the members were few and interest was small and the membership fees were smaller, and no secretary had a private secretary, the work devolved almost entirely on the secretary. In order to save time and expense he had printed the programs for the entire year and delivered them to each doctor in the society. He also had a nice card, about 8 x 10, printed and a ribbon to hang it on the wall. On this card was printed 'The Medical Society Meets the First and Third Tuesdays of Each Month at 8:00 P.M.' Thus the secretary hung on each doctor's wall in front of his desk. This novel procedure took the place of the notices by mail and telephone and it worked well.

"The secretary worked entirely without remuneration and paid for the printing out of his own pocket.

"We have a membership of forty-nine. In this respect, we have the advantage over most of the societies in the state in that all the members with the exception of two live in Morgantown. Five physicians in Monongalia County do not belong. Some of them cannot get in, others have allowed their dues to become delinquent.

"We have advantages that few societies have. The University of West Virginia is here and some of our most active members teach in the Medical School. There is the utmost harmony between our society and the faculty of the Medical School.

"Another advantage we have that probably no other society has is that all our members, with the exception of three, can walk from their offices to the medical meeting in less than ten minutes. The meetings are held after office hours, thus allowing anyone that wants to attend to do so without undue loss of time.

"Another advantage we enjoy that many societies do not is that we have no factions, and most of our members are especially friendly, and work untrammelled together to promote the profession.

(Continued on page 894-ADV. W.V.)

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COMMITTEE ON PUBLICATION

(Continued from page 893—Adv. xiii)

sional and personal welfare of the entire membership and the public at large. We surely have as harmonious a society as it is possible to have.

"Our society is active in civic affairs. The city council and the county court seek our advice in all affairs relating to public health. Our society, though it is active, never shows officiousness toward the public officials, but we strive to show them what is for the best interests of the people at large without appearing to be dictatorial.

"In this way the profession stands high with our public officials. For instance, we have rigid parking laws. It was quite aggravating to get detained at the office or bedside and come out and find a red tag on the car with a notice to appear before the city judge and receive a fine. The society sent a delegation before the city council, and the council made a ruling that the doctors could have unlimited parking time.

"The society had a neat little tag prepared to hang in the car with the doctor's name, name of car, license number, and the official seal of the city on it. The police are instructed not to disturb a car so marked. There is the most friendly spirit existing between the police and the doctors which is appreciated on both sides.

"Our meetings are held the first Tuesday in the month at 8.30 P.M. in the Junior High School library.

"It is remarkable how thoroughly our younger men go into the scientific papers they prepare for our meetings. The younger men are probably no brighter and intelligent than the older ones, but their preliminary and technical training has been of a much higher class and they are competent to discuss the subjects before them in a truly scientific and thorough manner. They are greatly appreciated by the older men, and when a consultant is wanted the younger men are generally called. The public has found out that the younger men have been highly trained in modern methods and can be relied upon to do good work."

STATE AND LOCAL CONFERENCES IN IOWA

The inaugural address of Dr. Bert L. Ecker as President of the Iowa State Medical Society, printed in the June issue of the *Iowa Journal*, discusses conferences, both State and local. A sidelight on the attitude of a few of the members of the House of Delegates is shown in the following quotation:

"A power of the component society is its representation, through one or more of its members, in the House of Delegates, which, according to our by-laws, is the law-making body of our organization. When the House of Delegates is deciding momentous questions, questions that in-

(Continued on page 895—Adv. xv)

(Continued from page 894—Adv. xiv)

volve not only finance, but scientific progress, and that body is trying to outline a policy for future constructive action; if at that time, your delegate is out on the streets with his wife, or some other man's wife, window-shopping, attending a movie, enjoying a ball game, or looking after some personal business; and the important business above referred to wins or loses by one vote; the fault lies not so much with the House of Delegates as it does with the subordinate organization for sending such a representative to the House of Delegates. Assuming that a dozen or more subordinate organizations are thus derelict in their duties, and such an assumption is not wholly without historic record, you can readily visualize what, in time, might happen to our organization."

Concerning local conferences, Dr. Ecker says: "The perplexities confronting organized medicine are both local and general. Small groups of component societies have received much benefit from a timely discussion of local problems, the mapping out of constructive programs and the discussion of state and national issues.

"Another important function of group meetings is that they acquaint a ~~space~~ individual with conditions outside his ~~particular~~ locality, giving him a broader and more comprehensive view of organized medicine and its duties, not only to its individual members, but to the people whom it serves. The personal friendships which develop in these meetings are one of the most beneficial results. To come in personal touch with each other, to listen to the personal perplexities which are never put on paper, to ask questions, to offer suggestions, to correct errors, all combine to make us more tolerant, more sympathetic and more consecrated to exalted duty."

The inaugural address was read before the State Society while Dr. Ecker was in a hospital where he died within a day after his induction into the presidency.

CONVICTIONS FOR ILLEGAL PRACTICE IN NEW JERSEY

The June number of the *Journal of the Medical Society of New Jersey* contains a list of eighteen persons convicted of the illegal practice of medicine during the first three months of the year 1932. The list is as follows:

Doctors of Medicine	2
Manufacturer of a Quack Remedy	1
Bonesetter	1
Naturopath	1
Midwife	2
Electrotherapist	4
Chiropractors (exceeding license, especially in giving electrical treatments) ..	4
Druggist	2
Plain Quack	1

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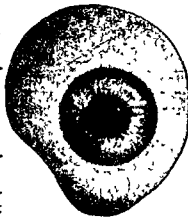
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A man and wife, both graduates in the Swedish System of Massage and Medical Gymnastics, desire employment, either together or individually. Experienced also in high colonic irrigation. Willing to go anywhere. Address, Alfred Nordstrom, 75 Sherwood Place, Greenwich, Conn. Telephone 1775.

PHYSICIAN—Desires a responsible position in Sanitarium specializing in mental diseases. Also experienced with the treatment for alcohol and drug addiction. Excellent references. Address, Responsible, Box 27, care N. Y. State Journal of Medicine.

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Cocomalt is highly recommended for children, adults, expectant and nursing mothers and convalescents.—See page xii.—Adv.

PHYSICIANS WHO PLAY GOLF

Know There's a Club for Every Stroke

Almost any player can swing around the course with a single club, dubbing drives, lifting fairway sods and bringing home a century mark or more for the final score. But the finished golfer needs a club for every shot—a studied judgment of approach or putt before the club is selected.

Similarly in artificial infant feeding. For the normal infant, you prefer cow's milk dilutions. For the athreptic or vomiting baby, you choose lactic acid milk. When there is diarrhea or marasmus, you decide upon protein milk.

In certain other situations, your judgment is evaporated milk.

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To each type of formula (be it fresh cow's milk, lactic acid milk, protein milk, evaporated or powdered milk), Dextri-Maltose figuratively and literally supplies the nicely matched balance that gets results.—Page xi.—Adv.

ANTIPHLOGISTINE

The summer vacation exodus is in full swing and thousands are flocking to country and seaside in search of relaxation and pleasure.

Many vacations, however, are doomed to end unhappily through illness and accident, and physicians will be called upon to at innumerable traumatic injuries on the muscles, tendon sheaths, bursae and synovial structures about the joints: sprains, abrasions, lacerations, dermal burns, and by poisoning and burn, etc.

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ORBITAL INFECTIONS

By ARNOLD KNAPP, M.D., NEW YORK, N. Y.

IN CONSIDERING orbital infections, it is important to speak, first of all, of the *orbital septum*. This is a thin membrane, which can be regarded as the continuation of the orbital periosteum, extending from the entire orbital margin towards but not reaching the palpebral opening. (Whitnall's Anatomy of the Human Orbit, p. 131.) It is the deep fascia which lines the palpebral part of the orbicularis muscle and covers the space between the globe and the orbital margin. It can form a barrier to the passage of extravasations from the orbit to the lids and vice versa. It descends behind the area of the lacrymal sac which therefore lies outside the orbit. The lacrymal gland is posterior to the orbital septum but is shut off from the orbit by the expansion of the levator aponeurosis; the weakest area of the lacrymal gland region is below in the direction of the conjunctival sac and it is here that infections of the lacrymal gland usually perforate. The septum is perforated by the vessels and nerves passing at its periphery, to and from the orbital margin. The nerves are the supratrochlear and supraorbital and the vessels are anastomoses between the ophthalmic and angular veins.

Inflammatory processes of the brow or eyelids, of the lacrymal gland or sac are generally not severe, as they remain external, and do not invade the orbit.

At the margin of the orbit in and below the brow, infections that resemble carbuncles are sometimes encountered. These are deeply seated purulent necrotic areas next to the periosteum, which frequently burrow laterally. A broad incision with excision of the necrotic tissue leads to prompt recovery. These do not involve the orbit and do not resemble the severe phlebitis-forming infections which are so dreaded by surgeons. The latter, the staphylococcal sepsis cases occur after furuncles situated in the middle line of the face, in the upper lip, along the lateral wall of the nose, or in the region of the eyelids.

In these there is a tendency to infectious thrombo-phlebitis of the facial vein and of the ophthalmic vein, which readily extends to the cavernous sinus. In some cases the infection does not invade the veins, but extends by lymphatic extension to the orbit and then to the meninges. In all of these cases numerous metastases occur in the internal organs especially in the lungs and kidneys (Lenhartz, Die Septischen Erkrankungen, p. 263, Vienna, Holder, 1903).

Infections at the *margin* of the orbit are generally caused by an injury, or by an extension from the inflammatory process in the neighborhood (tear-sac, periosteum of the upper jaw). This periostitis of the orbital margin resembles a periostitis found in other parts of the body. The diagnosis is usually easy. There is very little change in the position of the eyeball, the lids and the conjunctiva become red and swollen, a circumscribed tender, more or less firm, swelling develops, accompanied by pain, and is dark red in color. The swelling softens and perforates the skin, allowing some thin, fluid pus to escape. The swelling then gradually subsides, but it is a long time before the tissues return to normal. A fistula may develop which leads to exposed bone. Sometimes, in addition to the circumscribed periostitis at the orbital margin, a lid abscess develops. The inflammation may extend from the margin of the orbit to the deeper parts of the retrobulbar tissues. This is always a serious complication and depends upon the nature of the infectious organism and the primary localization of the process. Sometimes the reverse occurs in which a subperiosteal abscess secondarily involves the periosteum at the margin of the orbit.

A periosteal swelling may develop at the orbital margin whose exact diagnosis is not always apparent. A sinus infection may be simulated, but involvement of the lacrymal gland is a possibility as the following case shows: *M. A.*, aged 30. Two weeks after ton-

sillitis right upper lid became swollen and red. There was a swelling along the entire upper wall. X-ray showed frontal sinus to be clear. The swelling gradually became localized to the region of the lacrymal gland, and this abscess perforated through the conjunctiva with prompt recovery. This shows that an acute dacryoadenitis may develop after a tonsillar infection.

It is customary to speak of inflammation of the orbital walls and their lining periosteum and inflammation of the orbital contents. The former is called *orbital periostitis*, the latter, *orbital cellulitis* including abscess and thrombo-phlebitis.

Chronic periostitis of the orbit may be due to tuberculosis or syphilis. The *tuberculous* periostitides which I have seen, usually affect children, especially among the colored race. It is localized to the lower and outer orbital margin with involvement of the adjoining face. A "cold" abscess is present, and at operation necrosis of the bone is encountered. The recovery is necessarily slow with frequent resulting deformity of the lower lid.

The *syphilitic* variety is unusual and then involves generally the upper orbital margin together with other parts of the skull. It may affect any of the orbital walls and thus the condition is often obscure. A case in point was *Mrs. H. D. A.*, aged 47, who was seen on Sept. 16, 1926, with a history of five weeks, sore throat, pain on moving right eye for two weeks, with loss of sight. The pupil, 4 mm. wide, was immobile. Neuritic optic atrophy (hemorrhage below). Exophthalmometer, right 20, left 18. Pressure painful. Blood negative. Teeth negative. Sinuses were found normal. Pain at night with more protrusion and chemosis conjunctivæ. Weakness of superior and external recti. The treatment consisted in hot compresses, sodium salicylates, mercurial inunctions and calomel internally. Gradual improvement. Some sight returned in right eye. Pupil remained immobile. On December 13th, general health much improved. Right 5/200. Field defect above oblique line from above and out down and in. Pupil reacts. Retinal arteries narrow just beyond disc. April, 1927, 8/200, pupil 5½ mm. Has gained 10 lbs. Motility seems normal. July 21st, R. 8/200. F. normal. Pupil immobile, arteries irregular, glistening spots. Oct. 25th, R. 12/200. Jan. 31st, 1929, R. 10/200. F. normal. Retinal arteries very narrow. L. —0.50cV, 20/20.

Acute periostitis is now regarded as always secondary to a sinus affection, the intervening bone being first affected. The orbital periosteum is readily lifted up and a subperiosteal abscess develops which may extend either forward or backward. The intact periorbita furnishes usually an excellent protection to the orbital structure.

The symptoms of an orbital periostitis are often severe, especially at night, with pain in the

region of the eyebrow, vomiting, swelling and reddening of the lids and conjunctiva. These symptoms, together with their rapid development, usually easily distinguish a periostitis from an orbital tumor. The eyeball is displaced, it is pushed forward or in the direction away from the infected area and its motility is restricted. In periostitis the presence of a circumscribed tender area in the orbital wall is a very important symptom. The position of the tender area often shows which sinus is the starting point. Thus pain and swelling at the upper margin suggest an inflammation of the frontal sinus. In ethmoidal empyema the orbital complications occur at the inner wall above the lacrymal fossa. If left to itself the abscess perforates the skin and may thus slowly get well.

Though orbital periostitis and ostitis are generally due to inflammations of the accessory sinuses, it is well to remember that at the time when the orbital periostitis is predominant the nasal accessory empyema may be quieting down or have healed. In every affection of the orbit it need hardly be emphasized that the sinuses must be carefully examined.

While traumatic periostitis of the orbit is particularly prevalent in childhood, the second and third decade are more frequently involved in nasal sinus periostitis. A periostitis of the orbital wall is always a serious condition, both as regards life and the eye.

A periosteal swelling at upper or inner wall is usually associated with a perforation of the adjoining sinus. It may remain localized or extend forward to the orbital margin where it spontaneously perforates the skin and the acute symptoms subside, a fistula remaining which leads down to the affected sinus. It may extend back and invade the structures at the apex of the orbit, the most important one of these is an infection of the optic nerve.

At *operation*, which must be done early to avoid invasion of the orbit, the periosteum is detached from the orbital wall affected and a subperiosteal collection of pus is encountered and a defect in the bony wall of the affected sinus exposed. The subperiosteal abscess is evacuated, the defect in the bone enlarged and the cavity curetted with provision for proper drainage into the nose.

Periostitis of the floor of the orbit is unusual. The following is an example: *Mrs. B. B.*, 29 years old. Influenza, three weeks ago. Left eye protruded one week later. Left ptosis. Eye is pushed forward and up. Immobile. Conjunctiva very red. Lids normal. Pupil moderately dilated, o. d. normal. Vision 20/70. Along the entire orbital floor there was a uniform thickening. Examination of the nose revealed pus in left middle meatus. The antrum was washed out and contained pus. Point of greatest tenderness

was just external to the lacrimal sac. At operation an incision was made along the lower orbital margin, and the periosteum was retracted from the underlying bone. At about 2 cm posterior to the margin a hole was found in the bone, which led into a cavity situated partly in the floor and in the adjoining inner wall. Some granulations were removed. There was no free pus. Wound left open, tube inserted. Opening into the antrum from the nose was enlarged. Considerable purulent discharge through the tube. Irrigating the antrum, or blowing nose caused a discharge externally. Swelling of the eye distinctly less. Secretion from the tube gradually diminished. The swelling of the lids and exophthalmos rapidly came down, though the inferior rectus remained weak, for some time. Ultimate complete recovery.

Orbital periostitis is sometimes secondary to or associated with a tumor as is seen in the two following cases.

C. D. M., 39 years. In October, 1923, headache and failure of vision in right eye. The nasal sinuses were found affected in 1923 and were operated on. Wassermann negative. R 10/200 large paracentral scotoma. Right eye diverges and is displaced slightly up. Spasmodic retraction of lower lid. Eye immobile except downward. Pupil 3 mm immobile. Vision normal. Exophthalmos, right 22, left 20. O. d. blurred, +3 D. elevation. Fullness of floor of orbit on palpation. The x-ray showed a clouding of the orbital walls and a mass obstructing and erasing the sphenoidal fissure. The posterior nasal sinuses were explored. Scrapings from sphenoid bled very freely. These were examined and pronounced adeno carcinoma.

J. G., 49 years of age, was seen on September 30, 1929. There had been pain in the left orbit for eight months with diplopia. L 20/20. Field and interior were normal. Exophthalmometer, left 22, right 18. There was a mass below left caruncle. The x-ray suggests a tumor of ethmoid. The patient died two months later. The autopsy read as follows: A large, foul-smelling subdural abscess covers the major portion of the left cerebral hemisphere. By contiguous pressure the hemisphere had been thrust inward and to the right. No gross pathological changes were apparent within the brain substance. The region of the ethmoid and sphenoid sinuses were completely occupied and invaded by neoplastic tissue which protruded as sharply delineated nodules upon the intracranial surface of the body of the sphenoid bone. The observed abscess was therefore probably due to contiguous extension of the coincident intracranial infective status. The removed portion of the neoplastic tissue presented grossly a whitish appearance and of rather dense consistency which, however, was partially mitigated by necrobiosis.

In treatment we are confronted with a number of important questions. We must first decide—where did the inflammation originate, and is a sinus inflammation present or not? This requires a thorough examination of the nose including x-ray, and a complete history with study of all the symptoms. The mouth must be searched for carious teeth and periostitis, the pharynx must be examined, and a general examination made. The second question is—has the inflammation of the bony wall led to a subperiosteal abscess in the orbit? If this can be diagnosed, an early operation is indicated to prevent extension and involvement of the retro ocular tissues. If the diagnosis cannot be made, we may wait until the abscess extends to an accessible part of the orbital margin. We would thus incur the danger of an orbital abscess and a brain complication. An exploratory operation should best be done, especially if the roof of the orbit is affected, displacing the eyeball downward. Birch-Hirschfeld (Graefe Saemisch, II ed., vol IX, part 13, p. 277) condemns the usually recommended exploratory incision or puncture for the following reasons: If we realize the shape of the bony orbit, it is apparent that an incision can hardly be made without opening the periorbita and infecting the retrobulbar tissue. The incision, furthermore, will hardly find a collection of pus, drainage will be insufficient and probably dangerous. I agree with Birch-Hirschfeld that it is much better to make an incision along the orbital margin and then to detach the periosteum, and this is the procedure which I always follow. A subperiosteal abscess if present, can then be readily evacuated and drained. The retrobulbar tissue is preserved and opportunity is offered to inspect carefully the bony wall. If the process extends to the retrobulbar tissue, and an abscess develops, the periorbita can then be more readily exposed and incised after detachment of the periosteum. If the abscess points at the margin of the orbit, it can be opened through the skin, and sufficient drainage is obtained.

Inflammation of the retrobulbar tissue occurs in orbital abscess, cellulitis of the orbit, or orbital thrombophlebitis. These are not different conditions, but in one case there is a large accumulation of pus, while in another case there are multiple abscesses, and finally there is a group with a particular involvement of the veins. The condition is generally acute, with severe general symptoms, such as headache in the forehead fever, etc. The most important local symptoms are the marked edema of the lids and of the conjunctiva (chemosis) and protrusion of the eyeball. This protrusion is straight forward unless the preceding periostitis is pronounced enough to cause lateral displacement. The suddenness of these symptoms, together with their inflammatory nature, distinguish this condition from an

orbital tumor or a retrobulbar hemorrhage. In panophthalmitis there are inflammatory symptoms of the eyeball itself. Periostitis of the orbit usually affects only a definite part of the orbital wall, and while there is swelling of the lids and of the conjunctiva, the protruding eyeball is displaced to one side with less interference with its motility. The one-sided occurrence of the disease, the absence of severe cerebral symptoms, and of edema over the mastoid distinguish it from cavernous sinus thrombosis. In tenonitis the chemosis is usually pronounced while the protrusion of the eye is slight. The diagnosis is often difficult and it is not always possible to distinguish between periostitis and abscess and a combination may be present.

The *causes* of orbital cellulitis are—First, when the orbit is directly infected by injuries, by foreign bodies, or by operation; second, extension from the neighboring structures; third, metastatic. Of the foreign bodies which have perforated and remained in the orbit splinters of wood are particularly frequent. There may be a slight injury of the lid which is followed by erysipelas and an orbital abscess. Inflammation has followed some operations, such as removal of an orbital cyst, tenotomies, evisceration and particularly operation on the lacrymal sac. Operations on the nose and especially extractions of teeth have been followed by serious orbital suppurations. The second group, i.e., extension from the neighboring structures, is a larger one. Here we distinguish between an inflammation of the orbit following panophthalmitis, and orbital abscess following purulent dacryocystitis, and, finally, an orbital abscess after purulent inflammation of the nasal accessory cavities. That the last is a frequent cause has been previously emphasized. At the same time, the usual orbital complication of a sinusitis is periostitis which, however, may, sooner or later, give rise to cellulitis of the orbit. An important group are the inflammations which start as thrombo-phlebitis of the facial veins after a primary infection of the lids, of the eyebrow, of the lip, and the nose. There are deeply situated vessels which anastomose with the orbital veins, such as the vessels of the superior maxilla, of the mouth, the tonsils, and the pharynx, which may be the starting point of a purulent process and lead to an orbital abscess. Leber has drawn attention to the importance of erysipelas starting in these regions where the primary infection is of short duration and causes but few symptoms. The final group (metastatic inflammations), is indefinite. If the infection is located in places where there are direct veins connecting with the orbit, a progressive thrombo-phlebitis is the pathological process. This holds true for parotitis, tonsillitis, and for erysipelas of the face. On the other hand, influenza, scarlet fever, and diphtheria can cause an orbital complication through the in-

termediary of a sinus disease. Large accumulations of pus within the periorbital area are not as frequent as multiple small abscesses which are usually located in the neighborhood of the vessels. The tendency of an inflammation in this location to diffusely infiltrate or to cause small abscesses is probably due to the anatomic structure of the orbital fat tissues. The process extends rapidly to involve all of the retrobulbar tissues, displacing and immobilizing the eyeball in the line of the axis. Complications on the part of the eye and of the brain may then occur.

As for ocular complications, exposure from exophthalmos, rigidity of the lids and stagnation of circulation, cause ulceration of the cornea, which may go on to corneal abscess, slough of cornea, or panophthalmitis. The eye may be affected though the cornea is intact. The changes in the eyeground vary: the fundus may appear normal, optic neuritis, retinal hemorrhages, or closure of the retinal vessels have all been noted. Blindness may come on suddenly, or failure of sight is gradual. Panophthalmitis and atrophy of the eyeball are not infrequent. Birch-Hirschfeld found in 275 cases transient visual disturbances in 39 and blindness in 52.

The most serious complication of course is an *involvement* of the *brain*. Birch-Hirschfeld (l. c.) found that death occurred in 47 of 275 cases, resulting generally from meningitis or brain abscess (30) and sometimes from thrombosis of the cavernous sinus (8). The brain complications were evidenced by rigidity of the neck, vomiting, delirium, coma, disturbance of speech, and paralysis of the extremities and of the face. In purulent cavernous sinus-thrombosis the involvement of the other orbit is notable. A comparatively unusual complication of a retrobulbar inflammation consists in abscesses of the temporal and parotid regions, presumably due to a phlebitis of the inferior ophthalmic vein which communicates with the pterygoid plexus. The brain may be involved by perforation of the bony wall of the orbit though this is generally the result of a periostitis or subperiosteal abscess. In general the veins serve as the means of transmitting the infection to the brain. Bilateral abscesses of the orbit are unusual. They occur generally through the intermediary of the cavernous sinus.

The *treatment* of orbital abscess is more difficult than that of subperiosteal abscess, as the orbital tissues are infiltrated with purulent foci. If a large abscess develops and points externally in the lids an incision is naturally the correct treatment.

Orbital infections occur not infrequently in very young children, and the following is the report of an orbital abscess occurring in a child of eight weeks. After a cold with considerable discharge from nose, the left eye became swollen. The swelling became localized to the lower lid

which was indurated and brawny. Marked exophthalmos. The eye was pushed upward and outward. There was a dense resisting mass palpable within the lower orbital margin. The region of the sac seemed normal. Eyeground was normal. An incision was made along the lower orbital margin. The orbital septum was dense. On cutting through this, discharge of pus, exposing a cavity which extended in a straight line back for over an inch. There were no pockets nor induration about the walls and there was nowhere exposed bone to be felt. The external wound was enlarged and a cigarette drain introduced. The acute symptoms gradually disappeared, the discharge lessened, in one week the eye condition was much improved. Recovery uneventful.

When the abscess does not point externally treatment is difficult. Conservative measures do not help much, and on account of the objections to exploratory deep incisions into the orbit which have been previously stated the decision to operate becomes difficult. If the lids are very tense and the cornea suffers from exposure, I would recommend a curvilinear cutaneous incision along the temporal orbital margin with division of the external canthal ligament. This is a procedure to relax the eyelids which is of value in extreme proptosis. Birch-Hirschfeld (1. c.) states that while it is difficult to arrive at any definite conclusion on the advantages of treatment from statistics, it nevertheless seems that the prognosis for the preservation of life is better in early incision in orbital abscess than in conservative treatment, while early incision has not influenced the fate of the eyeball.

When operation is imperative rather than blind deep incisions Birch-Hirschfeld thinks that it would do better to first expose the margin of the orbit, detaching the periorbital, and then to open the orbit; occasionally the Krönlein method has given good results. Some of these cases fortunately recover without the help of the ophthalmic surgeon. This favorable result depends on the kind of infection and not on our therapeutic mea-

sures. This author furthermore states that the removal of an eye with panophthalmitis has been performed in the presence of an orbital cellulitis with favorable influence on the orbital inflammation. The operation, however, is not permissible unless the eyeball is so damaged as to require removal, and it must not be forgotten that enucleation in the presence of an orbital abscess may be an added danger.

Infections of the orbit which occur from *penetrating injuries* with retention of a foreign body often present difficulties in treatment. In the following case, a piece of wood had been retained in the orbit for nine years.

J. M., aged 17 years, came on account of drooping of the lid and occasional pain in the left orbit. Otherwise there was no change. A year ago a lump appeared in the old cicatrix which discharged pus. Three days later the lid again became swollen. Exophthalmometer right 18, left 22. Pain on moving eye. Motility restricted upward. Upper lid swollen and red. There was a resistance to be felt within the upper orbital margin. R. 20/15, L. 20/20. A probe was cautiously introduced and at about 1" it came up against some firm substance, without setting free any discharge. At operation a curved incision was made along the upper and inner margin of the orbit. With difficulty the periosteum was separated above and nasally, and at 1½" back a discolored area was exposed in the periorbital. This was incised and a small spicule of wood removed. Directly posterior to this area an irregular exostosis in the upper bony wall had formed, which was removed. The discolored area in the periosteum was enlarged and a purulent collection evacuated together with three additional pieces of wood. The fistulous tract was then opened up, the edges trimmed off, and the tract curetted. As no further resistance could be felt in the depth of the orbit, a rubber tissue drain was introduced and the external wound was partly closed with sutures. Gradual recovery.

This case shows the advantage of the subperiosteal approach in orbital conditions.

TWO ESOPHAGEAL CASES

By J. V. BOHRER, M.D., NEW YORK, N. Y.

Cases shown before the Surgical Section of the New York Academy of Medicine, December 4, 1931

CASE 1. DIVERTICULUM

AMAN, aged sixty-nine, a clerk by occupation, was admitted to Knickerbocker Hospital May 13, 1931. Two years previous to his admission, he began to experience difficulty in swallowing. The first symptom he noticed was disturbance in swallowing certain types of food. Liquids and semi-solids were most annoy-

ing; the second swallow would be regurgitated and cause vomiting. At other times the food that he had taken the meal before would be regurgitated. This at times would be mal-odorous. He had a feeling of fullness in the region of the diverticulum and also a gurgling sensation. He lost weight on account of lack of food. It became so difficult to swallow that he would not

eat in public and ate very little in private. At the time of admission he was in poor nutrition, weak and dehydrated. It was essential to improve his condition before operation. He was encouraged to take food and was given water by rectum and glucose by venoclysis. He irrigated his diverticulum with water after eating.

An operation was done on May 17, 1931, under light colonic anæsthetic. The diverticulum was about three inches long and about three inches wide. It lay in the pre-vertebral space behind and to the left of the trachea and extended down to the level of the clavicle. The sac was easily identified, grasped with an Allis clamp and dissected free by blunt dissection. The lower, acute angle was dissected well up to the neck of the sac, in order to allow the diverticulum to be placed in a reverse position; thus placing the blind end of the sac at a higher level than the opening into the esophagus. The sac was then sutured in the wound holding it in the above-mentioned position. This prevented food from entering the sac during the act of deglutition. Twenty-four hours later he was able to swallow liquids with little difficulty and without regurgitation. During the latter part of his ten-day interval between stages, he was up and about the ward and was able to swallow all types of food. He gained in weight and strength, in fact, judged from his ability to swallow, a second-stage operation was not necessary.

May 27, 1931, the second stage was done under local anæsthesia. The fundus of the diverticulum was clipped off and the mucosa dissected down to 1 cm. of the opening in the esophagus, leaving the submucosa in place. This tract was packed with vaseline gauze, which coapted the cut edge of the remaining mucosa. For four days there was slight leaking when the patient swallowed liquids. He was completely healed at the end of ten days.

He has been able to swallow perfectly since the completed operation, has regained his normal weight and is entirely well.

On two occasions since operation, I have passed an olive-tipped bougie, on swallowed silk thread as a guide for the dilator. A 15 cm. dilator passed readily. X-ray and fluoroscopic examination made December 28, 1931, showed a slight retention of barium at the site of the former diverticulum. This did not give the patient a feeling of retention. I do not believe this retention is due to a residual diverticulum, but to a distortion of the esophagus at the site of the scar.

Certainly a two-stage operation in these debilitated, elderly people is a safe, satisfactory and adequate operation. Undoubtedly a one-stage resection gives a better anatomical result, but in the hands of the general surgeon, certainly is not as safe an operation.

In a communication from Dr. Lahey, he states:

"I do not believe it is possible with any type of operation for esophageal diverticulum not to get esophageal distortion as the result of the scar. I presume that the two-stage operation gives a little more distortion than the one, on the other hand, it is so safe and the results have been so excellent in our hands—we have now operated on thirty-seven or thirty-eight of them without a mortality—that I feel not at all disturbed by the little projecting aperture on the back wall where the neck of the sac is excised.

"We have had no recurrences, but on the other hand, we have dilated them with olive-tipped bougies on swallowed silk thread for at least a year postoperatively."

Moynihan, under correspondence in *Surgery, Gynecology and Obstetrics*, Vol. LIV, No. 1, Jan., 1932, states:

"I write not solely to call attention to the facts mentioned, but to encourage my American friends to perform the operation of resection of these pharyngeal pouches in one stage. If a surgeon is competent and has a perfect technique there is really no need whatever for operations in two stages. I have operated upon 15 cases (1 on the right side) and have never had any difficulty in obtaining healing by first intention."

CASE 2. CONGENITAL TRACHEO-ÆSOPHAGEAL FISTULA

Baby P. was born in Bellevue Hospital November 9, 1931, at full term, and died November 25, 1931. It showed a normal development in all outward appearances. It passed meconium. Its circulatory system was apparently normal.

When the baby nursed, it was observed that after a few minutes it would stop and immediately regurgitate what it had swallowed and then resume nursing. The regurgitated material was unchanged milk. It contained no curds and was alkaline in reaction. The baby lost weight rapidly, and glucose and water were given hypodermically to maintain nutrition.

When fourteen days old, it was transferred to the surgical ward. An attempt was made to pass a catheter into the stomach. It could be passed only 12 cm. from the alveolar edge. Lipiodol was then injected and an x-ray examination was made. It revealed the esophagus to end in a dilated pouch. Under local anæsthetic, a laparotomy was done. The stomach, although it had received no food, was dilated and contained air. A gastrostomy was done and 10 c.c. of sterile water injected before the wound was closed. The baby immediately coughed, choked and became very cyanosed. A small amount of milk was given through the gastrostomy tube twelve hours later, only to cause a repetition of symptoms.

It was quite apparent that we were dealing with a fistula which communicated with the bronchial tree.

A barium mixture was then introduced into the stomach and an immediate x-ray picture taken of the abdomen and chest. This revealed the stomach portion of the esophagus joining the trachea at about the level of the bifurcation. The baby died twenty-four hours later. A partial protocol of the post mortem follows:

The thoracic and abdominal contents are examined from the posterior aspect after having been previously hardened and after the areolar tissues have been carefully dissected away. The following anomalies are found to exist in the first place, the esophagus is divisible into two portions which are entirely separate and distinct. The first is an upper portion which is rather tubular with a sacular end. This lower end is entirely closed and terminates at the level of the bifurcation of the trachea. From the dilated closed end there comes forth a slender strand of fibrous tissue which blends with the peri-aortic areolar tissues. This rather separate and distinct upper portion of the esophagus does not communicate in any way with the trachea and its mucosa appears entirely normal. The lower portion of the esophagus comprises the inferior two-thirds and commences at the bifurcation of the trachea and terminates in the cardiac opening of the stomach. It takes origin on the posterior surface of the trachea at its bifurcation and continues extending into the cardiac opening of the stomach as described. The origin then comprises a tracheo esophageal fistula and except for a very slight curvature where the esophagus blends with

the bifurcation of the trachea, the two structures might well be considered as a continuous straight tube. Thus, when a probe is passed through the gastrostomy, it passes through the cardiac opening of the stomach up the inferior portion of the esophagus, out through the trachea and emerges from the larynx. A careful search of the body viscera fails to reveal any other congenital anomalies.

A ductus arteriosus is obliterated and the bladder and rectum terminate through a distinct opening.

The heart is a four chambered organ without any septal defects. The various solid and hollow viscera show no gross pathological change and are apparently normal. The diagnosis was congenital anomaly of the digestive tract, atresia of esophagus, congenital tracheo esophageal fistula.

This proved to be one of the most common types of congenital malformation, viz., where the upper portion of the esophagus ends in a dilated blind pouch, having no connection with the stomach portion, the latter connecting directly with the trachea.

For complete discussion of the various types of congenital malformations of the esophagus the reader is referred to two recent publications. First a report by Rosenthal, "Congenital Atresia of the Esophagus with tracheo esophageal fistula", *Archives of Path.*, Vol. XII, p. 756-772. Second, C. C. Beatty, "Congenital Stenosis of the Esophagus," *British Journal of Children's Diseases*, Vol. 25, 1928, p. 237-270.

INDICATIONS AND CONTRAINDICATIONS FOR PHYSICAL THERAPY IN TRAUMATIC CONDITIONS

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Read as part of a course on Physical Therapy in Traumatic Conditions arranged by the Committee on Public Health and Medical Education of the Medical Society of the State of New York for the Medical Societies of the Counties of New York and The Bronx.

THE huge increase in the number of physical therapy treatments administered in the physical therapy departments of most hospitals today testifies to the enlargement of the scope to which physical means are being used to alleviate the results of trauma. The usefulness to which these means are employed varies largely in individual clinics so that we see the same type of trauma treated in entirely different ways in different institutions. The physical therapy treatments accorded to patients in doctors' offices is administered upon the experience that the individual doctors have gained from hospital and private experience. There is scarcely any institution today, of any size, which is not equipped with some department of physical therapy and the differences in the treatment accorded vary so much in individual hands that it is well for us to look into and have some generally accepted funda-

mental ideas on the indications and contraindications of this form of therapy. The demand for such service is very great.

The impetus given to treatment by physical means during the past twenty years has been due to the appreciation by a larger group of medical men of the value of this type of treatment. Prior to that time a relatively small group of men appreciated the value of physical means in the treatment of injuries and disease, but many of the modalities used were employed empirically. Today those interested in the work are seeking the scientific employment of physical means and to this end we must attempt to justify the employment of these means by a careful review of what may and may not be expected of physical therapy.

It is not and can never be a cure all, and the employment of such means in a purely empirical way, like the old gunshot prescription, can result

only in placing physical therapy in disrepute. No one who will look upon the subject objectively can fail to see the value of properly employed physical therapy. In all things medical we must begin with the patient and before we can institute any means for treatment, we must make a definite diagnosis and have some understanding as to the pathology present. Upon this assumption we can then predicate the possible value of one or another means of treatment, provided we know what such treatment can in itself accomplish.

The physician who assumes the responsibility of administering physical therapeutics without knowing what can be expected of the various modalities and without a definite appreciation of the pathological condition present places himself on a level with those of the laity who, believing that apparatus is all that is necessary to give such service, have so equipped themselves, and ignorantly administer treatment to themselves or others until the disappointment of ineffectual results terminates their practice. The State has foreseen this and has fortunately provided that licensed physiotherapists may administer treatment only on written prescriptions of licensed physicians. The State herein assumes that physicians appreciate the pathological conditions which are amenable to treatment by physical means, but the varied opinions as to the indications for such treatment and, more important, the contraindications, would tend to show that we are not all of the same mind regarding physical therapy.

In attempting to evaluate the benefits derived from any form of treatment we may approach the problem first, from the viewpoint of research, or secondly, from the viewpoint of clinical experience. Many attempts have been made to find out just what happens physiologically when the various modalities of physical therapeutics are used. Recently Harold Wolfson of Chicago attempted a study on the effect of physiotherapeutic procedures on function and structures in the normal limb of a dog. While a single study of this kind is not entirely conclusive, the author did show experimentally that heat produces increased blood supply due to the active dilatation of the blood vessels. Massage and motion, by mechanically emptying the blood vessels, caused temporary increase in the rate of flow. Electricity, as applied in this study, was ineffective in increasing the blood flow. The author properly states that the value of electrical treatment in poliomyelitis and peripheral nerve injuries may be due to some other effects not studied in these experiments. However, the point of the matter is that when we attempt to evaluate the possible benefits to be derived from physically administered therapeutics, we can approach the subject in a purely experimental way. Secondly, clinical experience shows us that clinical improvement follows the administration of certain physical

means when experimentally no scientific basis can be given. If we were to ask any physiotherapist as to the value of electrical stimulation to paralyzed muscles I have no doubt that all would agree that where the reflex arc is intact improvement will be seen, and yet just how this occurs will be explained by each in his own way, some believing that the improvement is due to actual muscle contraction itself, others that it improves the regenerative power of the nerve itself, while still others will argue that the improvement of nutrition and circulation aid in the lessening of waste products. From a clinical viewpoint it is not of essential importance just which of these explanations is correct but it is of importance that all are in agreement that electrical stimulation is of value in the clinical improvement expected in a given case. As the efficacy of all physical measures depends in the last analysis upon the physiological response of the body to applied measures, it is well to enumerate the classes or types of physical measures at our disposal and see what might be expected of them physiologically when applied to the body. Kovacs¹ has enumerated them as seen in the accompanying chart.

THERMIC

Hot water.	Relaxation of tissues.
Hot air	Hyperaemia
Radiant heaters	Relief of pain
Incandescent lamps	Attenuation or killing of germs
Sun	Reflex stimulation
Diathermy	

CALORIC

Cold water	Contraction of tissues.
	Anaemia

PHOTOCHEMICAL

Sun	Erythema of skin
Heated metals	Killing of germs
Carbon arc	Relief of pain
Mercury vapor arc	Increase of solid contents of blood

ELECTROCHEMICAL

Galvanic current and variations	Pos. pole vasoconstriction acid reaction vasodilatation
	Neg. pole alkaline reaction
	Interpolar—metabolic

DYNAMIC

Interrupted, wave, and alternating currents	Muscle and tissue contraction
Vibration	Increase of venous and lymph flow, stretching of tissues, reflex stimulation.
Massage	

All effects may be mild (stimulation) or exaggerated (destruction), local, general or reflex, according to the intensity, duration and area of application.

The effects of these physiologically may be mild, and, as such stimulative, or, with misuse, destructive in action. Burns, chronic passive congestion and necrosis may easily follow the injudicious use of heat or cold. Likewise, photochemical measures, inappropriately used, or continued over too long periods, may result in burns or definite anaemias and surely no one would call the electric chair a therapeutic measure and yet its action is identical with electrochemical measures employed by us but utilized in a destructive phase. The dynamic measures such as massage and alternating currents, so productive of benefit in producing muscle contraction, improvement in blood and lymph flow and possibly reflex stimulation, when injudiciously used result in congestion, increase of pain and temporary, if not permanent, paresis. The too early use of massage in peripheral nerve injuries clearly demonstrates this principle. Application of the physiological principles of function of the various modalities and an insight into their disturbing action by injudicious use must predicate all attempts at a formulation of the indications and contraindications of physiotherapeutic measures. It is not sufficient for those who are to be responsible for the proper application of these physical agents to be acquainted with these measures alone in endeavoring to relieve the pathological processes which are the result of trauma. Other physical principles must not only be known but must be used.

Few traumas occur that are not accompanied by hemorrhage of more or less degree in the soft tissues. When this occurs in the periphery of the body, as in an arm or leg, one cannot expect a return to normal by any kind of physiotherapeutic treatment if, during the interval between treatments, the part is constantly kept dependent. Whatever improvement might be gained by an hour of physiotherapeutic measures would surely be undone by the return of congestion, the result of dependency. So that it is of importance that the physical therapist appreciate the value of elevation of a traumatized part during the entire period of incapacity. I fully appreciate that if, during the period of incapacity, a limb is maintained elevated, the blood vessels will lose their ability to contract and relax as required, and that at whatever time the limb begins to become dependent there will be lymph and blood stasis. It is true that elevation can be overdone but, as I see it at the present time, it is not used sufficiently.

Vasomotor exercise, obtained by practicing elevation and dependency alternately, will frequently accomplish more than any other physical measure in the relief of lymph or blood stasis.

Again, the principles of splintage or braceage of any kind are truly a physical measure designed to make possible the satisfactory application of the appropriate therapeutic measure. To illustrate injuries to the musculo spiral nerve result in wrist drop. During the regenerative stage, lack of support to the wrist and fingers to maintain them in dorsiflexion is certain to result in over stretching of the extensor muscles so that in spite of any amount of electrical stimulation, they cannot regain their power. Failure on the part of the physiotherapist to take advantage of these physical measures is bound to result in failure in the regaining of function through physiotherapeutic means, when success might be had if proper splintage were taken advantage of. Foot drop, the result of failure to support relaxed muscles when, for some reason, they are unable to maintain their own tone, will certainly respond to physiotherapeutic measures more readily when, in the interval between treatments, the foot is maintained dorsiflexed by proper splintage.

The responsibility of the physician rendering physical therapy cannot be limited to the administration of the appropriate modalities of thermal, electrochemical or dynamic agencies alone. He must have an appreciation of other physical agents used outside his own specialty, as to how, when and why they are used, if he is to adequately benefit the patient. For too long has physical therapy been considered the work to be done after the surgeon has completed his work. This is unfortunate as it is soon after trauma that physiotherapeutic measures have their greatest opportunities. If we are ever to approach the ideal, the surgeon and physiotherapist must work conjointly and physical therapy must be instituted from the time of admission of the patient and cease when it is found that the patient can do for himself what the treatment is designed to help him perform. It is just as grievous to continue to indulge the patient in continued physiotherapeutic treatment when all that is required is his own activity as it is to neglect to give him the benefits to be derived from such treatment early in his illness.

Traumatic surgery presents an ever changing assortment of conditions requiring a versatility observed in no other branch of surgery. A simple fracture of both bones of the leg without displacement may be treated with simple immobilization permitting the use of early physical therapy and early function. How different must be the treatment accorded when the fragments are comminuted or when the wound is compounded. Just as the general surgical principles must be maintained in all of these varying types of injuries, while the treatment accorded in each will vary widely, so also must the physiotherapist adapt his physical measures to the individual case varying it to meet the requirements. In one case

it will be the relief of congestion, again the improvement in the muscle tone, while in a third it may be for the improvement in nutrition to the part. The armamentarium of the physical therapist must be sufficiently wide for him to use it effectively. The earlier after the injury physical measures can be instituted the more may certain conditions be prevented. In hospital work the admission of an accident case is attended usually by great scurrying upon the part of the house staff to attend to the wounds and broken bones, but it is rare to see anyone and, least likely of all, the physiotherapist, hurrying with a good sized radiant heat lamp which might be of incalculable value in combating the shock seen in many of these cases. And yet the patient may die of his shock while the probability of his demise from the fracture *per se* is, to say the least, remote. It is true that these cases are admitted on the surgical service and one might rightfully argue that it is up to the surgeon to see that these shock measures be instituted, but, if a physical therapy department is to function wisely, it must see its opportunities in all departments of the hospital and probably, by suggestion, be instrumental in lessening disability. Physical therapists should see to it that effective means are employed early in the treatment of the patient so that the result of early neglect will not result in conditions requiring prolongation or delay of appropriate physiotherapeutic measures. The cooperation of the physical therapist and the surgeon must be complete.

Specific traumatic conditions requiring the use of physiotherapeutic measures would indeed be a long list. For the purpose of discussion, we might segregate them in six groups: (1) Fractures and dislocations; (2) Infection and results of infection; (3) Burns; (4) Low back injuries; (5) Peripheral nerve injuries; (6) Sprains and strains.

Perhaps the largest group and certainly the one resulting most frequently in prolonged disability is composed of fractures. A fracture is too often considered a broken bone. It is true that when a fracture occurs the bone is broken, but it is likewise true that no fracture ever occurred, and certainly no fracture with displacement, without injury to parts other than the bone. The treatment of fractures has been frequently divided into the stages of reduction and the restoration of function in the adjacent joints. Physical therapy cannot be expected to overcome the consequences or the result of improper or incomplete reduction. If function is to be regained the best possible reduction must first be obtained. The physiotherapist should be interested in what has been accomplished in the way of reduction and I have no doubt may readily be of considerable help in suggesting ways and means of accomplishing this. Champenier demonstrated this when he accomplished reductions readily in elderly people with

sedative massage. While this principle cannot be generally applied, it does illustrate that the relief of muscle spasm by massage can, in the selected case, accomplish reduction of displaced fragments. Murray** has recently attempted to properly place physical therapy in the treatment of fractures. He looks for an appreciation of first, what treatment of the fracture *per se* intends to accomplish; secondly, what physical therapy can and cannot do and thirdly, the part played by the patient. He suggests for the first appropriate reduction and a minimum of immobilization permitting the early institution of heat in the form of the therapeutic lamp and diathermy. Massage, if used, should be of the light, stroking type as described by Mennell for its reflex effect. He uses muscular stimulation by slow rhythmic contraction, employing the Bristow coil or a sinusoidal surge. He stresses the point that after the bone lesion is healed the patient visits the physiotherapist for his treatment, usually fifteen or twenty minutes three times a week and waits for physical therapy to restore function to the part. He emphasized the importance of having the patient appreciate that the regaining of function is the patient's job and that physical therapy can help him to do his work but it cannot do it for him. Assuming that in a given fracture case reduction has been accomplished and appropriate physical therapy has been employed during the healing stages, the condition which most frequently continues the patient's disability is that of limitation of motion in the joints adjacent to the fracture. Immobilization does not cause ankylosis, either fibrous or osseous. Immobilization may be a contributing cause to ankylosis but if we will search for the pathology existing in the given case responsible for the limitation of motion, the solution of restoration of function will become more evident. The types of fractures which enter a joint result in extravasation of blood into the joint itself, as well as into the ligamentous and muscular structures surrounding the joint. In addition to this, the cartilage and bone having been divided, unite, with callous closing the bone and with fibrous tissue healing the cartilage. Cartilage does not replace itself as does bone. In this type of case appropriate physical measures to hasten the absorption of blood within the joint, such as elevation, heat, gentle massage and, at times, diathermy, lessen the possibility of ankylosis. Immobilization used at the same time, while these extravasated products are being absorbed, lessens the chance of ankylosis rather than promotes it.

The accomplishment of this is usually completed within the first two or three weeks at which time mobilization of the joint may be started for short periods during the day. When the fracture line does not enter the joint but is confined to the shaft of the bone, even near the joint, the only possible deterrent to activity is the

extravasated substances within the ligaments, tendon sheaths and muscles which, if permitted to organize, lengthen the period of disability by decreasing the contractility and elasticity of the muscle fibres and by increasing the irritability of the muscle itself.

Passive and active exercises are so frequently misused that I would like to take the liberty of recalling their use and misuse to you. Active motion is that type of exercise in which a joint is moved by the subjective contractions of the patient's own muscles. Passive joint movement varies from it in that the motion is carried out by someone else's muscles or by some mechanical device. If a patient flexes his elbow he contracts his biceps and, at the same time, unconsciously relaxes his triceps. Conversely, extension of the elbow is accomplished by contraction of the triceps and relaxation of the biceps. Following trauma about the elbow, and particularly if the joint has been immobilized without the means being taken to prevent the organization of extravasated products, changes occur in the biceps and triceps lessening their elasticity and extensibility. In the presence of this, active contraction of the biceps will result in a lessened range of motion in the joint itself but it will with certainty be accomplished by relaxation of the triceps up to the point of extensibility of this muscle when pain will be noticed and the patient will cease contracting the biceps further. In this state of lessened elasticity and extensibility the apprehension of the patient to pain will cause him to fear any attempt at passive movement and his apprehension will cause him to exert a protective spasm in both biceps and triceps at the same time. If the passive movement be continued it can only result in the stretching of a spastic muscle which means possibly minute but nevertheless definite hemorrhage in the muscle itself with consequent organization, fibrosis and further stiffness. If we are to accomplish anything in improving the range of motion in joints following fractures, we must cease to regard passive movement as a means of accomplishing this. I saw this well illustrated in a patient who had sustained a fracture of the internal condyle of the humerus not entering the joint. The fracture was reduced and the elbow maintained flexed with a posterior plaster splint. No early physiotherapy was instituted. At the end of four weeks the patient was ordered to have radiant heat, diathermy and passive motion. He received this daily for six months at the end of which time the elbow was held flexed at 100 degrees with about 10 degrees of active motion present. X-rays revealed no bony interference either within or without the joint but marked protective muscle spasm was present. It was suggested that the patient continue the use of heat and diathermy but that active exercise be substituted for passive movement. In a week the patient had 40 degrees of motion

and returned to work within a month with practically full motion.

Resistive movement, unlike passive movement, has a definite place in assisting the patient in regaining loss of motion in a joint. It is indicated where, through fear of hurting himself, a patient will not exert sufficient muscle contraction to improve his function. When we resist the flexion of an elbow, the biceps must work more powerfully and conversely the triceps must relax more thoroughly. We know that opposing muscle groups work interdependently. Having the patient contract his biceps against resistance and alternately contract the triceps against resistance will accomplish more in a short time in improving the range of motion in a joint than any amount of powerfully exerted passive movement. The reason for this, and here again we must go back to the fundamentals of the physiological property of muscle, is that every contraction of muscle must be followed by a phase of relaxation if we are to develop power in the muscle. The popularity of weight and pulley machines used some few years ago has largely waned for this reason. If we conceive of pulling against a weight for the development of the biceps, the weight dropping as the contraction in the biceps reaches its maximum, it follows that the biceps must maintain some contraction in order to permit the weight to fall. This means that the biceps are contracted both as the weight is pulled up and as it is let down. With this there is no phase of relaxation and therefore there cannot be any improvement expected in the strength of the muscle.

There is one exception to the use of passive movement which I would like to call to your attention. Following injuries to the forearm or hand it is not infrequent that stiffness results in the wrist and fingers. If these joints are stretched manually we have seen that further hemorrhage occurs resulting in further stiffness. However, if gradual traction is applied to the joints of the fingers and this traction be constant and always less than that which an active contraction of the tendon under traction can overcome, stretching will occur without actual hemorrhage. To illustrate, if elastic traction be applied to improve flexion in the fingers, the extensor tendons, joint capsules and soft tissues being shortened, the elastic traction should never be sufficiently strong to prevent an active contraction of the extensor tendon from straightening. With this amount of traction the constancy of the elastic pull will overcome gradually the shortening in the extensor tissue and further flexion will be accomplished without injury to the extensor tissue. This type of passive movement differs from the usual manually employed passive movement in that further insult to the shortened tissue is never provoked. Physical therapy employed with this type of passive movement will frequently accomplish the restoration of function when physical therapy

alone or traction alone would never result in improvement.

I believe that if we are to attempt indications and contraindications for physical therapy in fracture treatment, we must cease to consider the cases as fracture cases and consider them as cases of lymph stasis, blood stasis, cases in which the contractility and elasticity of the muscle have been lost or cases in which muscle tone is lacking. If we do not appreciate the pathology that we are trying to relieve, we can never accomplish a desired effect by empirical measures.

The delayed union, fibrous union or non-union seen in fracture work rarely offer opportunities for improvement by physical therapy alone. The delayed union in fractures is frequently the result of some local or general metabolic change while the fibrous unions and non-unions are unfortunately too often the result of interposition of soft parts. Physical therapy such as heat, in one form or another, diathermy or ultra-violet light may be of assistance in those cases of delayed union where local or general metabolic improvement is looked for, but I am not of the opinion that it is ever of much use in fibrous union or non-union. One might reason that the fibrous union is union without calcification and that certain forms of physical therapy might be of help in the laying down of calcium in the organizing tissue, but as a matter of clinical experience, I have rarely seen it. Moorhead*** states that fractures which fail to show union in a period 50% longer than the time usually taken for fractures of the same kind will probably fail to unite and that means should be taken to investigate the cause of why union is failing. Physical therapy cannot and should not attempt long periods of treatment for cases of non-union, inasmuch as the majority of these cases are due to mechanical interposition of tissue.

I believe that there is a very fertile field for the use of physical therapy prior to bone grafting, particularly in those cases where previous infection has been present. Surgeons vary very much in their opinions as to the length of time after infection that a bone graft might be performed safely. What the surgeon wishes to know is whether or not latent infection might be lighted up by the trauma of operation and, if this can be determined prior to operation, it would be of the utmost importance in preventing the catastrophe of prolonged drainage following bone grafting. Prior to a bone graft, in cases previously infected, we can obtain information as to whether or not latent infection is present if we will take a blood count so that we will have a basic normal, then treat the patient physiotherapeutically with heat, diathermy and active massage and, in the course of a few hours, again take a blood count. If retained infection is present, there will be a definite rise in the white cell count, a response to the local aggravation of the local condition, and there will

frequently also be seen a rise in temperature. If this is present bone grafting should not be attempted until, following this line of procedure, no aggravation is shown by this method.

It seems to be a common belief that the use of penetrating heat will stimulate osteogenesis and that the use of diathermy following bone grafting hastens union. I am not of this opinion. I believe that the judicious use of diathermy following bone grafting is useful in hastening the processes which will ensue whether the diathermy is given or not. I have seen bone grafts several weeks post-operative showing little or no osteogenesis take on a healthy and speedy growth after a few diathermy treatments and I have also seen the complete absorption of a bone graft under the use of diathermy. In other words, penetrating heat will hasten the process which is taking place whether it be in the formation of more callous or the tendency to non-union but it will do no more than hasten this process. It will not grow bone. The local and general factors present in the individual case are the determining factors as to osteogenesis.

Dislocations form another large group of cases, the result of trauma. When a dislocation occurs there must perforce be a rupture of the capsule of a joint. This rupture usually occurs at the weakest part of the point and, if we were to examine that joint by dissection, we would find that it appeared as a rent in the capsule and the ligaments surrounding the joint. The rest of the capsule and the ligaments are intact. It is only certain motions which will eventuate in redislocation of that joint.

Perhaps the commonest joint dislocated is the shoulder. At the shoulder anterior dislocation is the commonest type. The only motion that will result in re-dislocation is abduction and extension. If these be prevented there is no possibility of the joint re-dislocating. If, following a dislocation of this type, a simple sling be worn for a few days and the patient advised not to make attempts at the motions which might cause re-dislocation, there is no excuse for failing to give the patient the opportunity of other motions and of the physical therapy which will promote the rapid absorption of extravasated blood and hasten the repair in the soft tissue surrounding the joint. The uncomplicated dislocation of any joint which has been reduced should start physical therapy on the day of the accident. If this is done much time will be saved in the restoration of function.

Infection and the result of infection constitute a third large group which may or may not respond to physiotherapeutic measures. There is a vast difference pathologically from that group where extravasation of blood following trauma has resulted in hematomas, blood stasis and lymph stasis. At the time of infection nature attempts to wall off the area with blood cells resulting in induration of the tissue. Heat, hot wet dressings

and, in selected cases, baths are definitely indicated. Massage in the presence of infection is definitely contraindicated as it can do nothing but harm.

Infections of the hand particularly, whether they be paronychia, tendon sheath or fascial space infections, after adequate drainage has been established and pain has entirely subsided, will then respond to the whirlpool bath and be thereby definitely benefited. However, I would warn you against the use of even baths during the stages of temperature and while pain is still present. These are most frequently the indicators of the retention of pus under pressure which has not as yet been released and extension of the process may result from the too active use of physical measures. Drainage must be complete before physical measures can accomplish their purpose adequately. I would particularly warn you against the use of physical measures in a certain type of hand infection. These are known as tooth infections and occur usually over the dorsal surface of the metacarpophalangeal joints when an individual strikes the tooth of another individual, thereby sustaining a laceration in this region. The dangers occur in the type of infection which ensues. It is usually the spirillum of Vincent. The wounds are usually small but the type of infection will be spread rapidly unless adequate drainage be established and the wound antiseptized early by appropriate means. Physical therapy and inadequate surgery usually will spread this type of infection.

Physical therapy has a definite usefulness in the case of sepsis following trauma other than its local effect. General ultra-violet light and radiant light are supportive measures which frequently are successful in improving the patient's general condition and comfort and thereby promoting the healing process.

Extensive burns form a fourth group of cases seen in traumatic work. Here physical therapy can do splendid work in all phases of the condition. The most satisfactory treatment that I have seen for the treatment of the local condition has been the application of 2½% to 5% tannic acid applied immediately and until coagulation has occurred over the traumatized area. Radiant heat, constantly applied, not only hastens the action of the tannic acid but materially lessens pain, keeping the part at a constant temperature. In the last stages, when epithelialization is taking place, ultra-violet light has been shown to be a definite stimulant to this process.

A fifth group of traumatic cases is comprised of those low back injuries which form such a formidable problem to anyone seeing traumatic cases. These cases constitute one of the most important disabling factors in traumatic and compensation work. They are the cases in which, when appropriately applied, physical therapy can do so much and conversely they are those which,

with misdirected physical therapy, can be continued so long disabled.

As in all medical or surgical conditions the indications for treatment depend entirely upon what is the matter. An individual reports to the doctor with a pain in his back following an injury. The most searching clinical examination is not sufficient for diagnosis. It is my opinion that no back injury should receive physical therapy without antero-posterior, stereoscopic and lateral view x-rays. We have all seen the case of pain in the back treated with baking and massage for an indefinite period and, when no improvement occurs, x-rays are taken showing a fracture of the lamina, transverse process or some other bony condition. Clinical examination will elicit much but it is frequently impossible to accurately rule out bone pathology without x-rays. When an injury occurs to the lower part of the back we must form an opinion as to what this pathological condition is. Fractures of the spinous processes, articular processes, bodies or lamina, luxations, hematomas, tearing of the lumbar fascia sprains, congenital abnormalities, postural abnormalities, latent disease such as tuberculosis or chronic arthritis, all of these are factors which must be considered. In the soft tissue group physical therapy can assist very much but in the injuries to bone or in latent disease physical therapy cannot be substituted for other measures. To do so can only result in failure and in the disrepute of physical therapy. In those cases of bone injury following the bony repair, physical therapy may be indicated in the restoration of motion and, as such, has a definite place. I would remind you that, in selected cases, there is a place for manipulation and there is also a usefulness for the combination of physical therapy plus adequate support, whether it be brace, removable corset or belt.

Injuries to the peripheral nerves constitute a sixth group. Here again accuracy in diagnosis is essential. The neurologist, the surgeon and the physiotherapist must work in conjunction. Accurate diagnosis must predicate the type of treatment to be instituted. Prior to operation much information can be gained from electrical investigation of musculonerve reactions. Following operative repair the position necessary for the maintenance of nerve contact may preclude the general use of physical therapy but it is rarely that all physiotherapeutic measures must be postponed because of this. To illustrate an ulnar nerve which has been divided with loss of substance may frequently have to be transplanted to the anterior surface of the elbow before its ends can be brought into continuity. This means that the elbow must be kept flexed during the first six weeks so that physical therapy cannot do all the work that it might while, at the same time it is of the utmost importance that the elbow be maintained flexed until healing has occurred at the site

of suture. With cooperation the physiotherapist can usually institute measures keeping the part in this flexed position and at the same time carry out the measures which will aid in nerve regeneration and also maintain the nutrition of the parts supplied by that nerve in the hand. Heat, diathermy, faradism and exercises to those active groups will do much in assisting regeneration.

Sprains and strains constitute a large group of the traumatics. A sprain is a tearing of a ligament while a strain is a stretching of this tissue. Support, elevation for the first twenty-four or forty-eight hours followed by active physical therapy and exercise with care to prevent further insult by re-stretching or re-straining the traumatized ligament will definitely lessen the period of disability. In an ankle joint the wedging of the heel of a boot will frequently prevent the re-straining of this ligament while it is healing, while the active physical therapy will hasten the reparative process by speeding up the local metabolism. The commonly employed strapping of injuries of this sort for weeks before physical therapy is instituted is to be decried.

Bursitis, myositis, synovitis and tenosynovitis are other traumatic conditions amenable to properly applied physiotherapeutic measures which space alone prevents me from giving due consideration. The adequate treatment of any of these subjects would require a paper in itself.

To sum up, Physical Therapy in traumatic conditions is indicated:

1. In fractures and dislocations.
 - (a) Early to relieve pain and spasm.
 - (b) To promote absorption of extravasated products.
 - (c) To improve muscle tone and range of motion in joints.
 - (d) In later stages to hasten calcification on decalcification.
2. In infection and the results of infection.
To hasten absorption of by-products of inflammation, improve motion in joints soften scar tissue and lessen fibrosis.

3. In burns for hastening local coagulation, lessening pain and stimulating granulation and epithelialization.
4. In back injuries.
To promote absorption of extravasated blood and lymph, thereby lessening pain, improving muscle tone and activating joint motion.
5. In peripheral nerve injuries.
To maintain nutrition, stimulate regeneration and improve muscle tone and function.
6. In sprains and strains.
Lessening blood and lymph stasis, promoting early active motion.
7. In bursitis, myositis, synovitis and tenosynovitis.
For the removal of waste products, sedation and promoting early function.

Physiotherapy is contraindicated:

1. Where other medical or surgical procedure has proven superior.
2. After the patient can do what the therapeutic measure is aimed at helping him perform.
3. Before an adequate examination, both clinical and laboratory, has revealed the pathology present.

An experienced doctor once said: "Do not permit yourself the luxury of an hypothesis to save yourself the drudgery of an observation." If we were to carry this thought into Physical Therapy, with more exacting observations on the effectiveness of each modality upon traumatized tissue, I believe that we would be less apt to employ empirically modalities which might be of the utmost usefulness in conditions other than those for which we now use them.

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CONSERVATIVE SURGICAL CONSIDERATIONS IN THE TREATMENT OF CANCER OF THE BREAST*

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CARCINOMA of the breast continues to be one of the foremost problems in the field of malignancy. This contribution is based on a study of cases encountered in hospital service and includes a few conservative points in treatment. The form of treatment described here-

in represents an endeavor to avoid some of the most obstinate and serious manifestations following radical surgery of the breast.

Surgery is recognized as having achieved a certain degree of prestige in combating malignancy and the consensus of opinion still prevails among many that surgery alone is the only effective method in the treatment of cancer. However,

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radium has also contributed its measure to the success of certain cases and high voltage x-ray with the more recent advances in filtration, renders the contribution of value as a pre- and post-operative form of therapy. The value of x-ray and radium radiation as associate forms of therapy, in conjunction with conservative mastectomy in the early and advanced cases of breast involvement, will also be considered.

It is not the purpose of this paper to bring into disrepute the radical operation for carcinoma of the breast as devised by Halsted, Meyer, Cheyne, Handley, Kocher, *et al*. This type of operation has its specific indications but on the other hand, it seems wholly unscientific that in every case of breast cancer the same orthodox procedure should be adopted.

These observations are based on custodial cancer patients who have been subjected to radical surgery and present in their late post operative careers serious complications such as persistent fibrous edema of the upper extremity with traumatic neuritis, painful thoracic scar formation, loss of thoracic soft tissue protection, recurrences and varying degrees of metastases. The very fact that the disease recurs in the scar area indicates that extensive surgical resection at times does fail in its purpose by disseminating malignant cells during manipulation. In many instances, the fibrous edema is the exciting cause of death independent of the disease itself. A post-mortem study of this condition proves it to be due to a lack of venous drainage resulting from traumatic scar tissue formation.

Many authors advise complete ablation of the axillary and clavicular glands whether palpable or not as a prophylactic measure against metastasis. If glands are palpable, metastasis is usually present and the prognosis is definitely limited. If no glands are demonstrable why give rise to a potential source of complication by stirring up a sensitive axillary anatomy? The same attitude exists in regard to the routine removal of the pectoral muscles. The anatomical factor is generally overlooked that in many instances two-thirds of the breast are attached to the serratus and external oblique muscles and the vascular and lymphatic associations in these structures are as prominent as those permeating the pectorals.

Balfour,¹ in his masterly paper on cancer of the stomach, in which he states the mortality rate should be less than 10%, and where the anatomical and physiological factors of the lymphatic glandular system presents a similar problem as in cancer of the breast, points out two important facts regarding enlarged lymph nodes, namely (1) enlargement does not necessarily mean involvement by cancer, and (2) a patient may be cured even if all involved lymph nodes

are not removed. He corroborates the foregoing points by further stating "I believe it to be a possibility that in cancer in any situation, removal of the primary growth and of the immediately adjacent lymphatic structures may bring about permanent cure even if involved lymph nodes are left, the remaining nodes in such cases act as a sufficient barrier to further dissemination of the disease. It is, therefore, occasionally good practice to disregard involvement of lymph nodes if the primary growth can be removed, and to remove the adjacent lymphatic structures as completely as possible."

By the term "conservative mastectomy" is meant a surgical process which varies from a limited radical procedure, without manipulation within the axilla, to the simple removal of the breast tissue proper from its attachments to the thoracic wall. By "limited radical procedure" is meant the absolute avoidance of any surgical manipulation within the axilla and the removal of the pectoralis major when said structure is involved, and even of the pectoralis minor when the latter is definitely involved.

The conservative amputation should be performed with the following surgical factors in mind. The skin incision should be so planned that there is a wide margin of apparently healthy tissue surrounding the tumor mass, and at the same time bearing in mind the necessity of leaving sufficient normal tissue so that absolute approximation of the wound edges can be secured. The resection should be done so that the tumor and surrounding tissue is removed in such a manner that the pectoral fascia be included. Careful handling of the tissue following resection is essential, all bleeding vessels should be clamped and ligated immediately upon being severed, and counter drainage, independent of the line of incision, should always be established.

The employment of conservative mastectomy in localized ulcerating breast lesions is recommended, even in the presence of metastasis, in order to avoid a progressive phagedenic process from advancing, oftentimes leading to skin metastasis. This is suggested as a purely palliative measure for the comfort of those patients, some of whom may have a period of years to live.

Cancer of the breast is one of those conditions in which it is most difficult to determine the prognosis. The same type of tumor involvement as regards size, location and pathology in two different individuals will assume such different courses that no surgeon would attempt to predict with any degree of accuracy the result of operation, liability to metastasis or recurrence. It is encouraging and interesting to note that patients over fifty years of age possess some unknown defensive factor in the body mechanism which appears to combat the virulence of the disease, even in the presence of advanced metastasis.

¹ Balfour, Donald C. Curability of Cancer of the Stomach. *Surg Gyn and Obst* 54 315 Feb 15, 1932

To give a plausible explanation as to why cancer of the breast offers so unfavorable a prognosis, it is necessary to consider the anatomy in order to point out the diversity and freedom of paths of dissemination. Metastatic cells are transported by lymph and blood vessels and by an insidious process known as permeation. It has been stated that aside from cancer of the pylorus, cancer of the breast gives rise to the widest form of metastasis. This is due to its complex and extensive anatomical structure, further influenced by its physiological processes.

A review of the anatomy shows that the vascular system of the breast is made up of branches from the internal mammary, intercostal and axillary arterial systems. The lymphatics, which are also of great moment to the surgeon, consist of a superficial or subcutaneous plexus which cover the periphery and a dense network of deep lymphatic channels traveling through all parts of the glandular tissue. This deep system connects with the lymphatic trunks of both the deep fascia of the chest and of the abdominal wall with an extensive anastomosis between these two systems as well. The lateral portion of the breast is drained by trunks which run along the outer border of the pectoral muscles and are drained by nodes within the axilla, and by extension communicate with the sub- and supra-clavicular nodes. The mesial portion of the breast is drained by deep lymphatics, which perforate the intercostal spaces, to be drained by the nodes in the anterior mediastinum. A connection of lymphatics of both breasts across the sternum at times may give rise to dissemination to the opposite side.

Stress is laid on the necessity of roentgen investigation in all cases of breast involvement no matter how innocent the local involvement may appear, as metastasis to the lungs and skeletal system may be present and exceed in activity and scope beyond the primary condition. By the utilization of this important diagnostic feature, the degree of dissemination can be determined so that radical surgery can be intelligently selected over conservative, as suggested in the classification soon to follow. The following case of a localized tumor formation, without glandular evidence, in a woman of 32 years of age is an interesting example of its value in diagnosis. While ascending the stairs at the clinic, this woman sprained her ankle and an x -ray was taken to determine the trauma. Examination of the radiograph revealed a bony metastasis and subsequent investigation showed a generalized bony involvement.

The question of biopsy in cases of breast involvement might well be limited to those cases where decided diagnostic factors are absent. Usually the advanced or moderately advanced cases require no biopsy, as pathologic classifica-

tion does not indicate radio-sensitivity or individual susceptibility to virulence. In such cases it is better to consider surgical removal and submit the entire breast to pathological examination rather than risk dissemination by localized enucleation. However, no matter how innocent a tumor may appear on gross appearance, a microscopical study should always be made to determine its pathology. A small localized mass can very well be enucleated without injury to neighboring tissue.

High Voltage X-ray and Radium: Before entering upon treatment, it is proper to consider the value of x -rays and radium, as associate forms of therapy, and their methods of application. The success of irradiation is based on the biological effects produced when the tissues are subjected to a change in intra-cellular energy. The destruction of a cell is determined by the relationship of that energy and the sensitivity of the cell. The degree of sensitivity in a group of cells making up a tumor oftentimes is variable, and depending on this variability a tumor may demonstrate itself as being radio-sensitive or radio-resistant. The defiance of the radio-resistant type of cell may equal or excel the resistance found in the adjacent or surrounding normal tissue cells. This factor presents a situation whereby certain high resistant cells may give rise to recurrence or be the source of metastasis. The cells of tissues to be influenced are more sensitive to the radiation absorbed by them than those of the neighboring healthy tissues. The element of resistance to radiation may be combated in some degree by a specialized technic in application and division of dosage. In any event, the higher the sensitivity the more malignant the character of the cell, and such being the case the virulent elements are more easily destroyed and recurrences and metastasis checked by subsequent irradiation. Marked radio-sensitivity is no criterion for the ultimate success of the cure.

X-ray Therapy: In x -radiation the treatment should be planned so that the tumor mass will receive a desired dosage and the adjacent normal tissues are not subjected to injury. For this purpose fractional exposures are employed, that is, the application of rays through several portals at different intervals in such a way that no one area of skin receives more than a full erythema dose. Target distance, filtration and time of exposure, all depending on the site of the pathology in relation to the surface to be attacked, are factors to be taken into consideration.

At times tumors show regression to x -radiation and occasionally they are converted into freely movable and limited masses, thus changing their condition from a non-operative type of growth into an operative one.

A study of the palliation problem reveals that high-voltage x -ray is of marked value in the

treatment of pulmonary and skeletal metastases, is well as in pelvic involvement. The pain and disability resulting from bone metastasis following surgical removal of the breast may often be relieved and the life of the patient greatly prolonged. Its use is recognized by many as a pre- and post-operative form of treatment in cases of glandular and soft tissue involvement.

Radium Therapy. Radium in cancer of the breast may be applied in the form of surface application by way of the mould or interstitially in the form of needles of the element or of radon. In the case of a tumor formation within the breast, where radium therapy may be considered, interstitial treatment with needles is the method of choice. Needles may be conveniently inserted into metastatic glands within the axilla, clavicular regions and close to the pectoral muscles. These processes may also be treated with mould applications. Skin recurrences are treated with wax moulds and at times with the insertion of gold seeds of radon. However, mould applications are more desirable.

In radium therapy the different types of rays and the variations within each type must be considered. Practical requirements are met by filtration. The radiation which acts upon normal as well as pathologic tissues must also be considered.

Failla,² of the Memorial Hospital of New York, states "The effective utilization of radium in all cases of carcinoma should be based on the following factors:

- 1 The amount of radium
- 2 Duration of irradiation
- 3 Filtration
- 4 Distribution
- 5 Spacing
- 6 Geometrical configuration of tissues
- 7 Absorbing power of tissues for the particular irradiation which reaches points therein."

Treatment. The chief form of therapy in the post-operative cases is palliative. An endeavor is made in this clinical study to employ a form of research, based not only on the workings in the pathology laboratory and the suggestions in the literature, but one guided by observations of cases under palliative treatment. The scientific and practical contributions at our disposal are the result of studies of the various cancer institutes throughout the country, notably those which are adhering closely to the outlines suggested by the American College of Surgeons as a fostering unit. These institutions have patterned their working progress after careful group study both here and abroad and are enabling us to give practical consideration to the associate use of radium and high voltage x-ray along with sound surgical principles.

For the clarification of treatment a therapeutic

classification of cases, as outlined below, is respectfully suggested. Such a classification seems feasible in order that a more favorable post-operative status for the patient will possibly be established than that heretofore obtained by radical surgery. Each case should be carefully studied and taken according to the duration of the disease, size and location of the tumor, defensive factors, laboratory findings and the presence or absence of lung, skeletal and soft tissue metastases and palpable glands.

Class I

- 1 Localized tumor formation
- 2 No palpable glands in axilla
- 3 No palpable glands in sub- or supra-clavicular regions
- 4 Roentgen studies negative for metastasis to lungs or skeletal system

Treatment

- a A course of pre-operative high voltage x-ray to breast, axilla and clavicular regions
- b *Conservative mastectomy*
- c A course of post-operative high voltage x-ray
- d Periodic roentgen investigation

Class II

- 1 Breast tumor
- 2 Palpable glands in axilla and clavicular regions
- 3 Roentgen examination positive for skeletal or lung metastasis or both
- 4 No suggestion of skin metastasis

Treatment

- a A course of pre-operative high-voltage x-ray
- b *Conservative mastectomy*
- c Radium needles inserted in axillary, clavicular glands and beneath pectoral muscles
- d Subsequent repeated courses of high-voltage x-ray for metastasis, as indicated by periodic roentgen investigation

Class III

- 1 Breast tumor
- 2 Palpable glands in axilla
- 3 Palpable glands in clavicular regions
- 4 Roentgen investigation negative for metastasis
- 5 No suggestion of skin metastasis
- 6 Clinical and laboratory findings otherwise negative

Treatment

- a A course of pre-operative high voltage x-ray
- b *Radical mastectomy*
- c A course of post-operative high-voltage x-ray, to be repeated during follow-up treatment, as indicated by periodic roentgen investigation

Class IV

- 1 Ulcerative tumor involvement

²Clark, John G. Norris, Charles C., Failla Gioacchino. Radium in Gynecology, J. B. Lippincott Co., p. 86

2. Palpable glands in axilla.
3. Palpable glands in sub- or supra-clavicular regions.
4. Roentgen investigation positive for lung, skeletal metastasis or both.
5. No evidence of skin metastasis.

Treatment.

- a. A course of pre-operative high-voltage *x*-ray.
- b. *Conservative mastectomy.*
- c. Subsequent courses of high-voltage *x*-ray for palliation, as indicated by periodic roentgen investigation.

COMMENT

The indications for radical mastectomy of breast cancer depend primarily on the extent of involvement of glandular metastasis within the axillary or clavicular regions and on the absence of skeletal or lung metastasis.

In the employment of high-voltage *x*-ray therapy the contraindications for such treatment must constantly be borne in mind. The presence of telangiectasis and other complications must be noted and a complete blood count, prior to and

between courses should be studied. The history of any previous treatments should always be recorded. Radiation after operation should not be given until complete healing has occurred. An operation after a preceding radiation should not be performed until two or three weeks after such treatment.

SUMMARY

1. The value of conservative mastectomy in conjunction with high-voltage *x*-ray and radium therapy, over radical operation, in early and advanced cases of breast involvement is considered. However, no attempt is made to disregard the value of radical operation when certain specific diagnostic endeavors have been taken into consideration prior to operation.

2. A classification and outline for treatment are suggested in order that a more favorable post-operative status might possibly be established than that heretofore obtained from the usual surgical method of attack in all cases of breast cancer.

3. The importance of roentgen investigation in all cases of breast cancer is stressed as a guide for the type of operation to be selected.

THE ROLE OF VITAMINS AND INFECTION IN PEPTIC ULCER

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IF vitamin deficiency and infection play a part in the etiology of peptic ulcer, the removal of these factors should aid in the recovery. Patients treated with these factors in mind should do better than others not so treated. This paper records the effort to verify by therapeutic tests these two current theories as to the etiology of peptic ulcer. There has been a great deal of discussion concerning its causes ever since the first observations were made over 300 years ago. It cannot be stated in such a simple way as some authors would lead us to believe. Thus, to say¹ that the essential causes of peptic ulcer are now well known, that they are a combination of gastric juice, injury to the stomach mucosa, and factors which lower the general resistance of the patient, is to merely put in words our lack of knowledge on the subject. Also such causes as heredity, autonomic instability, worry, emotion, hard work, "psychic load," neurasthenia, unhygienic conditions, hereditary abnormalities in the circulation of the stomach, are all suggestive but only slightly helpful in therapy. It is naturally an important subject, because when we know the cause we shall probably be quite near an adequate treatment, and everyone who has much experience with ulcer realizes that our present treatment is extremely unsatisfactory.

Surgeons differ with medical men, and worst of all, medical men differ among themselves.

Beyond the factors of infection and vitamin deficiency, very little has been added to the medical therapy since Abercrombie's² day. This wise Scot put in a few words in 1824, the treatment we rely upon today. Subsequent workers have merely methodized and scheduled his treatment. He said "the food should be of the mildest kind, and in very small quantities, with abstinence from all stimuli, and from bodily exertion. Mercury in small quantities seems to be useful in such cases, in others lime water and the oxide of bismuth."

The Infection Theory: Of the many theories developed to explain ulcer, probably the most persistent one is that ulcer is due to infection and is especially the result of focal infection. It is not new. Long before Pasteur, the early writers on ulcer, Broussais (1823) Abercrombie (1824) and J. Cruveilhier³ (1830) remarked on the inflammatory appearance of ulcer. Böttcher⁴ (1874) shortly after Pasteur's work, demonstrated microorganisms in ulcers. Foreshadowing Rosenau, Letulle⁵ (1888) injected "Cultures Microbienes" intravenously in animals and produced gastric lesions. Following this, many workers performed similar experiments and made confirmatory ob-

servations, notably Fabre, Wurts, Vidal, and Gordon⁶. Not much attention was paid to the idea, however, until Rosenau's⁷ work was published in 1913. This work is now well known. He demonstrated in animals that certain streptococci circulating through the blood stream had a special affinity for the gastric mucosa and caused gastric lesions. Later (1915) he isolated streptococci in pure culture from many ulcers. Haden⁸ (1925) and Meisser⁹ (1925) supported Rosenau's work by obtaining ulceration from streptococci isolated from infected teeth, and in 1928 Nickel and Hufford¹⁰ added support to the idea using streptococci from other foci as well, such as tonsils, prostate and cervix. Most recently E. W. Saunders¹¹ (1930) isolated a non-hemolytic streptococcus from resected ulcers. Agglutination reactions, using the serum of patients with peptic ulcer and this particular streptococcus, showed, according to Saunders, that ulcer is caused by, or at least always associated with a specific type of streptococcus.

Clinically, also, other factors make one suspect the relationship of ulcer with focal infection. Many have observed that intercurrent colds, acutely abscessed teeth, or infections of any kind will make ulcer pain worse. Also, the extraction of infected teeth and diseased tonsils will aggravate the disease. The situation is analogous to that in arthritis, where focal infection has a very substantial basis in fact.

Certainly it is true that focal infection as a factor in ulcer has received at least tentative reception among medical men. Most physicians now remove focal infection, if found, in association with their usual Sippy regime, and feel that the procedure is somehow of value.

Vitamins in Peptic Ulcer: Years ago, (1904) Deeks¹² contended that a high carbohydrate diet produced "gastric irritation." This is an interesting article far ahead of the times. At that time the vitamin itself was not an actual conception. More recently, McCarrison¹³ reiterated this statement in the light of our modern knowledge of vitamins. He was impressed with the rarity of gastric and duodenal ulcers in the natives of the Himalaya Mountains, and laid this to the fact that they used exclusively the so-called natural foods, such as milk, eggs, grains, fruits, and leafy vegetables. In 3600 major operations he did not see one case of ulcer, appendicitis, or mucous colitis. He also tried to prove experimentally that monkeys fed on a deficient diet would develop peptic ulcer. Those monkeys which received a sterilized carbohydrate diet developed ulcer. The emphasis was laid on Vitamins B and C as the most important factor in protecting the gastro-intestinal tract from infection. The role of food in the causes of many diseases, according to some authors, involves increased susceptibility to infection due to lowered resistance caused by faulty diet. The actual excess of carbohydrates,

per se, is also supposed to be a contributory factor in ulcer. Is the apparent increased incidence of peptic ulcer due to the fact that we are yearly consuming more carbohydrates? We in America have been referred to as the sugar saturated nation. This tendency is a definite trend of the times. "The consumption of sugar has increased 500% in the past 60 years." The peak of sugar consumption in United States was reached in 1926 when 109.3 pounds were used per capita. On this basis it was estimated that nearly one-fifth of the requirement of food fuel in this country was supplied by pure refined sugar.¹⁴ Whether it is a fact that ulcer patients belong to a group that over-indulge in carbohydrates, and thereby lack sufficient vitamins, as stated by Harris¹⁵, is an observation that I have not been able to verify. However, if all the above is correct, we should expect the administration of a low carbohydrate diet and large quantities of Vitamin B and C to act advantageously in peptic ulcer. This is one of the points we tried to prove in our series of ulcer patients. It is also interesting to note that the usual Sippy diet, which is the most widely used form of treatment, is quite deficient in Vitamin B and C. On the other hand there are many observations which lead one to doubt the etiologic relationship of vitamins and ulcer. During the World War there were serious outbreaks in the Civil and Military population, of scurvy osteomalacia and other nutritional diseases, and yet the incidence of peptic ulcer was not markedly increased.

Method: At the gastro-enterological clinic of the fourth Medical and Surgical Division, we have endeavored to put to test, in the cure of ulcer, the effect of a high vitamin diet together with the removal or treatment of focal infection. We purposely associated the two factors simultaneously in therapy because of their reputed dependence. The treatment consisted of (1) A normal diet without interval feedings. (2) The assured inclusion of all known vitamins. (3) The removal or treatment of focal infection. (4) Vaccine therapy (non-specific). One would expect, if ulcer were caused by these factors that treatment directed along these lines would cure the condition, or at least give better results than where these were ignored. This result would especially be expected if the disease were due to vitamin deficiency, where one might expect such rapid restitution of normal function and structure as in rickets, scurvy, and other nutritional diseases. We report here sixty patients with peptic ulcer treated in this way during the past two years, and followed, in all, over three years. Every patient had a complete dental examination and dental X-ray. Tonsils were carefully examined and a history of tonsil infection elicited. Other foci were sought, especially gall bladder disease and infections of the genito urinary tract. These latter factors were not frequently met. Figures

on the incidence of gall bladder disease in association with peptic ulcer are not commonly published. Some surgeons feel a mild cholecystitis is common. When found it is probably an associated pathology rather than a causal focus of infection, just as in the case of chronic pancreatitis. Together with this treatment we gave our patients non-specific protein injections. These consisted of stock vaccines made from streptococcus viridans and streptococcus hemolyticus with some B. Coli and staphylococci, the idea being not to seek for a specific immunity but for a non-specific action. It was considered that such injections stimulate the immunological protective mechanism of the body. These injections were given once a week sub-cutaneously, a reaction being avoided. Holler in 1922¹⁶ was apparently the first to apply protein therapy to the treatment of peptic ulcer. He used milk and various vaccines. Pribram in 1922¹⁷ and later L. Martin¹⁸ (1929) reported excellent improvement in the administration of the various non-specific proteins. Following these the method has been in frequent use.

The diet outlined for the patients in this series consisted of three meals a day without any intermediate feedings. Patients were immediately placed on a well-balanced diet such as should maintain excellent health in an average human being. Sippy regime and ulcer regimes of all kinds were sedulously avoided. Indiscreet combinations, and difficult and grossly coarse foods were restricted. Patients were instructed, however, to include in the daily diet at least one raw fruit, one raw vegetable, two cooked fruits, two cooked leafy vegetables, and a moderate portion of meat, six butter balls a day, whole wheat bread, and some kind of unrefined cereal. In addition to that, in order to be absolutely sure that all the vitamins were in excess, the patient was instructed to take daily two ounces of tomato juice, two teaspoonfuls of cod liver oil, together with either yeast, Bemax, or Vitavose daily. In addition, our patients received ultra-violet radiation over the abdomen, two or three times a week. This diet without question is rich in all the known vitamins. The reception of this food (especially the factor of three daily meals instead of interval feedings) was quite satisfactory. It is traditionally essential in ulcer patients that they receive interval feedings and bland foods. Most of our patients, however, received symptomatic relief at least at first under this regime. A few, however, required interval feedings of milk and cream in order to get relief from pain. All medication was sedulously avoided.

Findings Before Treatment: The sixty cases were under observation over three years. There were 82% males and 18% females. All of these patients received complete laboratory investigation. The tests included Ewald test meal, chemical blood analysis, urine, complete blood count,

Wassermann, stool examination and so forth. There was nothing especially of note in these laboratory reports, the findings being about as normal as in any group of cases. Complete physical examinations were done with the special idea of seeking out all possible foci of infection.

A great deal of dental pathology was found. Caries were noted but not studied statistically. Only nineteen of the sixty patients showed no apical infection and no pyorrhea on examination. 68% showed gross dental infection and required removal of one or more teeth and drainage of pyorrheal pockets. This incidence of infection is rather high, but here we are dealing with a specially low economic group, which fact probably accounts for the high incidence. The general impression is that teeth are a far more potent factor in peptic ulcer than are tonsils. This is analogous to the situation in arthritis, where we consider the tonsils as a factor in the younger group and teeth as a factor in the older group (over 35). Four tonsillectomies were required. The infrequent importance of the sinuses is similar to the situation in arthritis, but in our series all real sinus trouble received special treatment. There was revealed a high percentage of membranous thickening, especially in the antra, but no real suppurative processes, either acute or chronic.

All patients were subjected to thorough gastrointestinal X-ray examinations at the beginning of the treatment, and regularly thereafter at intervals of three months in order that the X-ray as well as the clinical findings could be followed. It is a common observation in ulcer patients that their symptoms are relieved, as a matter of fact they become symptom-free, and yet the X-ray shows no improvement in the ulcer. Hence the importance of frequent X-rays. 11% were gastric, 87% duodenal, and 2% marginal. 20% had been previously operated upon.

Results of Treatment: The question was: does a treatment, which has for its object the removal of focal infection and the institution of a high vitamin diet, in itself cure ulcer, or aid in its cure? To actually know this, one must compare our results with those obtained by the usual Sippy method. We have endeavored to collect a few of the published reports on the results of ambulatory Sippy treatment. (See appended chart.) With this information as a basis, we were able to note whether a regime paying strict attention to focal infections and vitamins were superior to the usual Sippy regime. In our series there was symptomatic relief, practically complete, in 58% of the cases. In addition to the 58%, 12% of the cases showed moderate improvement, and 10% slight improvement. In 20% there was complete failure. Ten percent of the patients required operative interference during the treatment and had gastric surgery. Six percent perforated and 8% had hemorrhage during the treatment. Most of the latter, however, recovered and made good

RESULTS OF AMBULATORY SIPPY TREATMENT IN PEPTIC ULCER.

Reporter	Number of Cases	Type of Ulcer	Time Followed	Symptomatic Results	Hemorrhage	Perforation
Beams, A. J. <i>Ohio State Med. J.</i> xxiv:21, 1928	121	Gastric and Duodenal	6 months to 5 years	92.2% remain well 9 recurrences 6 failures		1 case
Carter, H. S. <i>Bull. N. Y. Academy Med.</i> ii:580, 1926	From Series of 10,000 cases treated all methods	Gastric and Duodenal	2 years or more	32% cured		
White, F. W. <i>Boston Med. & Surg. Jour.</i> xcv:983, Nov. 18, 1926	206	Gastric 54 and Duodenal 152	3 to 5 years	Well Better No Better	Duodenal 57% Gastric 30% Duodenal 21% Gastric 24% Duodenal 4% Gastric —	
Gatewood, W. C. <i>Northwest Med.</i> xxvii:580, Dec., 1928	261	Gastric and Duodenal	2 years	Symptom Free Arrested	48.7% 13.4%	
Blackford & Bowers, J. M. <i>Am. J. Med. Sciences</i> clxxii:51-58, Jan., 1929	66	Gastric 6 and Duodenal 60	2 to 10 years	58% "Satisfactory" 13% Improved		5 cases
Nisbet, W. O. <i>Southern Med. & Surg.</i> 89:155-159, March, 1927	24	Gastric 1 and Duodenal 23	2 to 5 years	41%		

progress. The X-ray findings are of interest. Despite the fact that there was a considerable percentage of patients relieved, only 14% showed negative X-rays. There was another 24% which showed negative X-rays during treatment but subsequently the ulcer returned visible to X-ray examination. It merely bears out what is already known but not fully appreciated, that the patient may be free of symptoms and yet have a persistent ulcer. Such ulcers, even when symptom free are apt to bleed or to perforate suddenly, much to the surprise of the physician and patient. It is also interesting to note that all our excellent results were obtained with duodenal ulcers.

Conclusion

The relation of focal infection and vitamin deficiency to peptic ulcer is problematical, at best. Certainly the indiscriminate removal of teeth and tonsils is to be deplored. Such a practice is not warranted by the benefits seen to accrue. While on general principles the removal of real, proven focal infection and the administration of a balanced vitamin diet is indicated, these measures are probably no more valuable in peptic ulcer than in any other constitutional disease. Peptic ulcer is a disorder whose real cause is yet to be demonstrated.

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CERTAIN EDUCATIONAL, PROFESSIONAL AND CIVIC PHASES OF CLINICAL SPECIALIZATION*

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MR. CHAIRMAN, Distinguished Guests, Honored Hosts, Ladies and Gentlemen: On this occasion, the actual dinner, albeit Lucullan, is but a pleasurable incident: the social delights of such a communion of gracious women and potent, and eloquent men are delightful, inspiring, items: but they are only the fine interlude in an absorbing, continuing, human-interest drama which began long ago; and which in its next act nears one climax.

The central figure of this drama is man with his age-old burden of physical ills. Its action centers around his waxing hope that in health he yet may be conceived and born; that in health he may mature; and that through maturity and to his sunset he may progress and wane in bodily peace. It is meet that, in this interlude, we discuss this hope of man.

In this day, his hope is justified: not in its fulness; but to the degree that a vast amount of human suffering now endured is, in fact, unnecessary. Mankind as a whole does not know this fact, so vital to his happiness. Indeed it is known only to enlightened ones.

The justification of man's hope is to be found in the potential riches of the sum total of today's medical knowledge and skill. The pith of the matter is to make these riches kinetic in a broad and efficient sense, rather than in the prevailing relatively narrow and inefficient sense—to cause such riches, now enjoyed by a minority, to become enjoyed by a great majority—by all, indeed, who shall, intelligently, reach forth for them.

This gathering is essentially one of physicians; and of those interested in physicians, their special education and their work. However, it is axiomatic that the prime responsibility of the physician is not his own welfare, but is rather the medical welfare of his patient; and that the prime responsibility of medical education is to train the physician for the best

possible care of his patients. Therefore, in developing our discussion, it is clear that if we proceed from the standpoint of the interest of the patient we are on sound ground; and that if through this we may develop the interests of the physician and of his special education, then, and only then, will they also be upon sound ground.

Specifically, it is submitted that:

(1) The patient has a right to expect, and should receive, that quality of medical service which is as good as current medical knowledge and facilities, as a whole, are potentially capable of rendering.

(2) Every high-grade physician is now a specialist; and this includes so-called general practitioners.

(3) The best medical care necessitates that the physician shall have whenever indicated, and without reserve, the aid of consultants, laboratories, hospitals and nursing.

(4) State medicine will come in America unless physicians wisely guide the trend otherwise.

(5) The problem of the cost of medical care must be solved for both patient and physician.

(6) Methods for certifying medical specialists are essential; are now, in part, with us; and will grow rapidly into maturity and potency.

(7) Medical education must become so organized, and is becoming so organized that it shall efficiently play its part in the premises.

It is obvious that, the first thesis is the key to the series; that this key is shaped by the last; and that the others are important collaterals. We may therefore turn in our discussion to medical education, viewing the other matters the while we proceed, or when indicated.

As we approach the end of the first third of the twentieth century we find the conditions of medical education and practice in America vastly altered from those which existed as the century began. Medical development has had its ample share of the rapid general develop-

* Address, by invitation, to the New York Post-Graduate Medical School and Hospital, Columbia University, Fiftieth Anniversary Dinner, Hotel Biltmore, January 30, 1932.

ment in matters scientific and material which the people of this century have constructed upon the foundations laid in the former century.

In medical education the most striking changes have been the disappearance of most of the numerous "independent" medical schools which formerly existed; the general trend of all medical education to be under the university aegis; the great improvements in medical educational facilities, including teaching hospitals; the elevation of the minimal medical educational standards permitted by law and by dominant public opinion; and the laying of the foundations of conscious and adequate university graduate medical education.

With a single exception all of the stated new century medical educational developments now have a stable and mature status; and are ready for refinements, whatever they may be. The exception is university graduate medical education, which is still youthful—though lusty, particularly in the very few universities where in it has been especially nourished.

That it behooves all American universities with medical establishments to give serious attention to the providing of adequate facilities for the special training of appropriately selected medical graduates in the science, practice and progress of medicine in its various clinical branches is now well recognized. The universities of Pennsylvania, Minnesota, Harvard, Tulane, and Columbia are already especially active; but the focussing of university thought and effort upon the matter is now quite general.

During the past decade there has been accomplished important pioneer work in this field. Precedents have been created where none existed; the goal has clearly been seen; ideas and efforts have become more lucid and definite—in contrast to the previous vague and casual ones; there have been constructed, conducted and continuously developed comprehensive plans of graduate medical education and equipment as a distinct university entity—in contrast to less efficient former efforts of a fragmentary, makeshift and ancillary character.

In proceeding we should have a clear understanding as to why there is the need for both undergraduate and graduate medical education—why educate youths for the work of physicians and then further educate some of these physicians?

An enlightened railroad president, for example, should no more think of trusting his major medical needs to a recent medical graduate than he would think of commissioning the construction of an important bridge to a recent engineering graduate. In both cases imma-

turity and inadequate special knowledge are faced; and in both cases the necessary maturity and knowledge can only ensue from further training and experience. As a matter of fact, in many states the new medical graduate cannot so much as make application for medical licensure. He must first obtain a specified minimal medical experience—usually in an approved hospital, even though his hospital contacts have been many during his medical undergraduate days. There are also many medical schools which do not grant the M.D. degree until the hospital internship has been completed.

However, hospital internships constitute but a beginning so far as real graduate medical education is concerned. The need for real graduate medical education arises from the conditions of the whole fabric of technical knowledge, skill and effort of the present as compared with the past. During perhaps the first century of our Nation, it was possible for one mind to grasp medicine as a whole and to practice it as it then existed—just as it was possible for the great Franklin, to perform every act of journalism as in his time it existed—news gathering, editing, typesetting, printing, publication. Today, Franklin would find a demand for a journalistic service which to be performed by a single individual would require that he be supernatural.

So it is with the physician. Medicine of today is far too vast for any single physician, and indeed anything save a considerable group of cooperative physicians, to practice if the patient is to receive the benefits which collective contemporary medicine is potentially capable of furnishing to him. Furthermore, clinical medicine is no more a completed thing than are the natural sciences. Medicine is based upon the natural sciences—it grows as they do, and with them—like them it becomes diversified—it becomes like them specialized through sheer, inescapable, mass-demand—it must have, as they have, specialized practitioners to exemplify its best service, and specialized investigators to widen its boundaries of knowledge and continue to increase its service.

How are physicians to become qualified as clinical specialists? By a process of self-education including experience gained by their trial-and-error essays upon unwitting patients? Forbid it! Through preparation in appropriate residencies or assistantships? To a significant degree, yes: this is the classic method.

However, all concerned should realize that the residency-assistantship is obsolescent as a sole and complete method in the premises. That method is an essential and indispensable portion of the normal method for the training of clinical specialists; but today and tomorrow

only the complete normal method should prevail; and it should be both normal and permanent in the same sense and probability of permanency as is the approved and prevailing normal undergraduate medical education of today and tomorrow.

There really exists a complete parallel—historically, developmentally, and currently—between the fundamental clinical training, involved in undergraduate medical education, and the special clinical training involved in graduate medical education. This truth, unfortunately, has only sporadic or vague appreciation; but its full appreciation and acceptance is vital to the success of the new medical educational effort in New York which looms in the minds of those foregathered here tonight. It is not possible on this occasion to do more than to state this truth; time forbids us to demonstrate the truth and its compelling implications.

The chief difficulty which presents itself to the logical and unhampered coordinate development of both undergraduate and graduate medical education is lack of a generally accepted, logical definition of the clinical goal of undergraduate medical education.

Given such a definition as to the clinical goal of undergraduate medical education and given its whole-hearted acceptance and practical use, undergraduate medical education would be improved; and there would be a similar improvement in what is known as the "general practice" of medicine for which undergraduate medical education is really the personnel feeder. Briefly, the field of graduate medical education would then be all forms of medical educational service indicated by the need of the times and unsupplied by undergraduate medical education.

There has been no lack of essays to define the goal of undergraduate medical education; there has been the weight of heavy authority behind various of these essays; and most of the essays have been made by those who are qualified. The troubles with most essays have been: conscious or unconscious bias; or failure to appreciate that any complete plan of medical education must include both undergraduate and graduate phases; or reluctance to disturb an existing condition; or aversion to disagreeable subtractions and additions; or disinclination frankly to define "general practice."

It would serve no purpose essential to this discussion to particularize under all of the foregoing heads. Let the statements themselves suffice, except in regard to "general practice."

General practice must be discussed and defined else there results an impasse. Everyone should agree that the practical goal of undergraduate medical education is to produce po-

tential general practitioners. This being agreed, how could one construct a logical undergraduate curriculum while lacking a frank definition of general practice?

The "general practitioner" or "family doctor" has been accorded admiration and love; and has been praised in prose, poetry and painting—all of which recognition he has well deserved. Much has been expected of him and much he has given. But today too much is expected of him. Unconsciously he is expected by his public to be a superman; and subconsciously he cannot help trying so to be.

The patient usually realizes clearly that medicine has made vast strides in recent years; and he fairly well realizes the increased advantage which that progress augurs for him; but he does not realize, or realizes but vaguely, that the whole of medicine is now far beyond the mastery of any one physician. It is common for him yet to expect the general practitioner to function "generally" as of yore.

The truth of the matter is that the general practitioner should be, can be, and, in his best expression, is really but one kind of a special practitioner—whether the fact be understood or otherwise. The sooner all concerned do realize this fact the better for all. Forbid any false inference that here is a knock against, or attempted dismissal of, the general practitioner. Quite to the contrary, the purpose is to aid and to magnify him; and, in so far as dismissal goes, it were but foolish to attempt the dismissal of the indispensable.

Imagine a medical army arrayed against and never ceasing to battle with physical human ills. Today this is a very modern army; and like other modern armies has many essential parts. The general practitioner occupies the most advanced post. He it is who delivers, by preventive medicine, the first assaults against diseases; and who receives, by curative medicine, the first shock of disease's attacks. He repels the enemy if he can; and often he succeeds; but the occasions arise when he must call for aid from other specialists who constitute the reserve arms of the medical service; and then it becomes their turn to exert their forces against the common enemy.

The expression "general practitioner" is therefore entirely misleading. Less misleading is the well-known "family doctor," though this is not entirely satisfying. Good expressions would be "family physician" or, simply, "physician."

However, let us use the accepted expression, general practice, and endeavor, briefly, to define it. The definition is one thing for districts having good hospital service; and another thing for districts inaccessible to such service. It is essential that medical practice of today

in its best sense shall have the command of truly efficient hospital facilities, be they of private or of community character. In districts lacking such hospital service, the general practitioner must often essay to be all that the term implies. He must do his best to serve every medical need of his district. In other words, he must essay an abnormal task simply because there is nothing else to do.

Fortunately, the railroads, highways, automobiles and airways of America, and the many hospitals within or accessible to rural localities have minimized the necessity for the abnormal type of general practice just cited, and it is obsolescent.

We may say at once that the normal type of general practice requires a knowledge of the principles of the basic medical sciences—biochemistry, anatomy, physiology, pathology and pharmacology, a foundation knowledge of the principles and usefulness of the recognized departments of preventive and clinical medicine, and an intimate knowledge of internal medicine, pediatrics and normal obstetrics. In brief, the general practitioner should really be a specialist in internal medicine with just as good a basic training in the various other departments of medicine as any kind of clinical specialist needs in medical departments other than his particular one.

This is the same as saying in a word that the practical goal of undergraduate medical education should be to produce graduates who are as nearly as possible qualified as beginners in the special practice of internal medicine. It means that the undergraduate curriculum should be carefully adjusted and balanced with this practical end in view.

The trouble with undergraduate medical education has been that such adjustment has not been fully maintained.

The tendency is now however to recognize that the undergraduate medical curriculum has been overburdened with material suitable only to the training of other clinical specialists, with a corresponding lack of sufficient emphasis upon internal medicine. The obvious remedy is to reverse the stated condition, to create adequate graduate medical education, and to exert therein the heavy efforts necessary for training in the other clinical specialties. Only in such a manner may the coordinate development of undergraduate and graduate medical education logically proceed.

Let us now turn to the remaining theses above set forth. The first one seems obvious, but it may be remarked that in order for the patient really to receive what he has the right to expect, due solutions must be found and applied with regard to the remaining theses. It will be sufficient for us to consider briefly

the matters of state medicine, cost of medical care and certification of specialists.

We are living in a time which social doctrine largely dominates. What is here meant is simply the benign types of social doctrine—of which the public school system is perhaps the most prominent of the numerous examples. In the medical field, probably the best examples are free or part-pay dispensaries, and free or part-pay ward beds. These medical services should no longer be regarded as merely "charitable." They have become so wide spread and of such great total magnitude that they constitute an imposing social whole, which, like the public school system seems ever to be waxing rather than waning, and which like the public school system should have definite public financial support.

The cost of the public school system is borne definitely and wholly by taxation, but the cost of contributed medical service is borne only indefinitely and inadequately by taxation—private donations, and unpaid professional services contributed by a host of physicians, provide the remainder. The large volume of deadheads and poor pays carried in the private practices of physicians also constitutes much of the free medical service of the land.

At this time there is much insistence, and considerable practice, in the matter of social policies such as old age pensions, unemployment insurance, mothers' and children's welfare grants, etc., and workmen's compensation laws have spread over the nation.

Physicians should all be alive, as many of them are, to the fact that it is an easy step from such precedents and trends to state medicine, which impends from various directions. One important direction is that state medicine is already effective to a greater or lesser degree in most of the world's great nations—America being the really notable exception. Another significant influence may be the eventuation of the current nationally organized American survey as to the cost of medical care. We all know that this survey reflects the widespread conviction that modern medical care costs more than our numerous and honored middle classes can afford to pay. Another way in which this conviction is often expressed is "only the rich and the properly hospitalized poor receive high grade medical care." Indeed who else potentially do receive the benefits of that combination of due hospitalization, nursing and medical specialists' services, and extensive medical supplies and equipment which are implied in the dictum?

We urge that state medicine would be an unfortunate extension of social practices—alike for patients and physicians. To the patient it would mean impersonal, perfunctory

medical services. To the physician it would bring a type of governmentally dictated servitude to replace his dignity of independent service. Therefore organized physicians should go forth mightily to meet and to destroy this threat ere it becomes an established fact.

Broadly speaking, the way to inhibit state medicine is to solve two problems: the cost of medical care; and the quality of medical care.

It is submitted that the solution of the problem of the cost of medical care is to be found in suitable insurance or/and financed installment payments, sufficient to supplement such portions of the cost as the public purse should assume. Trustworthy insurance corporations should sell appropriate medical care policies, which provident well persons will buy; and personal finance corporations should accept the installment promissory notes of those needy ones who have been ill, but who have been improvident previously—or notes of their relatives, if necessary. State medicine of some sort seems to impend as the alternative.

By insurance, we do not mean the usual disability, or "sick-benefit," policies; but rather policies to pay the cost of medical care, as needed and to those to whom the costs accrue, rather than to the policy holders themselves.

We have insurance and installment buying for nearly everything else—why not for the more important matter of medical care?

Now as to the quality of medical care. This point has largely been covered by what has previously been said herein. It boils down to providing the patient with all that current medical knowledge, skill and facilities render possible in his service.

Due medical care should begin with the family physician, who should complete that care insofar as he is fully qualified to do so. However, when the due medical care modernly demanded by the case extends to further specialization and hospitalization, then the family physician should intelligently manage the case by securing for it whatever additional services are needed; and by continuing a watchful guidance over the patient's interests during and after the rendering of such services.

Thus we are finally brought to the necessity of knowing which hospitals and which medical specialists are modernly worthy. Certainly they are not so merely because they hold themselves forth so to be. What is needed is that

their genuineness should publicly be certified by competent authority.

Such authority could be state licensure of successfully state-examined hospitals and of medical specialists—just as such licensure is now universally required for the internists who practise as family physicians. Perhaps such licensure will appear; but it is not necessary. Certification by appropriate groups of physicians is sufficient—and much to be preferred.

Certification of medical specialists by appropriate groups of their professional colleagues already exists to a limited extent. Reference is made to the certificates issued by the American Boards: of Ophthalmic Examinations; of Otolaryngology; and of Obstetrics-Gynecology. These examining and certifying groups having been formed and authorized by the organized and recognized practitioners in their special fields, their certificates merit the confidence of profession and public alike.

But why should clinical specialists' certification or licensure not be universal, rather than limited? This is a question to which the American Medical Association is now actively addressing itself; and we do not doubt that within a few years the added moral force of this great organization will have proved as potent in the premises as it has proved in various other medical reforms which it has undertaken.

Tonight we celebrate the Golden Anniversary of the New York Post-Graduate Medical School and Hospital, founded in 1882; and we also celebrate its new union with Columbia University College of Physicians and Surgeons, founded 115 years earlier, in 1767, the second medical school to be founded in America; and it is the prescience of the great and good results that shall flow from that union which looms before our minds. To honor and to good-speed this union is, in friendship, presented the esteem and good wishes of the oldest of American medical schools, founded in 1765, 167 years ago—that of the University of Pennsylvania, which in 1916 by merger with the Medico-Chirurgical College of Philadelphia, (founded in 1881) effected a similar union for a parallel purpose.

May these venerable, vital and progressive sister medical institutions ever continue, in the van, to advance side by side in their beneficent service to mankind.



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For list of officers of County Medical Societies see this issue, advertising page xxiv

CRIME DETECTION

The detection of crime consists in making a diagnosis starting from a few vague symptoms which escape the notice of an untrained investigator. A detective must be trained in a few fundamental principles which are analogous to the basic conditions which a doctor determines in every sick person whom he examines. A skilled detective makes an accurate observation of a scene of a crime, and is careful not to blur or obliterate

tracks and finger marks, or to disturb articles which may have been disarranged. He also takes measurements and photographs in order that others may reproduce the scene accurately.

A good detective records his observations in accurate, understandable terms, and writes a brief history of the case, and especially records the names of all observers or informants. To make complete records requires training and education.

The records are subject to all the errors and omissions of a clinical report, and are as necessary as the hospital records of a case. Yet, when made by an untrained and uneducated constable, they are likely to have the crudeness and obscurity which would be expected of an ignorant healer or cultist.

When a suspected person has been arrested, the police methods of examining him are often still more crude. The medieval idea of securing confessions under torture is still applied, and the front pages of the metropolitan newspapers are just now carrying vivid accounts of the death of a criminal from edema of his larynx which was fractured when the police officers choked him in order to obtain his confession. If a physician were examining a criminal under like circumstances, he would recognize the necessity of observing the suspect while he was in a mental state of suspense and apprehension at the same time that his physical body was as comfortable and relaxed as possible. A criminal, relieved of his immediate fears, will exhibit mental reactions which a trained criminologist will interpret correctly, just as a psychiatrist would judge a paranoiac by his mental reactions when he is not forced to answer.

Criminology is now in an early stage of its evolution into a science and practical art. Already a few specialists have entered the field, and have pointed the way to the establishment of centers, such as the Scientific Crime Detection Laboratory of Northwestern University, Chicago, at which those with an aptitude for detective work may be trained for positions as directors of police investigations in cities and counties. Such trained officers as these are needed on the staff of every district attorney.

A crime detection laboratory is a comparatively new idea in the practical application of the principles of crime detection. A method of the identification of the individual pistol from which a bullet has been fired is recorded in a leading article in this Journal of August 15, 1926, page 701. The effect of scopolamine on truth-telling by criminals is described in *Hygeia* for April, 1932. These are examples of current progress in the scientific detection of crime. These methods are being developed and standardized to such an extent that police officials in the near future will turn to laboratories for the solution of baffling crimes, just as epidemiologists rely on public health laboratories for the identification of the microscopic criminals that cause disease.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Doctors' Sons: While there are a great number of physicians who are sons of physicians, there are very few who belong to the third generation of active practitioners, as is shown by the short list of those whom the editors of this Journal have been able to list. This Journal of August, 1907, has the following editorial comment on doctors' sons:

"Doctors' sons pretty generally make good doctors; that is, if they decide to study medicine and be doctors at all, they succeed. When you hear a physician say that the practice of medicine is a dog's life, and that if he had it to do over again he would never study medicine, that patients are ungrateful and give him little thanks or pay, you may be pretty sure that his son will not study medicine; and if perchance he should,

he is terribly handicapped by a lot of bad medical traditions. The unsuccessful doctor does not let his son study medicine. The doctor's son who does study medicine is quite invariably the son of the man who was successful enough to find joy in his work, and who could wish his son nothing better than to enter into the calling which had meant so much to him. And the boy saw in his father's life something that excited his admiration to emulate and covet. As a matter of fact and observation the son of the really successful doctor commonly does study medicine; and I can name a number of such men who attained to even greater success than their fathers.

"However, the decision as to whether a man is successful or not does not rest with you or me, the decision is with him."



MEDICAL PROGRESS



Edema in the Newborn.—John Gibbens finds that while text-books describe congenital edema, edema neonatorum, scleroedema, scleroma, etc. no two authors agree as to the precise definitions. With the idea of simplifying the subject he has collected cases with edema as the leading sign. This has brought out the fact that the main etiological factors are cold and sepsis. It is essential that every practitioner and nurse should realize that cold is the commonest cause of edema in the newborn. The ordinary clinical thermometer with a low level of 96° gives a false idea of the actual temperature of the baby. A thermometer with a low level of 88° must be used, and the temperature must be taken rectally. Probably many infants are certified as having died from atelectasis, prematurity, or congenital debility when, in reality, death was due to the effects of cold. Edema may occur (1) if the infant is put in a warm bath immediately after birth, without having had a subnormal temperature, and (2) if the temperature is subnormal. In the latter case cold is a contributory factor, the main factors being feeble development of the circulatory system, cardiac weakness, and delicate and fragile blood vessels. Edema of the feet may depend upon the effects of gravity, and may disappear with change in posture. Usually all trace of edema has vanished by the age of three or four weeks. No treatment is required beyond keeping the baby's temperature normal. There is no sharp distinction between edema, scleroedema, and scleroma; in all probability it is merely a question of degree, depending upon the water-richness of the tissues and the distribution of the subcutaneous fat. The treatment of scleroedema is simple, namely, warmth at all costs—hot baths, hot bottles, massage of the limbs, and breast feeding. Since these cases resemble myxedema, thyroid extract ($1/8$ to $1/6$ of a grain, three or four times a day) has been given with excellent results. In an infant suffering from scleroma, a circumscribed, symmetrical fat sclerosis, the temperature is commonly raised and the infant has small plaques in the subcutaneous tissue, like multiple lipomata, over which the skin is reddened. With massage they usually disappear after a few weeks. Edema in the newborn may be caused by sepsis, in which case fever is usually present. Nephritis is found to be very rarely a cause of edema in the newborn.—*British Medical Journal*, May 7, 1932, i, 3722.

A Method of Preventive and Curative Treatment of Serum Reactions by Benzo-Salicylate Medication.—According to M. H. Vincent, reactions, mild or severe, following injections of horse serum are rather frequent, having been estimated at 40 per cent in adults and 12 per cent in infants and children. The very multiplicity of the medications that have been recommended for them is a proof that none of these has a constant specificity of action. It is very important before giving an injection to inquire of the patient not only whether he has previously received injections of horse serum but also whether he has ingested horse meat or horse blood or serum in any form whatever, [and may we add has worked in stables or taken care of horses] since such renders the patients sensitive and explains certain strong allergic reactions. As the result of researches made upon the cryptotoxins in general, and upon the antitoxic and cryptotoxic properties of the sodium salts of benzoic and salicylic acids in particular, Vincent discovered that the various substances of this nature have in addition very striking antishock properties. His method of applying his discoveries in a therapeutic way is as follows: As soon as the first symptoms of serum sickness appear, the patient is given a tablespoonful of a potion containing 6 gm. sodium salicylate and the same amount of sodium benzoate in 200 c.c. of excipient, at first once an hour, and afterwards once every two hours. These amounts may be increased, and in children they should be decreased. It is well to give each dose in weak tea or other warm drink. The symptoms of reaction, whether general or local, generally stop in a few hours. The fever falls; the edema and eruption diminish, sometimes a little more slowly, but the itching and pain cease promptly. In case of a patient who has been sensitized by an earlier injection of serum, the shock is more severe and the eruption more densely crowded. Nevertheless, the prompt employment of benzo-salicylated medication in the manner here described, and renewed whenever necessary, usually causes abatement of the symptoms from the first or second day. No less real is the service it renders in cases in which the allergic reaction is already completely let loose, for it has the effect of suspending the symptoms, although somewhat slowly. The use of the treatment for prophylactic purposes in patients who have at some earlier time had injections of horse serum, or even in other

patients, is a wise precaution, since one never knows when a reaction may occur.—*Bulletin de l'Académie de médecine*, April 19, 1932.

Prevention and Treatment of the Common Cold by "Glegg's Mixture."—For the prevention and treatment of the common cold E. P. Poulton recommends the application of massive doses of an inert substance to the mucosa of the nose and nasopharynx. Such a substance is "Glegg's mixture," so named by the writer because he first learned of it from Wilfred Glegg in 1921. The mixture consists of three parts of liquid paraffin and one part of white vaseline, flavored slightly with rose. By Glegg's mixture with menthol is meant a similar mixture containing $\frac{1}{2}$ grain of menthol per ounce, without the rose flavor. The application is made by means of a nasal pipette. It is best for the patient to lie down on his back in order to apply the mixture; a pipetteful should be driven down each nostril so that it is felt at the back of the nose. This method should be used as soon as the slightest rawness is felt at the back of the throat. In mild cases the application should be made morning and evening; at the beginning of a severe cold it should be applied four-hourly. Even in mild cases the treatment should be continued for two days, or the cold will return with its old severity. After the second twenty-four hours the applications can be quickly reduced. If a cold cannot be entirely aborted by this method, at least it develops into a relatively mild affair. It is better not to swallow the mixture if it can be avoided, as it may possibly produce looseness of the bowels. Poulton believes the beneficial effect of this treatment is due to the coating of the mucous membrane with the oily mixture, thus creating a less favorable environment for the infecting organism. If this point of view is correct, a massive dose must be used. This view also explains why oily sprays are ineffective; the volume of the material is not sufficient. The substance should be so thick that it only just runs.—*The Lancet*, April 30, 1932, ccxxii, 5670.

Complex Troubles of the Cardiac Mechanism in the Course of a Severe Case of Typhoid Fever.—E. Géraudel and Mouquin report that they observed important disturbances of the cardiac mechanism in a boy $10\frac{1}{2}$ years old during a severe attack of typhoid fever. The electrocardiac tracings were of special interest for their complexity and rarity. Anomalies of widely different types, generally classed under different headings, followed one another in succession, proving that typhoid infection may be the cause of serious disturbances of cardiac rhythm. All the phenomena were transitory,

and without doubt pointed to a lesion that was only slight or to a purely functional trouble. They evolved in a cyclic manner, becoming progressively aggravated and then ameliorated; during the course of the amelioration, they receded in the reverse order by the same phases as those observed during aggravation. Clinically the disturbances appeared inconspicuous, and could be regarded as nothing more than a sinus arrhythmia. Only through the electrocardiogram could their importance be recognized, as they were seen to pass from a nearly normal rhythm when the rhythm was rapid, to a mechanism closely approaching auriculoventricular dissociation when it was slow. This phenomenon was instructive, since it raised the question whether the arrhythmia known as "sinus," when regarded as a purely physiological phenomenon, or at any rate as benign, is not in reality a minor phase of more serious disturbances, linked, as in this case, by multiple connections with auriculoventricular dissociation and very grave troubles of cardiac rhythm. In a large number of tracings it was observed that at certain moments two ventriculograms were abnormally approximated to each other, their coupling interrupting the regular course of near-by ventricular beats, equidistant and wider spaced. Between the two close beats an auricular beat was interposed. This phenomenon must be interpreted as a "ventricular capture." In the classic hypothesis, this expression signifies that the auricle is at this moment leading on the ventricle, but to the authors it means that the auricle and the ventricle are controlled by the same mechanism; there is a parallel urging on of the auricle and of the ventricle by the sinus vestibule, and not an urge of the auricle by the vestibule and of the ventricle by the auricle. The precise explanation of the pathogenesis of these disturbances cannot be given in the present state of medical knowledge. The case shows, however, that in seeking the etiology of every anomaly of the cardiac mechanism, typhoid fever should be given the same consideration as such affections as acute articular rheumatism or diphtheria.—*Archives des maladies du coeur*, April, 1932.

Tooth Extraction and Chronic Infective Endocarditis.—Herbert H. Brown, writing in the *British Medical Journal*, April 30, 1932, i, 3721, directs attention to the very real danger of extracting teeth with apical streptococcal infection. Even if a large number of teeth are removed at one sitting it is not generally a very serious matter. But if for any reason the patient's resistance against streptococcal infection is low, there may be serious danger. The use of local anesthesia by infiltration of the gum increases the danger. There can be

no doubt that forcing a fluid under considerable tension into the comparatively rigid and resisting tissues must tend to carry any germs which may be present into these tissues, and so to the blood stream. Two cases of infective endocarditis following tooth extraction under local anesthesia have been recorded by L. Abrahamson (*British Medical Journal*, July, 1931) and Brown reports another case. In this instance the mode of onset of the symptoms and the course of the disease indicate a blood infection originating from the extraction of a tooth. Later following the extraction of three teeth under local infiltration the endocarditis was greatly aggravated and terminated fatally. In each of these cases there was preexisting valvular disease. It is, therefore, a wise precaution, especially in the case of an individual already suffering from valvular disease, or one who may be liable to have a weak resistance, to extract *one tooth* only in the first instance, under a general anesthetic such as nitrous oxide; to make a culture from the tooth, and to test the patient's blood for bactericidal power against it. If the blood has no bactericidal power, an attempt may be made to improve it by graduated doses of vaccine.

Prophylaxis and Treatment of Alveolodental Polyarthrititis by Artificial Mastication and by the Bacteriophage.—The observation of a case of alveolodental polyarthrititis following the sudden cessation of mastication on one side of the mouth, whereas up to this time both sides had been used energetically, led Pitsch to the belief that the point of departure for Riggs' disease lay in insufficient mastication, a belief that was confirmed by study of the maxillæ of skulls in the museum of natural history. Savages with teeth well used never have pyorrhea, while we know, on the contrary, the frequency of this affection in races fed upon rice which they swallow without chewing. Prophylaxis could easily be secured by reestablishment of the function of the jaws, which would restore these organs to a healthy state. When it is customary to swallow without having chewed, it is possible to practise artificial mastication away from the table upon an inert substance, and thus restore to the alveolodental ligament the tonicity that it has lost through lack of use. This method gives remarkable results, but many persons will not consent to submit to it until it is too late. The effect of artificial mastication will be much more marked if at the same time means are used to hold the teeth solidly in their place, such as a bridge or an immobile apparatus preventing all migratory movement where neighboring teeth have been lost, and combating the pressure of the tongue, which is one of the

main causes of alveolysis and formation of *culs-de-sac*. If the latter are once formed, all the microbes of the mouth will swarm there; pus will form, and the tooth will fall sooner or later. In such case it is evident that artificial mastication alone could not succeed, but must be supplemented by proper hygiene of the mouth. Pitsch has had extraordinary results from introduction of a bacteriophage. He has observed no disadvantages from its use nor any contraindications. Although the technique of application, as also the virulence of the bacteriophage, is yet to be perfected, there is every reason to believe that, with the aid of a rational oral hygiene in which soap and formalin products play a large part, and also aided by artificial mastication, the bacteriophage will succeed in preventing or curing this redoubtable disease which nothing up to this time has been able to reach. Pitsch is experimenting to find the bacteriophage which will produce the maximum effect in the minimum of time, for it is important to bear in mind that the subject cannot conserve the bacteriophage in his mouth for more than a limited period of time.—*Bulletin de l'Académie de médecine*, March 22, 1932.

Injection of the Umbilical Vein in Retained Placenta.—David W. Currie shows that in cases of retained placenta Credé's maneuver is not without danger, and statistics show that manual removal is attended by a high rate of morbidity and mortality. During the last five years at the Leeds Maternity Hospital, the placenta has been removed on 87 occasions; 28 of the cases became morbid and 14 proved fatal—a morbidity rate of 32.7 per cent. and a death rate of 16 per cent. This series included a large percentage of emergencies. In seeking to improve upon these figures, the author's attention was drawn to Jarco's procedure of injecting the umbilical vein. This consists in first making sure that the placenta is in the uterus by using the simple tests, supplemented if necessary by rectal examination. The requirements consist of a Record syringe, a large needle, and 200 to 300 c.c. of sterile saline. The cord is thoroughly cleansed for about eight inches from the vulva. This part of the cord is used because it is least likely to be soiled by feces and most likely to contain a patent umbilical vein. The saline is then slowly injected, and the physician awaits the onset of uterine contractions and delivery of the placenta, which usually occurs in from ten to forty minutes. As Jarco suggested that the separation of the placenta was caused by the tearing of the small veins it was thought that if the saline was injected faster there was more likelihood of this occurring, and so the Record syringe

was supplanted by Scannel's apparatus and a No. 20 needle was introduced. By this means 300 to 400 c.c. of saline was injected in two and a half minutes. On completion of the injection the placenta is expressed if it has not already been delivered. In nearly all the cases from the onset of the injection to the final delivery of the placenta not more than five minutes elapsed. This procedure affords an easy means of completing the third stage of labor, without the aid of any further instruments than the practitioner ordinarily carries in his bag, without the necessity of much preparation or anesthetic, with a fair percentage of success, and above all without the great fear of puerperal infection and risk of death which accompanies the manipulations now generally practised.—*The Lancet*, May 21, 1932, ccxxii, 5673.

Can a Single Fluoroscopic Examination Activate Latent Pulmonary Tuberculosis?—N. Tsamboulas states that he has had the experience on a number of occasions, after fluoroscopic examination of a person who was physically sound upon careful examination, and in whom the roentgen findings were negative,—such a person, for example, having come for examination with a view to marriage or for some similar reason—of observing the appearance of pulmonary symptoms a few days, or even a few hours, after the roentgen examination was made. Not infrequently it was a pulmonary hemorrhage that ushered in the symptoms. Further observation of such subjects led to the suspicion that the X-ray examination had had the effect of activating a latent tuberculous pulmonary focus. With a view to examining the validity of this conclusion, Tsamboulas made tests on 13 patients with manifest pulmonary tuberculosis, to determine the effect of fluoroscopy of 3 or 4 minutes' duration upon the rapidity of blood sedimentation, upon the total blood protein, and its individual fractions, and finally upon the basal metabolism. He observed that in all these patients the fluoroscopic examination caused a shift in respect to every one of these items. He then repeated the test upon 8 healthy individuals in whom pulmonary tuberculosis could with the greatest possible certainty be excluded. No change whatever in any of the items was observed in any of these persons. It could therefore be safely concluded that 3 or 4 minutes of fluoroscopy has no effect upon healthy individuals. Tsamboulas then tried the effect of fluoroscopy upon some remote region of the body, such as the pelvis or thigh, in persons suffering with pulmonary tuberculosis. He found that no blood changes resulted under these conditions. This proved that the changes in rapidity of sedimentation and in the protein

composition of the blood were not due to a direct effect of the X-rays upon the blood, which was altered by pulmonary tuberculosis in its physicochemical nature, but that they were the result of irritation of existing pulmonary foci. It does not follow, however, that occasional clinical exacerbations observed after fluoroscopy are also attributable to the focal reaction caused by the fluoroscopy. Tsamboulas is of the opinion that the seemingly healthy subjects who developed pulmonary symptoms immediately after fluoroscopy had latent foci whose stage of development at the time of the examination must have been labile to such a degree that the irritating effect of even a single roentgen examination was enough to produce a focal reaction and to cause an outbreak of the disease.—*Münchener medizinische Wochenschrift*, April 22, 1932.

Follow-up Examination of 27 Cases of Post-vaccination Encephalitis.—An account is given by Oskar Kudelka in the *Münchener medizinische Wochenschrift* of March 4, 1932, of the findings in 11 boys and 16 girls who had exhibited signs of infection with postvaccination encephalitis between 1928 and 1931. Tests were made with reference to motor power, superficial and deep sensibility, tendon and pupillary reflexes, organs of sense, and signs of ataxia. Somatic examination was followed by mental and psychic tests. Contrary to what has been reported by a few authors (Brückner, Duken), it was possible to bring about a complete cure of the disease. All that could be found in the way of rests of the affection was the presence in a few children of somewhat livelier reflexes, and in a single child, whose illness dated from May, 1931, a unilateral paralysis of the abducens, for which a good prognosis could be made, in view of the fact that in other cases the most severe manifestations of the disease (speech paralyses) had entirely disappeared after a time. In one child the disease had been followed by mental or psychic deterioration; some others, however, were considered to be the best scholars in the school. Throughout the examination, it was the older children among those undergoing primary vaccination who fell ill; the youngest child was 4 years old. The reaction to the vaccination, judging from the nature of the cicatrix, had been quite severe. All the vaccinations had been carried out percutaneously with a vaccination point. The one case of encephalitis following intracutaneous vaccination was not included in this study. Vaccination encephalitis is an affection which either results in death or is cured without leaving any sequels. In view of the histopathologic and negative bacterial findings, it seems questionable whether the results of the examination are in harmony with the concept of a true inflammation in the region of the central nervous substance.



LEGAL



JUDICIAL INTERPRETATION OF THE PRACTICE OF MEDICINE

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Very recently an interesting case relating to the practice of medicine was decided by the highest court of one of the mid-Western States that is of considerable interest.

The City of F— had enacted an ordinance which classified certain occupations and provided for their licensing. One of the classes coming under the enactment was that of "travelling specialists and physicians." It was provided that those belonging to said class were to be licensed by the City Clerk at a fee of \$50 per day. A punishment for failure to comply with these requirements was also provided.

A certain doctor from the City of K— in an adjoining State had been in the custom of making periodic visits to F—, where he was consulted by patients. He would advertise these visits in the newspapers of F— and by means of handbills. He styled himself a travelling physician and specialist. He had been licensed to practice medicine in the State in which F— was located. His residence was in K— in the adjoining State, and in that city he operated a chemical manufacturing plant known as the C— Medical Institute. Upon examining patients and deciding that they needed certain medicines, he would take money from them and the medicine would be sent them from his place of business in K—. He did not comply with the licensing ordinance above referred to.

One day when Dr. S— was in F—, so engaged in his profession, the city authorities advised him that if he did not cease his practice as a travelling physician and specialist in the City of F— he would be arrested and fined. He thereupon brought an action to enjoin the enforcement of the city ordinance. The doctor in his petition claimed that he was engaged in interstate commerce and that the ordinance was a violation of the clause of the Federal Constitution giving Congress the power to regulate interstate commerce. He further contended that the license fee was unreasonable and prohibited him from following his profession as a travelling specialist. On the trial the court refused to enjoin the enforcement of the ordinance.

The doctor subsequently appealed to the highest State court on the principal question as to whether or not he was engaged in interstate commerce. He relied on certain United States Supreme Court decisions which held: "All interstate commerce is not sales of goods. Importa-

tion into one state from another is the indispensable element, the test, of interstate commerce; and every negotiation, contract, trade and dealing between citizens of different states, which contemplates and causes such importation, whether it be of goods, persons, or information, is a transaction of interstate commerce." Dr. S— contended that his dealings with patients in the City of F— were merely incidental to the business of shipping the medicines to them from K—. He urged in support of this the fact that he exacted no fee upon examining a patient unless he decided that some of the medicine put out by his C— Medical Institute would be of help to the patient.

The court, however, ruled that the question involved was not one of interstate commerce, which is subject to Federal control, but rather a question of the practice of medicine which is not subject to any regulatory power of Congress. The court, having pointed out that medical practice may be licensed and that medical practitioners may be made to pay a tax, found that the facts justified a finding that Dr. S— in fact practiced medicine. The court's opinion was in part as follows:

"In the case at bar the examination of the patient, the observation of his symptoms and distress, the mental processes, reactions, and conclusions of the doctor resulting from such observation and the prescribing of appropriate remedies to correct pathological conditions discovered all had their situs in F—. These acts had no elements of interstate commerce. They were the acts of Dr. S., not the C. Medical Institute of K—. The state has seen fit to regulate the doing of these things by requiring one who does them to have a license to practice medicine. The right of the state to do this Dr. S. has recognized by obtaining and filing with the county clerk of W. county a license to practice medicine in the state. The City of F— has equally well recognized authority to license the carrying on of classified occupations within its limit. One of these is that of physician and specialist. That is what the ordinance in question purports to do. No doubt the ordinance provides a license for the practice of law within the corporate limits. No one would have the temerity to say that a lawyer could maintain an office in F— for the purpose of meeting clients on certain days in the week, and then,

because he maintained a library in K—, where he wrote his briefs, escape thereby the necessity to procure a license to practice law in the state where F— is located and to pay whatever license fee the ordinance of the city should require. When Dr. S. performed the acts which he alleged in his petition, he engaged in the practice of medicine. The source of the medicine he prescribed is immaterial. He might have made it a practice to advise his patients to go to some mineral springs for a cure, or to go to Switzerland for the wonderful sun baths for which that region is famous, or to Colorado for the benefit to be derived from the health-giving climate, and still be practicing medicine within the meaning of R. S. 65 (the section of the State statute)."

The court quoted from an earlier decision as follows:

"In the main, the cases regard diagnosis as the test to determine whether a practice or treatment is included in the terms 'medicine' and 'surgery.' This is a practical test. A doctor who advises his patient to sleep in the open air is treating him. Such advice, however, is based upon a knowledge of the patient's condition obtained by diagnosis. The defendant professed to be able to ascertain by examination of the patient the cause of his trouble—a result rather beyond that which ordinarily attends the diagnosis of the regular practitioner. The method or extent of the examination is not the controlling feature. When the practitioner makes such examination of the patient as he regards as sufficient to indicate to him the cause of the trouble, and to indicate its proper treatment, he has diagnosed the case."

The court said in conclusion:

"Finally, it may be said that the acts performed by Dr. S. in F— constituted practicing medicine regardless of where his prescriptions were filled. The municipality has the authority to require one practicing medicine within its limits to pay a license fee. The regulation of the practice of medicine is a field of legislative control over which the federal government has no jurisdiction."

It should be noted that the court in deciding the case did not consider whether a tax of such an amount as fifty dollars a day was unreasonable.

In the State of New York evasions of the law regulating and licensing the practice of medicine have arisen. The opinion in the case referred to seems to be in complete accord with the rule in this State. In a recent case of prosecution for the crime of practicing medicine without lawful authority and registry, the defense was that the defendant did not administer drugs and therefore did not practice medicine. The Appellate Division sustained the conviction, stating the law in its opinion in part as follows:

"To confine the definition of the words 'practice medicine' to the mere administration of drugs or the use of surgical instruments would be to eliminate the very cornerstone of successful medical practice, namely, the diagnosis. It would rule out of the profession those great physicians whose work is confined to consultation, the diagnosticians, who leave to others the details of practice."

And further:

"Diagnosis would, therefore, seem to be an integral part of both the study and practice of medicine, so recognized by the law as well as common sense. The correct determination of what the trouble is must be the first step for the cure thereof. It is a well-known fact that the disease popularly known as consumption may, if discovered in time, be arrested, if not entirely eradicated from the system, by open air treatment in the proper climate, and that in such cases use of drugs has been practically given up. Would the physician, in such a case, who, by his skill, discovered the incipient disease, advised the open air treatment and refrained from administering drugs not be practicing medicine? It may be difficult, by a precise definition, to draw the line between where nursing ends and the practice of medicine begins, and the court should not attempt, in construing this statute, to lay down in any case a hard and fast rule upon the subject."

CLAIM OF NEGLIGENCE IN ADMINISTERING ANTITOXIN

While a surgeon was on duty at a large city hospital, he was called to the accident room to treat an emergency case. He examined the man and found that he had a punctured wound of the palmar side of the palm of his left hand which he had sustained while at work. He had been brought in for treatment as a workmen's compensation case.

The doctor determined that because of the na-

ture of the wound it would be advisable to administer tetanus antitoxin. The patient consented to the injection, and the doctor undertook to administer a prophylactic dose of 1,500 units. He injected the antitoxin by a hypodermic in the patient's arm, but as the doctor removed the needle he found that it had broken off at the hub and that the entire needle remained in the tissues. At once the doctor told the patient what

had occurred and impressed upon him the necessity of immediate removal of the needle. The doctor took x-rays of the hand and within fifteen minutes after the needle had broken, attempted to remove the same under an anesthetic of novocaine. After probing for several minutes unsuccessfully, the patient requested the doctor not to continue the search and agreed to return a few days later to have the needle removed.

At the appointed time, a second set of x-rays were taken to determine whether the needle had shifted its position since the earlier attempted removal. Again, under local anesthetic, the doctor made a further attempt to remove the needle. After about five minutes of this procedure, the patient requested the doctor to let the matter go altogether, telling the doctor that he thought it

was best to leave the needle alone as it probably would not cause him any trouble.

The doctor never saw the man thereafter or heard anything more of the matter until a summons was served upon him in an action claiming alleged malpractice. It was charged, in substance, that the fact that the needle broke and that the doctor failed to succeed in removing the same after two attempts, was clearly malpractice on his part.

The suit was apparently brought in the hope of obtaining a settlement from the defendant, for when the case was reached for trial on the calendar, no one appeared on behalf of the plaintiff, and on motion of the attorney for the defendant the complaint was dismissed and judgment entered in favor of the doctor.

TREATMENT OF A FRACTURED LEG

A middle-aged man was brought to the office of a doctor engaged in practice in a rural community, for treatment of injuries which he had sustained when he had been struck by the limb of a tree falling on his right leg. The doctor made a superficial examination and noted that the man's condition was that of a serious fracture of the said leg, for the fibula was protruding from the leg. He immediately arranged for the patient to enter the nearest hospital, where he was brought under the care of the chief surgeon associated with the staff of said hospital.

An x-ray examination was promptly made which showed a compound fracture of the right fibula and a comminuted fracture of the right tibia with marked anterior overriding. The man was put under an anesthetic and an attempt was made to reduce the fracture by the closed method of reduction. This was found impractical, for the fragments persisted in sliding past each other, and there was no means of keeping them in satisfactory position.

Two days later another attempted reduction was made, this time by the method of open operation and a Lane plate was applied to the tibia, using two screws above and two below the point of fracture. The fibula was found to fall in satisfactory apposition without the use of a plate or wire. The leg was put up in plaster of Paris, and a small drain inserted through the incision.

Infection developed as a result of the compound fracture and it was necessary to cut a large window in the cast in order to apply wet dressings thereto. Drainage was provided for the infection for a period of three weeks, at the

end of which time the surgeon in charge of the case decided that the safest method would be to remove the Lane plate. After this was done, the leg was put up in extension on a Balkan frame with splints, traction being applied by adhesive straps to the foot and lower leg. After this had remained on for a relatively short period of time, the patient refused to permit the extension to be continued and ordered his leg freed from the splints. He was throughout the entire period of treatment a very unsatisfactory patient, being extremely non-cooperative. The extension and splints were removed and while at this time the bones were found in good apposition, it was carefully explained to the patient that if his leg was not kept in splints and in extension, he would in all probability have a deformed leg as a result.

After the patient had remained in the hospital about three months, and when his leg had not improved sufficiently to justify his leaving the hospital, he insisted upon leaving and returning to his home contrary to the emphatic advice of the doctors.

The patient nearly two years later brought suit against both the doctor whom he had first consulted and the surgeon who had charge of his case at the hospital, claiming that due to their malpractice his fractured leg had never been reduced, and charging them with responsibility for the infection that had developed, and claiming that due to their negligence he had been made a cripple for life. The case was tried before a judge and jury in the Supreme Court, and after the testimony had been submitted to the jury a verdict was returned in favor of the defendants exonerating them from all charges of malpractice.



THE DAILY PRESS



THE MODERN DRUG STORE

The "Doctor Shop" of a century ago, run by the village doctor, as his own technical establishment, evolved first into a store for the sale of drugs; and then into a cosmetic shop; and finally into a general store. An investigation into what a modern drug store actually sells is described in an article in the *New York Times* of July 5, as follows:

"In the course of a national survey of drug stores, government statisticians checked the movement of 17,000 customers visiting a certain store in a metropolitan district. The *Journal of Commerce* reports the results. It was found that for 7,800 of these patrons, or more than 45 per cent, the soda fountain was the first point of call. The tobacco counter attracted 2,899. Nearly 3,000 visited the candy counter and 1,040 went to the section where toilet goods are sold. Only 1,743 or

about 10 per cent, called at the counter selling medicines and doctors' prescriptions.

"These figures tend to confirm off-hand impression that the druggist is rapidly evolving from an apothecary into the proprietor of a department store. Almost anything small enough to be wrapped and carried can be purchased of him. His choice of wares ranges from fountain pens to waffle-irons and from safety razors to free verse. At his hospitable counter he serves not only soda but all the ingredients for breakfast, lunch and dinner.

"Doubtless his functions have changed greatly since the days when his symbol was the mortar and pestle, rather than the Neon lamp playing upon a display of golf balls and bathing-caps. He is less the scientist that he used to be, but a more convenient neighbor."

CUTTING A WIDE SWATH

The expression "He cuts a wide swath," is now an insinuation that some one is making a big show in a sporty way. The expression was originally one of high honor and was applied to the mower whose lane of cut grass or grain was unusually wide as he advanced down the field swinging his scythe or cradle. To win the mowing championship of a town a hundred years ago was the highest evidence of manly strength and endurance; and many a man has ruined his heart and his health in trying to maintain a family record set by a giant brother. Commenting on the record of a Pennsylvania champion, the *New York Herald Tribune* of July 17 says:

"All harvesting methods have changed so utterly that even in the country people exist who never saw illustrated the literal meaning of the phrase 'to cut a wide swath,' nor realize the prestige that once went with such a manly accomplishment. They would only look blank, should one speak to them admiringly of 'Michael Cromer's record.' Yet on the 12th day

of July, 1858, in a field near Mercersburg, Michael attained to what ought to be deathless fame, performing a feat of power and prowess probably never equaled. The tale is still told in Pennsylvania of how between sunrise and sundown he cut twelve and a half acres of wheat by the swing of his cradle.

"This cradle was made especially for him, and was a pattern of strength and comeliness. The blade was five inches wide by sixty-five long and made of 'silver steel.' Once every two hours, as he swung it, Michael took a little broth and also whetted the scythe, but halted for no nooning. The yield of that day's work was 365 sheaves. The master cradler was thirty years old, 6 feet 3 inches tall, and weighed 230 pounds. He made an average of twenty-two clips a minute over a swath eleven feet wide and five feet deep, which did not vary even when a thunderstorm came up and his great blade flashed with lightning in the gloom. And that, children, is cutting a wide swath. It takes a man to swing a cradle."

CHAIN LETTERS

Every doctor who is a victim of a chain letter may find possible comfort in the following editorial in the *New York Sun* of July 7:

"That mythical American captain in Flanders

who is supposed to be the originator of the most annoying of contemporary chain letters had his prototype a century ago. On June 23, 1832, the *London Spectator* relayed a Dublin paper's report

that many of the Irish were to be seen running and riding over the midland counties with a piece of burning turf, part of which was left at every house along the way, with the exhortation:

"The plague has broken out; take this, and while it burns offer up seven Paters, three Aves and a Credo, in the name of God and the holy St. John, that the plague may be stopped."

"Whoever received a piece of the burning turf, according to the century-old report, rested under an obligation to take turf of his own, set fire to it and run to at least seven other houses where no burning turf had been left. The

penalty for failing to meet this obligation was the cholera itself. Among the superstitious of that day as among the superstitious before 1832 and since then is that earnestness accompanied by a threat compels belief. The priesthood then disowned responsibility for the charm, just as, a century later, it was to disown responsibility for the chain. The communal carrying of lighted turf seems laughable now, but is it any more ludicrous than the current fad for writing chain letters? Obviously the practice gives a background of antiquity to the chain letter: Professor Frazer probably could trace it back to the cave man."

LIGHTNING AND SOUR MILK

The *New York Sun* of July 14 has the following interesting comment on the persistence of the popular belief that a thunderstorm will turn milk sour:

"If the iconoclasts of the Federal Department of Agriculture think they can shake public confidence in the venerable belief that thunder sours milk, they are as credulous as they suppose other folk to be. Merely saying it isn't so, or presenting evidence to prove it, will not do the business. To have her milk soured by a summer thunderstorm is an inalienable right of every farmer's wife, regardless of what the bright young men in the Department of Agriculture have to say.

"What every farmer's wife knows is that often when just before a shower she tasted the milk set out in crocks for the cream to rise, it was sweet, but that when she tasted it again soon after thunder it was blinky. If thunder didn't do the damage, what did? To this the Department of Agriculture has what purports to be

an answer. It says that just before a thunderstorm the weather is likely to be hot and humid; that this moist heat is especially stimulating to bacteria; that it was the heat and the humidity before the storm, not thunder, that helped bacteria to turn the milk sour. It goes so far as to say that if milk is kept in an icebox nothing short of an earthquake will turn it sour.

"To this the only appropriate rejoinder is: 'Is that so?' Whatever the explanation, whether heat and humidity or thunder ought to be blamed, there are stalwart American citizens who will insist upon holding to the ancient theory. Our grandmothers believed it before bacteria were heard of. Besides, a proper place to keep a lot of milk for the cream to rise is in a good, old-fashioned spring house or on airy shelves in an old-fashioned cellar. If the thunder does turn a little of it sour now and then, there is usually more to be had from the sources of the original supply."

INVESTIGATING ILL TEMPER

The *New York Times* of May 6 has the following editorial comment on a serious investigation of outbursts of temper:

"The *London Times* prints an account of a Missouri professor who devised a method for testing the angry passions of his students. His scheme has not only benefited mental research, it has improved the tempers of the young men and women.

"Students carried a diary with attached pencil wherever they went. Every time they found a fit of rage coming on, they made a note of the fact and the cause. By the time they had set down their emotion it had mostly evaporated, as

if he had counted ten before striking or saying a naughty word.

"Some of the professor's newly discovered facts are that women get angry six times to four for men, and that of every hundred tantrums all but fifteen were caused by disregard or insufficient respect for the subject of rage. If anger is bad for the health, it is strange that women, with their record of fury, should live longer than men. The English comment is that this proves their innate toughness. But it is just as likely that most of their little explosions would not be considered by men worthy of inclusion in 'the mad book.'"



OUR NEIGHBORS



CRIPPLED CHILDREN IN NEBRASKA

The July number of the Nebraska Medical Journal contains an article read on May 12th before the Nebraska State Medical Association on Crippled Children's Clinics. The work originated at the State meeting of the Elks in 1929, and the development of the work is described as follows:

"Contact was established with the division of Rehabilitation of the State Department of Vocational Education and together they formulated objectives and plans.

"Wisely the committee chose to supplement rather than duplicate existing agencies—There was seen to be a gap between patients and facilities for treatment. This gap they sought to bridge.

"It was fully understood that clinics are primarily the function of physicians, therefore no infringement upon their particular sphere could be permitted. The relation of lay groups to the clinic must be essentially the same as that of church organizations to their endowed hospitals. In short the Elks assume responsibility for ways and means; the physicians do the work of examining. Physicians are not asked to give free treatment; this item of cost is to be met through county or state funds and voluntary contributions.

"The State was divided into nineteen districts known as Elk Jurisdictions and the work confined to one district at a time. The Beatrice Jurisdiction comprising all of Gage and part of Jefferson, Saline, Johnson and Pawnee counties was chosen for the initial attempt. This area contains approximately 40,000 people and is the smallest of the jurisdictions.

"During this canvass the field man was careful to get the individual reaction of physicians to the project so that when the material evidence was submitted to the county society, there was no dissenting voice to the proposal of holding a clinic.

"The final step in organization was the creation of a permanent general committee to be entrusted with the follow-up work. The personnel consisted of representatives of the medical society and participating civic bodies. The duties of this group are to pass on the

of patients appealing for aid, direct proper channels, approve expenditures and maintain contact with the may find personally or by letter. Much of the trial in the had by the patient depends on "That mythic.

the tact and perseverance of this committee. Parents often need to be stirred to action in the interest of these unfortunate children."

The results of the free clinic are described as follows:

"Eleven months have passed since the first clinic, time sufficient to give some idea of actual results. Thirty-three patients were examined though only thirty records are available for analysis. Grouped as to cause of disability they were:

- Poliomyelitis—10.
- Congenital Deficiency—6.
- Bone Tuberculosis—2.
- Birth Palsy—2.
- Club Foot—2.
- Arthritis—2.
- Spina Bifida—2.
- Traumatic Injury—2.
- Flat Foot—1.
- Epilepsy—1.

"Eighteen were favorable subjects for treatment; twelve should be classed as permanent institutional cases. Of the eighteen favorable cases ten could be treated at local hospitals or at home. Ten out of the entire group needed partial or entire financial aid.

"To date, fifteen clinic patients or fifty per cent are accounted for. Ten carried through the advice received—nine of these were benefited; one a three months old infant with spina bifida and congenital dislocation of the hips died following operation. Four others were found to be under satisfactory treatment and have continued as they were. One died of intercurrent disease.

"So far as the follow-up records show fifteen have not availed themselves of the advantages offered by the clinic."

Dr. C. P. Fall, a member of the Central Committee commented on the psychological attitude of the parents as follows:

"It is estimated that the average clinic represents a contribution of professional time and skill amounting to \$1,500.00.

"Parents are loath to let other people know their children are in any way defective. They are very neglectful, and very ignorant. When you start action, the psychologic condition is this: They resolve this question in their minds: 'If I take my child to the doctor, I

(Continued on page 936—adv. xii)

RELIEF FROM NEURITIC PAIN-

The same therapeutic agent which has proved so valuable in the alleviation of pain, reduction of swelling and increase of motion in arthritic and rheumatoid conditions is also proving unusually effective in relieving the pain associated with the various forms of neuritis.

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ON PUBLICATION . .**

(Continued from page 936—adv. xii)

is inadequate and will not insure competent service, or where the contract denies the patient the right of free choice of physician, or where competitive bidding for the contract is involved, does in fact constitute a violation of medical ethics of the A.M.A., Chapter 2 (Section 2, Art. VI). Under this ruling, each case will be decided upon its merits, and where these factors exist, singly or in combination, a county society in Texas will be well within its rights in requiring that contracts be abandoned which are thus held to be offensive."

The report of the Councilors to the House of Delegates assumes that certain forms of contract practice are proper, such as salaried doctors in the employ of Departments of Health. It also enumerates five principles under which contract practice is unethical, as follows:

"1. When the compensation received is inadequate, based on the usual fees paid for the same kind of service by the doctors in the same community.

2. When the compensation is so low as to make it impossible for competent service to be rendered.

3. When there is competitive bidding in order to secure the contract.

4. When a free choice of physicians is denied.

5. Solicitation of patients, directly or indirectly."

ANNUAL REGISTRATION IN PENNSYLVANIA

The annual registration of physicians, after the plan adopted by New York State, is attaining a growing popularity among the States, as the arguments in its favor become increasingly apparent.

What the medical leaders of Pennsylvania think of the Annual Registration Law of their State is shown by the following editorial in the June number of the *Pennsylvania Medical Journal*:

"A register of licensed practitioners is a public obligation of every State board. In Great Britain and some other countries the placing of a physician's name on the official register confers all the privileges of licensure.

"With the best of State board records, after the passing of a number of years, the licentiate is frequently lost sight of, making it difficult to determine if he is still active in ethical practice, deceased, or removed from the State.

"The advantages of annual registration are clearly set forth in the comprehensive article of Dr. Engberg of the Minnesota Board published in the March Bulletin. Periodic registration has been referred to as the salvation of reputable medicine in this country, and it certainly exercises a distinct leverage on the unlicensed practi-

(Continued on page 939—adv. xv)

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(Continued from page 938—adv. xiv)

tioner. It constitutes a reliable directory that will be a valuable source of reference for the public as well as for the medical profession.

"The process of annual registration as now conducted does not cause any particular annoyance to the practicing physician, and the fee is moderate. The fees are also a fund that can be devoted to law enforcement, thus distributing the burden of expense to a certain extent on those who are most concerned with its maintenance of licensure requirements and proper enforcement procedures. Annual registration is distinctly an advance in the right direction.

"Pennsylvania has an annual registration required by the medical practice act, effective in 1926. A fee of \$1 or such amount as the Department of Public Instruction may see fit is charged, and payable January 1 of each year. There is a penalty of a fine of \$10 to \$100 for failure to register. The secretary reports they have an appropriation of \$65,000 every two years which is not secured by special taxation of the State.

"The secretary believes annual registration advantageous as it 'gives a complete list of licensed physicians which is used to check violations, and is a valuable aid in securing law enforcement.'"

BIRTH CONTROL IN MICHIGAN

The attitude of the Michigan State Medical Society toward birth control is set forth in the following semi-official letter by Dr. B. R. Corbus, chairman of the Council, printed in the July Journal of the Society which records the proceedings of the Council:

"The Council of the Michigan State Medical Society looks upon this matter as a controversial subject, and has not been willing, when the matter has previously been brought up, to take such action as would commit the Society to a definite policy. The Executive Committee, speaking for the Council by Authority, and for the profession as a whole, believes that, while technically the matter is a medical subject, it remains mainly in the domain of Sociology. We believe that there is something to be said on each side of the controversy. We know that there are members of our profession who look upon this movement as a definite social-economic problem, others who feel that it is a definitely personal matter, and still others who oppose the movement on religious and moral grounds. Until there is a greater unanimity of opinion in the profession and in Society in general, we believe that the Michigan State Medical Society, as a unit

(Continued on page 940—adv. xvi)

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(Continued from page 939—adv. xv)

of Organized Medicine, should not take the formal position of an advocate.

"If and when Society agrees on the legitimacy and propriety of contraceptive measures, we believe it is for the physician to guide, control and safeguard the methods employed. The necessity for this we realize has been, to a considerable extent, recognized by the leaders of the Birth Control Movement.

"We see no reason why individual members of the profession, who are convinced of the wisdom of their course should not take an active part in the movement as individuals, but we do not believe that we are, at this time, ready to put the stamp of approval upon it.

"We feel that it is not unlikely that the time is approaching when it will be incumbent upon Organized Medicine to take a stand on this question. What that stand will be depends somewhat upon the form of the activities of the Birth Control League.

"If we look upon this movement as an experiment in Sociology, then the doctor is, by virtue of his professional contacts, in an unusual position to determine for himself whether the good that is to come out of this movement is to well over-balance the possible evils. Once convinced that the good predominates, he will have a great desire to have Organized Medicine further the project."

GRADUATE EDUCATION IN OKLAHOMA

The minutes of the House of Delegates of the Oklahoma State Medical Association printed in the June Journal of the Association, contain the following report on graduate education and motion picture films:

"I have been asked to report on the work that has been done in the Medical Extension Post-Graduate Course and the motion picture films. The University Extension Department very kindly prepared a map to show this (demonstrating map). This will show the work that was done. You have probably noticed the report of the Secretary relative to finances that \$700 was spent this year for post-graduate work and \$350 that was contracted for last year. The courses in gynecology and obstetrics are marked on this map by green dots. These were held at five centers with a total attendance of 331. The course in surgical diagnosis was also held in five centers with an attendance of 418. The cost to the State Medical Society was \$350 for each of the two courses, the County Medical Societies where the courses were held meeting any other expense. A total of 749 attended, making the cost to the State Medical Society less than a dollar a head. An-

(Continued on page 941—adv. xvii)

(Continued from page 940—adv. xvi)

other course was put out by the Extension Department, the State contributing nothing to the expense, the members of the County Societies contributing \$10 apiece—that was put on in the northeastern part of the State. Ninety-one took another course at Oklahoma City and forty-one attended a course in Ear, Nose and Throat. As Chairman of the Committee that has been interested in this post-graduate work I feel that our money has been well spent in reaching 749 at a cost to the Society of \$700. Seven hundred dollars has been put in the budget of the State Society to carry on this work for another year.

"And now just a word relative to the motion picture films. This map will show the centers in which these motion pictures have been shown. I can see no reason why they have not been more widely circulated. We have now fifteen films. There are four reels on forceps delivery, three on eclampsia, two on acute appendicitis, one on benign prostate hypertrophy and three on infections of the hand. These have been seen by 850 physicians throughout the State as near as we can figure, giving each County Society its membership. Probably more doctors than that have been present,—many times there is someone from the outside. More publicity should be given to the films. Probably more County Medical Societies would use them if they knew just how to get them. The only cost is the expense to and from Norman, and the only requirement that they be shown by a licensed operator. If the County seat does not have a picture show with a licensed operator, one can be sent out from Norman, the cost simply being his expense on the road. That is all it will cost. Or for \$15 or \$20 they will exhibit these films, bringing their own machine and putting them on. I am going to suggest that more publicity be given them in the Journal and see if more of the County Societies will not become interested in this method of instruction."

CULT PROPAGANDA IN NEBRASKA

The *Nebraska State Medical Journal* for July has the following editorial comment on an indirect appeal for support of an initiative petition to change the Constitution so as to favor the cultists:

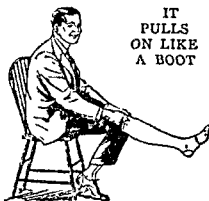
"The state has been flooded during the past sixty days with propaganda for 'medical liberty' presumably by a non-medical cult whose sole aim is to nullify the provisions of the Basic Science law enacted some four years ago.

"The literature broadcast would have the reader believe it is propaganda against com-

(Continued on page 942—adv. xviii)

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(Continued from page 941—adv. xvii)

pulsory vaccination, diphtheria antitoxin, etc., which it is not. It is a veiled attempt to befuddle the public into signing an Initiative Petition calling for an amendment to the Constitution as follows:

"Proposed Amendment to the Nebraska Constitution:

"No law shall be enacted or effective respecting the establishment or perpetuation of any exclusive method or methods of healing in any circumstance, nor infringing upon the free exercise of the right of any person to receive any method of healing, treatment or prophylaxis he or his guardian may choose.

"No law shall be enacted or effective whereby an applicant for a license to practice a certain method of healing shall be examined as to his qualifications for that method by any other person or persons than practitioners of such certain method of healing."

"Flimsy and silly as this appears to thinking people, there is a real danger that the necessary 45,000 signers may have been obtained by July 1st to get the proposition on the ballots for the November election. In that case the

medical profession must arise to its duty and see to it that it meets with a handsome defeat at the polls.

"It was thought when the Basic Science law was passed, and all those engaged in healing the sick placed on an equal basis of knowledge of the sciences fundamental to medicine,—that the matter was settled forever; but too many persons without a scientific foundation of any kind want to practice the healing art. Hence, this propaganda."

THE TEXAS JOURNAL

The following editorial in the April issue of the *Texas State Journal of Medicine* describes Volume XXVII of the Journal, which is completed by this issue:

"Last year there was a total of 1,688 pages, of which 750 were advertising (counting three pages for each unnumbered advertising insert, of which there were twelve), and 938 were reading pages. This year the total is 1,576, of which 644 are advertising pages (again counting three pages for each unnumbered insert, of which there are sixteen), and 932 reading pages. There has been,

(Continued on page 943—adv. xix)

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FREDERICK T. SEWARD, M.D., Res. Phy.

(Continued from page 942—adv. xviii)

therefore, a decrease of 112 pages, of which 106 are advertising pages and 6 reading pages.

"Thus, it will be seen that despite our decrease in advertising patronage, this volume almost exactly approximates its predecessor in regard to reading matter. Unless there is an increase in advertising it will be difficult to maintain the standard. We appeal to our readers to use whatever influence they may have with advertisers of ethical goods to patronize the Journal.

"In the following comparison between the division of reading pages of last year's volume and the present one, it will be observed that the original article sections differ by only one page, and that the greatest difference is in the miscellaneous items section, which shows an increase of 8 pages in the present volume over that of last year. This increase was due entirely to the more extended program of the annual session, which this year contains synopses of papers to be presented before three different sections and the General Meetings. We believe that this extension is worth-while and will be appreciated by all concerned.

"Our reading pages last year were divided as follows: Editorial, 97; Original Articles, 466; Miscellaneous Items, 86; News, 17; Society News, 101; Auxiliary Notes, 49; Death Notices, 30; Book Notes, 23; Transactions, 70. The index is among the miscellaneous items.

"This year the division is as follows: Editorials, 78; Original Articles, 466; Miscellaneous Items, 97; News, 21; Society News, 100; Auxiliary Notes, 44; Deaths, 29; Book Notes, 23; Transactions, 75.

"It will be noted that the principal cut in our reading pages was in the editorial department, where we thought the cut could best be made. It is the policy of the Journal to stress the production of scientific literature by our members. Our editorial efforts are devoted primarily and principally to the necessary propaganda among ourselves. Our Miscellaneous items, including all of the rest of the Journal are purely a matter of passing interest and public record of medical events of our day.

"As heretofore, there will be an exhibit at our annual session, comprising bound volumes of past numbers of the Journal and preceding volumes of Transactions, together with numerous medical journals, including the several Association-owned journals published in this country. Our package library service will be demonstrated at the same time and in the same exhibit."

WOMAN'S AUXILIARY IN TEXAS

The June issue of the *Texas State Journal of Medicine* contains the following opinion of the Woman's Auxiliary expressed by Dr. J. O. McReynolds, in his Presidential message to the House of Delegates on May fourth:

(Continued on page 944—adv. rx)



Thank You Doctor

The baby is doing splendidly and Tom and I are so pleased.

When you first told me that Junior would have to have bottle feedings I thought I was due for a lot of trouble and work because I remembered what a time my sister had when her baby was on the bottle. She sent for a formula that was advertised to be recommended by many authorities, but something was wrong. She used to spend hours in her kitchen mixing this, that and the other thing. And in spite of all her trouble, her baby fretted and cried and didn't gain properly.

This S.M.A. you have prescribed for my baby is a new one to me. In fact, I have never seen it advertised. But, believe me, it works like a charm and it is so simple to prepare—no fuss or bother at all.

Junior reaches to take the bottle right out of my hands and drinks it all up. And he's the best child. Always happy when he's awake, and sleeps the whole night through.

And talk about a picture of health! I believe he would take first prize in any baby contest.

I'm going to bring him down to your office Wednesday as you suggested. That S.M.A. folder you gave me says even a breast fed baby should be under the supervision of a physician and I think myself that it's better to keep the baby well than to wait until trouble starts.

We certainly want to thank you for bringing our baby along so well, Doctor. It increases our confidence in you as our family physician. Tom has already "said it with dollars", but I wanted to thank you personally, too.

And I'm going to persuade Mrs. Brown,—that's my neighbor with the baby that's not gaining—to come along on Wednesday so you can prescribe the proper diet for him too.

Trial supply of S.M.A. Because S.M.A. has won favor un-offered without charge under typical conditions we are quite willing that you should try it in your own practice and under your own control. To make this easy we offer you a generous trial supply without charge or obligation. Simply attach the coupon to your prescription blank or letterhead.

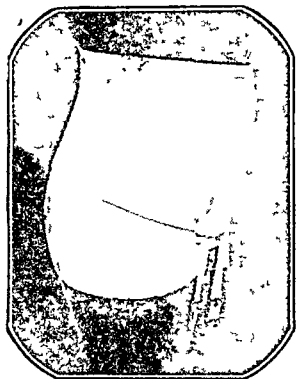


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(Continued from page 943—adv. xix)

"The Woman's Auxiliary, which as you remember, originated in Texas, has become an important national force. It is utilized by medical societies in carrying the gospel of dependable health measures to the general public, by the encouragement of health programs in the various women's clubs. These club programs, which likewise originated in Texas, have grown in number and influence, and are now established in the women's clubs throughout our country."

The scope and purpose of the Auxiliary is described by Mrs. H. R. Dudgeon, of Waco, President of the Woman's Auxiliary of Texas:

"The Woman's Auxiliary has a splendid opportunity here to act as a public relations committee, assisting the medical profession in making the right kind of educational contact with lay organizations.

"The Woman's Auxiliary has made it an important part of its work to sponsor a wide distribution of *Hygeia*. We try to place it in the waiting rooms of the doctors, where their patients may read it, into the public libraries and especially the school libraries. We are presenting its merits to the clubs and are getting it into the homes whenever opportunity presents.

"We have sponsored radio health talks, as well as health talks before clubs whenever possible. These activities are undertaken, of course, with the approval of the local county medical society and our Advisory Council from the State Medical Association.

"We are doing what we can to aid in the establishment of more accurate birth registration, and we are stressing the importance of yearly health examinations.

"We have in operation a student loan fund, the purpose of which is to help deserving junior and senior medical students. We do not propose to give them this money, but we do let them have it at a very low rate of interest—lower than it can be had elsewhere. This fund has been greatly augmented through the generosity of Mrs. S. C. Red of Houston, who graciously donated to it, for a period of two years, the proceeds from the sale of her book "The Medicine Man in Texas," and the County Auxiliaries have been asked to donate to this fund such amounts as they will each year.

"We have also a Benevolent Memorial fund, which was started by a gift from Mrs. John O. McReynolds, in memory of her mother, to be used to assist widows and children of physicians who are in need.

"Since the woman's vote carries as much weight as any other, it is easy to understand the importance of organization of our Auxiliaries, as a source of political strength and influence in legislative and other public programs, both state and national medical associations."

VENEREAL DISEASE CLINICS IN ALABAMA

The June Journal of the Medical Association of the State of Alabama contains the following article by Dr. D. G. Gill, Director of the Bureau of Venereal Diseases of the State Department of Public Health, describing the standards for venereal disease clinics:

"The State Board of Censors recognizes that the ultimate success of any plan looking to the clinical control of the spread of venereal disease must have, not only the sympathetic support of the medical profession, but also that such support should be enlisted by giving to the members of the profession a voice and financial interest in the execution of such plans. In all public health work conducted in this State, the voice of the profession is now articulate. Inasmuch, however, as these clinics are operated and financed largely by the State Department of Health and are not an integral part of county health units, but often serve more than one county, the Board feels that, while every consideration should be given County Medical Societies in the selection of personnel and in the conduct of these clinics, the final decision as to personnel and policy should rest with this Board. In order to stimulate a keener interest among all members of the profession in this important work, the Board, at its last meeting, in April, adopted the following regulations governing the operation of the free venereal clinics.

"Hereafter, whenever a decision has been reached by a County Medical Society and the State Committee of Public Health that a free venereal clinic is to be established at any point in a county, the following rules shall govern:

"That the members of a County Medical Society, in regular meeting, shall submit to the County Board of Censors the names of one or more members whom they consider suitable and competent to do this particular work.

**Diuresis is recommended
in many forms of
Heart Disease
as an adjunct to other
appropriate treatment.**

Poland Water

**may be relied upon
to induce diuresis
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"That, from the names submitted to the County Board of Censors, it shall recommend to the State Health Officer, the name of one member for the position of venereal clinician.

"That the salary of such clinician, when paid in whole, or in part, by the State, shall be fixed by the State Committee of Public Health.

"That the formulating of rules and regulations governing the operation of such clinics is the responsibility of the State Committee of Public Health."

ADVERTISING AGENT FOR THE CALIFORNIA JOURNAL

The minutes of the January 16 meeting of the Council of the California Medical Association, printed in the February issue of California and Western Medicine, contain the following article in regard to employing an advertising manager for the Journal:

"Doctor Kress, Editor, stated that the southern councilors had met with Mr. Butterworth, an experienced advertising man, who had kindly consented to give his time and advice in the selection of an advertising agent; that Mr. Butterworth stated that he felt that an advertising agent could secure considerable advertising in southern California but that a full-time man was necessary.

"On motion of Dr. Kress, seconded by Dr. Catton, the following resolution was adopted:

"Resolved, That this matter be turned over to the Los Angeles councilors with power to select an advertising representative for southern California; that such employment of such advertising agent be subject to a contract covering the terms, compensation, etc., as may be prepared by this Council upon advice of the general counsel, Mr. Peart."

"Resolved, That the councilors from southern California be authorized to engage an advertising agent on a drawing account not to exceed \$200 per month and not to exceed in the aggregate \$600."

CLASSIFIED ADVERTISEMENTS

Classified ads are payable in advance. To avoid delay in publishing, remit with order. Price for 40 words or less, 1 insertion, \$1.50; three cents each for additional words.

WANTED: Salaried Appointments everywhere for Class A physicians. Let us put you in touch with investigated candidates for your opening. No charge to employers. Established 1896. Aznoe Service is National, Superior. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago.

ARLINGTON, New Jersey, 211 Stewart Av.—Attractive 7-room house; plot 120x103; oil burner; 2-car garage; 8 miles from New York City; 5 minutes' walk from station and bus lines; rent \$100 month or sell, easy terms, at a bargain price. Owner, Box 5, Care N. Y. State Journal of Medicine.

60S, EAST—4 rooms, suitable Doctor; co-operatively owned; for sale; great sacrifice; upkeep \$66.00; owner leaving city.

50S, EAST—Corner, 4 rooms, 2 baths, including large living room, suitable Doctor; building co-operatively owned; rent very reasonable; possession. MURRAY Hill 2-8514. Address: Box 27, Care N. Y. State Journal of Medicine.

MASSEUR OR ATTENDANT—Swedish, wishes position in private or institution. Thorough knowledge Swedish system of massage and medical gymnastics; also colonic therapy. First class references. Willing to go anywhere. Reply, Alfred Nordstrom, 75 Sherwood Place, Greenwich, Conn. Telephone: Greenwich 1775.

CREST VIEW SANATORIUM

Charmingly located, beautifully appointed; in the hilly country one and a half miles from Long Island Sound where the air is tonic. Truly homelike, no institutional appearance. See page xxiii.—*Adv.*

WHAT IS MALTCOA?

Maltco is a scientifically prepared health food consisting of pure sugar, malt, cocoa, partially defatted milk, and liberal quantities of organic phosphates of calcium and iron in the same form as nature produces these salts in grains and vegetables.

"MALTCOA" ANALYSIS:

Moisture	3.03%
Cocoa Butter	4.42%
Butter Fat .....	.56%
Milk Solids not Fat	10.09%
Crude Fiber .....	.89%
Cane Sugar	45.07%
Maltose	14.72%
Total Protein	9.87%
Dextrin and Other Carbo- hydrates	7.36%
Mineral Ash	3.99%

100.00%

The ash contains:

Sodium Chloride	0.84%
Iron	0.09%
Calcium Oxide	0.52%
Phosphates as P ₂ O ₅	1.41%
Calories per Pound:	1830

See page xiv.—*Adv.*

HAY FEVER CLINIC

Due to the increased demand of people sensitive to Hay Fever Pollens and allied diseases, the New York Polyclinic Medical School and Hospital has enlarged this department to meet their needs. Clinics are held every morning from nine-thirty to eleven o'clock. See page iv.—*Adv.*

SIMPLIFYING SUMMER INFANT FEEDING PROBLEMS

Vacation travel presents fewer difficulties in caring for infants on S.M.A. Instead of using milk from dairies of unknown standards, the mother feeding S.M.A. is using a food made from milk which her physician knows to be produced under strict sanitary requirements and rigorous inspection.

Refrigeration is unnecessary because individual feedings of powdered S.M.A. may be made up as needed. If the supply runs out, S.M.A. is available virtually everywhere in the United States in prescription pharmacies from Skowhegan to Hollywood. S.M.A. is not a grocery product for adults, but a scientific antirachitic breast milk adaptation designed for infants.

S.M.A. is made to resemble nature's own formula, breast milk, as closely as modern scientific knowledge and laboratory control can accomplish, certainly closer than a trial and error formula. See page xix.—*Adv.*

ANTIPHLOGISTINE

The summer vacation exodus is in full swing and thousands are flocking to country and seaside in search of relaxation and pleasure.

Many vacations, however, are doomed to end unhappily through illness and accident, and physicians will be called upon to treat innumerable traumatic injuries of the muscles, tendon sheaths, bursae and synovial structures about the joints; sprains, abrasions, lacerations, dermatitis caused by poison ivy and other plants, sunburn, etc.

In these cases physicians will find Antiphlogistine one of the most useful and efficient all-round dressings.

In addition to its antiseptic, analgesic and osmotic qualities, Antiphlogistine by stimulating the flow of blood to the parts, favors the absorption of infiltrations, exudations and adhesions.

Injuries resulting in blood and fluid in the various synovial sacs are particularly responsive to Antiphlogistine; and the associated edema and stiffness of a joint, following fracture, are usually much relieved.

Physicians are invited to write for sample and literature. See page ii.—*Adv.*

CHOOSING A HYPNOTIC

Every physician is familiar with several agents from which to choose when called upon to prescribe a sedative for nervousness, hyperthyroidism, menopausal symptoms, neurasthenia, or psychasthenic states, or where the indications point to need for rest and repose.

Since the use of the product prescribed must often be continued over a considerable period it becomes important to select an agent that will accomplish the desired results without effects that are harmful.

Unlike barbital and phenobarbital, Amytal is reported to be completely destroyed in the body. Extensive experimentation is said to have been conducted in a study of the effect of Amytal on the kidneys. Reports show that there was not even microscopic evidence of injury. No known decomposition products of Amytal have been recovered from the urine. By regulating the dose of Amytal, the physician is said to find it easy to produce ambulatory sedation, to quiet the nerves before undergoing trying ordeals, or to produce sound sleep from which the patient will awaken rested and refreshed without depressing after-effects. See page x.—*Adv.*

INFANT FEEDING

The Texas State Journal of Medicine for February, 1932, comments editorially on the growing custom of drug chain organizations to adopt so-called merchandizing methods in handling well-known products, such as infant foods,—referring to the practice that drug stores shall handle only those products whose manufacturers make special concessions to the retailers, and that, in return, drug clerks will push the sale of the preferred products. The people are ready to believe that the clerks know how to prescribe infant foods, but the results of their advice are often deplorable.

There is so much lay feeding of babies now going on, thanks to ill-advised "public education," that sooner or later many of these babies are brought to the pediatrician when they are in pretty bad shape and the frantic mothers do not know what to do about it.

We have been trying for years, and especially during the depression, to keep medical practice in medical hands. We could probably make a good deal more money than we do, were we to go directly to the public with our products. But we believe that our interests are closely linked with those of practicing physicians, and theirs with our own. Mead Johnson & Company will co-operate with the medical profession in the future as in the past. See page xxvi.—*Adv.*

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TRAUMATISMS OF THE FRONTAL AND TEMPORAL REGIONS AND THEIR RELATION TO MENINGITIS FROM THE STANDPOINT OF THE GENERAL SURGEON

By WELLS P. EAGLETON, MD, NEWARK, N. J.

Opening the discussion on Cerebral Trauma before the Annual Meeting of the Medical Society of the State of New York, at Syracuse N. Y., June 3, 1931

SURGERY in any injury to the brain or its coverings can accomplish but two things—first, it may relieve compression, second, it may cure sepsis, or, better still, it may prevent infection, that is, meningitis. It can do nothing more. Consequently, from a surgical standpoint the questions in every cerebral injury are first, is compression present? second, is sepsis apt to occur?

In the automobile accidents of today about 10 per cent die as the result of brain laceration with its associated extensive intracerebral hemorrhage. They become unconscious immediately upon the receipt of the injury and never regain consciousness. They die as the direct result of damage to the cerebral tissue, although they may live for several days. In brain laceration, surgery but shortens the few hours or days that the patient otherwise may live, for any surgery simply adds a further trauma to the already over-damaged brain.

Barring cases of brain laceration, in skull fracture it is now a recognized duty immediately to convert a compound linear or depressed fracture into a simple fracture through debridement (the excision of the soft parts of the wound, the removal of all loose fragments of bone, the elevation of any bony depression, and finally the tight closure of the skin without drainage). For so sensitive to infection are the meninges that a large proportion of compound skull fractures with a dural tear that are treated by drainage end in meningitis.

Rule I. Every compound fracture should be converted into a simple fracture—it should not be drained.

But I have elected to discuss simple linear fractures of two areas of the head—the frontal and temporal regions—because these areas possess peculiar anatomical and physiological properties that permit of certain injuries which do

not make the patient seriously ill immediately following the trauma, but if improperly treated result fatally in a large proportion of cases. A fatality in such a case, then, is a complication of what in reality is an unimportant injury. The questions are—how are these cases to be recognized and when and how treated?

Types of Cases To Be Discussed

First type, a patient has an injury to his frontal region—he has bleeding from his nose, a black eye, he is dazed or unconscious for a short time and then gradually regains consciousness, the x-ray reveals a linear undepressed fracture through his frontal bone. On arrival at the hospital nothing surgical is done because, the immediate effect of the injury having passed, the patient is apparently normal. Suddenly, a week, perhaps three weeks or even several months after the injury, he has a severe headache, the temperature rises and he rapidly becomes unconscious. A lumbar puncture now shows a purulent meningitis. In a few days he dies. This occurs because his recognized compound fracture—for with bleeding from the nose the fracture entered the base—with an injury to the brain or its coverings had not been converted into a simple fracture.

Second type. A man is struck on the temporal region. He is unconscious but soon regains consciousness. He has great dizziness, vomits continuously and has marked nystagmus. Blood comes from his ear, this is followed by a flow of cerebrospinal fluid. He manifestly has a compound fracture of the base which has perforated the dura. Immediately following the accident and for the next day or two the patient looks very ill but in a few days all symptoms disappear and outside of total deafness of one ear and possibly an annoying buzzing he is well and so remains.

There are thus two types of linear fracture of the base of the skull—in one the patient is immediately following the injury desperately ill with outstanding cerebral symptoms but there is a rapid and prominent recovery; in the other, he has slight or no cerebral symptoms at the beginning but later death occurs from sudden and unexpected meningitis.

Surgical Anatomy and Physiological Consideration in Fractures of the Frontal and Temporal Regions

To understand traumatic lesions we must appreciate the physiological and anatomical differences in the two regions—both of the skull and of the brain. For all anatomical differences have a physiological basis and these anatomical and physiological differences supply the cerebral and peripheral symptoms and should dictate the character of our surgery.

The frontal and temporal areas of the head are anatomically different because they serve different purposes in the evolution of life.

The frontal bony region contains a mechanism, the nose with its accessory sinuses. The mucous membrane of the nose was evolved by life to prevent infection of the brain. It was present while life was still in the water. So efficient is this mechanism that, although the mucous membrane of the nose is constantly the seat of bacteria, brought to it from the air; and although the nose is separated from the brain by but a thin layer of bone with many holes in it—the cribriform plate—still the normal mucous membrane mechanism prevents infection of the meninges. It is only when this protective mechanism is broken down by trauma or disease that we have cerebral sepsis, that is, meningitis, from the nose. On the other hand, the temporal region is preserved by life to protect the brain from trauma. This protection is because the temporal region contains the ear—the organ of hearing—the most delicate of all life's mechanisms and the most important of life's attributes in its evolution from the material into the spiritual. From hearing speech was evolved. Hearing is a late addition in life's evolution.

Fishes do not hear as we understand hearing, but some fishes perceive sound—the same as man hears a roar as the train "thunders" through a tunnel.

But after life crawled out of the water on to the land there developed a mechanism for the reception of grades of sound—the cochlear apparatus. At the same time the central nervous system was undergoing a consummate expansion. In land-confined vertebrate animals, smell is the important sense—the rabbits, the rodents, the deer—they all recognize their food, their mates, their enemies, chiefly by smell assisted by hearing. In them the cerebral area of the sense of

smell is so important that it composes a large part of the brain. But when life took to the trees the cerebral part of the smell area diminished, and the visual area increased. So that in the primates the olfactory area is insignificant in size compared to the rest of the brain; but in the mantle, the neopallium, which grows over the brain from behind, the visual area is large; and with the growth of the mantle forward there appears greater and greater intelligence.

And at last, in man, out of the complicated peripheral mechanism of hearing—the auditory apparatus—adapted to receive different grades of sound; and its cerebral connections in the temporal cortex of the brain—for the analyzing of pitch and tone—there came speech.

Speech was made possible by the evolution of the peripheral cochlea for the reception of different tones and by an addition to the cerebral cortex of a specific area. The speech area is placed between the frontal and parietal lobes and is covered by the squamous portion of the temporal bone—the thinnest part of the skull and where the sutures of the skull are the last to unite. For it is the late closure of the sutures that gives man an advantage over the animal. It allows his central nervous tissue to continue to develop long after birth. If a child does not hear, it does not talk, and a child does not begin to talk until it is two years old.

The temporal bony area of the skull because of its thinness and because of its unclosed suture would be especially liable to injury were it not protected by a flying buttress of bone, the zygomatic process.

Again, injury to the brain behind the thin squama presents few symptoms, for the temporal lobe is a silent area outside the cortical area for speech on the left side, so there may be extensive damage to the temporosphenoidal lobe from direct trauma or by contrecoup laceration without symptoms.

Consequently, from a physiological standpoint we find: (1) the frontal region especially adapted to the prevention of infection from attacking the brain; and (2) the temporal region, especially adapted to prevent trauma from injuring the brain.

If the frontal bony region is adapted to the control of infection, then an intracranial complication from nasal sinus suppuration should be very uncommon, and such is the case, for although suppuration of the frontal and ethmoidal sinuses is almost universally present in people living in rapidly changing temperatures, intracranial complications from suppuration in the nose occur but seldom. There is only one cerebral complication—brain abscess, meningitis or venous sinus thrombosis—from suppurative disease of a nasal sinus to about forty from discharging ears.

On the other hand, linear fractures which extend through the nasal region into the skull with a *tear in the dura* have a mortality of 25 per cent; while linear fractures of the temporal region in which the dura is also injured (for there is a flow of cerebrospinal fluid from the ear), have a mortality of only 8 per cent. So in these two regions, the nose and the ear, we must be able to diagnose which are dangerous fractures.

Fractures of the Frontal Region

In all simple linear or depressed fractures of the frontal region (that is, without rupture of the skin) it is of great clinical importance to determine whether the fracture is (1) external to the sinuses or (2) through a sinus. Any fracture which passes through the sinuses is a dangerous fracture *provided the dura is torn*, because a fracture which extends from a frontal sinus through the dura and into the brain has a direct communication with the outer world. It is in reality a compound fracture but the communication with the external air is hidden; it is inside the nose.

A fracture through a nasal sinus with a *tear in the dura in those regions in which the dura can be stripped from the bone*, such as the posterior surface of the frontal sinus, may cause meningitis because the mucous membrane of the nose is a low grade, rapidly proliferating tissue, and if there be a tear in the dura, mucous membrane from the nose may grow into the brain before the fracture becomes united. Later if the mucous membrane of the nose becomes infected by a cold, the bacteria may pass from the nose, through the crack, through the dura and into the arachnoid by direct continuity of tissue infection.

With cracks through the cribriform plate this does not happen. In this region the dura cannot be separated from the bone; the dura and the bone are one structure; and here again, at the roof of the nose, the mucous membrane is a highly specialized sense epithelium, which does not proliferate rapidly. Fractures through the cribriform plate do not cause meningitis, excepting in cases of a wide defect between the fragments, or from displacement of pieces of bone through the dura.

I have said that 25 per cent of the patients with fracture of the posterior wall of the frontal sinus with a tear in the dura die of meningitis. How can these dangerous fractures be recognized and how treated so that meningitis may be prevented? This must be done while the patient is still in good condition.

Linear fractures through the sinuses produce (a) bleeding from the nose, and (b) black eye. The position of the fracture and whether it involves the posterior wall of the sinus may be seen in the (c) x-ray; or its position may be suspected by (d) the presence of exophthalmus; if the fracture goes through the cavernous sinus. In the latter cases there is apt to be a bruit upon

listening to the head. This bruit is sometimes present without exophthalmus. Consequently, auscultation of the head should be performed routinely in every fracture of the frontal region. Again, if the fracture goes through the sella turcica we may have (e) pressure on the optic nerve, in which case there will be visual or visual field disturbances. Therefore, in all frontal fractures we should test the vision and in fractures of the frontal or temporal regions we should map out the visual field. But in the absence of all localizing symptoms what we want to know is whether there is a tear in the dura or not. (f) This a lumbar puncture may decide by showing whether there is blood in the spinal fluid.² If there be no blood the dura probably is not torn.

Rule II. All fractures of the inner table of the frontal sinus with a tear in the dura should be widely opened and a layer of skin or fascia lata tucked in, thus short-circuiting the nose from the pia-arachnoid by walling off the sinus, so as to prevent a later infection from colds. If the patient has not been operated upon immediately following the accident, and he later develops headache and fever, operation is imperative, and the better his condition the greater is the indication for operation, for if the infected fluid is early evacuated the meningeal inflammation may be stopped.⁴

Simple Linear Fractures of the Temporal Region

Simple linear fractures of the temporal region from a diagnostic and surgical standpoint should be divided into (1) fractures through the squamosal portion and (2) those through the petrous portion of the temporal bone.

Linear fractures through the squamosa without severe symptoms are especially important because of the possibility of injury to the middle meningeal artery.

The middle meningeal artery in its upper part is adherent to the dura, and in its lower part is within the bone; consequently it cannot retract, and so stop bleeding from a tear in its wall. The result is that a middle meningeal artery, torn by a linear fracture, may slowly bleed over and over again, and ultimately, an extradural clot may cause cerebral compression; and this hours after the receipt of the injury.

Rule III. All fractures of the temporal region followed by an interval of consciousness should be operated upon if the patient later becomes unconscious, because, if there has been a free interval, the compression which causes the coma, in part at least, must be from an extradural clot.

A subdural hemorrhage—pachymeningitis hemorrhagica interna—may be present if the free interval has been of days' duration. All surgeons know that patients with extradural hemorrhages from fractures through the middle meningeal artery—in which the patient after receiving a blow

is conscious and then lapses into unconsciousness—die suddenly of medullary compression.

How can we be warned that respiratory paralysis is imminent?

Rule IV. If there be a suspicion that there is a fracture of the temporal region and the patient has had a conscious period *no matter how short*, take his blood pressure and count his pulse at least every half hour. If the systolic blood pressure persistently rises and the diastolic drops, that is, an increasing pulse pressure develops—which is a sign of the medulla's call for blood—and especially if the pulse becomes slower, signifying general brain compression; respiratory failure will occur if the increasing intracranial pressure is not promptly relieved.

But it is asked—what about brain laceration with its associated hemorrhages into the brain substance, which is the cause of death in the majority of cases of cerebral traumas that end fatally? The patients do not have a conscious interval. In brain laceration which is sufficient to cause compression the patient is immediately unconscious and remains so, although I have seen one case of cortical laceration with subdural space hemorrhage from brain laceration in which the patient did not become unconscious for several hours.

The practical thing in all fractures of the anterior portion of the temporal region is to ascertain (1) if the fracture is in the region of the middle meningeal; and (2) whether there has been an interval of consciousness.

Rule V. In all cases of cerebral trauma in which the patient is unconscious find out if there has been a free interval.

Cases of injury to the temporal region without fracture in which the patient is unconscious for a few minutes and then regains consciousness.

In such a case the pathologic condition is either (1) concussion of the brain or (2) subdural space hemorrhage.

Concussion: What is concussion?

It is caused by multiple punctate hemorrhages into the perivascular spaces of the brain.^{5, 6} Diffuse punctate hemorrhages do not cause cerebral compression. If the hemorrhages are extensive enough and especially if they involve the basal ganglia, the patient may die. He never regains consciousness.

Ordinary concussion—in which consciousness is lost for a minute or two—does not kill the patient but still it is a serious condition as regards his future comfort and well being. For if he is allowed to exert himself for some time after the accident, later he is apt to develop headache and vertigo, from which he may never recover. In all of my cases of brain concussion in which consciousness has been lost if only for a few minutes the patients are confined to bed for at least a month. During this time the slightest appearance

of compression or brain irritation—headache, slow pulse, etc.—calls for lumbar puncture (to remove the irritating blood from the cerebrospinal system) and dehydration (the administration of magnesium sulphate and intravenous injections of glucose). The restoration of the dynamical equilibrium between the hemic pressure, the cerebrospinal dialyzing, and the intercellular nutritional systems is a delicate physiological problem once the normal equilibrium has been disturbed by trauma.

Blood in the cerebrospinal fluid system over the cortex causes cortical irritation, headache and even delirium. Blood in the fluid of the base causes stiff neck.

Rule VI. In cerebral trauma, headache or delirium calls for lumbar or occipito-atloid punctures to remove the irritating blood as well as to reduce the pressure.

How can the otologist be of assistance in determining whether or not there was a cerebral trauma in those patients who weeks after the accident claim to suffer from headache and dizziness without other neurological symptoms, and in whom a radiogram fails to reveal a skull fracture? By demonstrating whether there is a reduction of at least 50 per cent in the duration of the induced nystagmus after rotating the patient.^{7, 8}

Rule VII. In all cases of doubt as to whether the brain has been injured have the patient's vestibular apparatus carefully examined, but not until at least eight weeks after the accident.

Subdural Space Hemorrhage

There is a group of cases of injury to the temporoparietal region—subdural space hemorrhages—that show delayed signs of local compression—papilloedema, ocular paralysis, headache and vomiting without a skull fracture; but the spinal fluid is yellowish from old blood.

Rule VIII. If following a trivial injury of the head the patient continues to have headache, make repeated ophthalmoscopic examinations and search for evidences of blood in the spinal fluid.

In fractures that go through the petrous portion of the temporal bone—that is, the posterior part of the temporal region—how are the dangerous ones to be recognized?

If the fracture passes through the labyrinth the patient is totally deaf on that side, and there are nystagmus and bleeding or an escape of cerebrospinal fluid from the ear. If there is bleeding but the patient still hears, the fracture is not apt to cause meningitis.

Rule IX. Ascertain if there is any hearing in the affected ear, for if there is hearing the prognosis is good.

Again, in all cases of linear fracture of the petrous portion even with total deafness, nystagmus and vomiting and an escape of fluid but without a rise of temperature, or pain in the head,

nothing surgical should be done. For experience shows that linear fractures of the base through the labyrinth without brain laceration develop meningitis only in 8 per cent of the cases.

All surgeons now appreciate the danger from syringing the ear in case of bleeding, that it may light up a meningitis.

In linear fractures of the petrous portion what are the signs which should warn the surgeon that the suppuration is advancing toward the meninges?

Rule X. If following a fracture of the petrous bone, fever and headache appear (especially in the presence of a suppurating ear) operate at once. Expose the line of fracture along the petrous bone at least beyond the middle ear and the eustachian tube, for meningitis has developed and it must be combated.

Conclusions

This paper would emphasize

(1) The limitation of surgery in all cerebral injuries whether accompanied by a skull fracture or not, to (a) the prevention of sepsis and (b) the relief of compression.

(2) The diagnostic importance of consciousness and unconsciousness in injuries of the frontal and temporal bony regions. If unconsciousness is present the importance of ascertaining whether there has been a free interval even if it was only a very short one.

(3) How to diagnose clinically, while the patient is in good condition, the deceptive cases of linear fracture of the frontal bone that are apt to develop meningitis.

(4) The conversion of compound but hidden fractures of the frontal sinus with a tear in the dura into simple fractures.

(5) The value of lumbar puncture for the removal of blood from the cerebrospinal fluid in injuries of the brain.

(6) The value of the turning reactions in determining whether or not the brain has been damaged by an apparently trivial head injury.

(7) When to operate in fractures of the petrous bone.

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THE SUB-ERYTHEMA METHOD IN ULTRA-VIOLET RADIATION

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SINCE the ultra violet rays became popular and in great use by medical practitioners, lay practitioners, and laymen their misuses and abuses claimed a number of victims more so than it is really known.

The main cause responsible for the mischief is that the only warning which ultra-violet radiation is always "sensing" to the patient—the erythema—is not taken into consideration or is misinterpreted. It is however in the erythema where the danger is hidden.

I could cite many instances of great harm done to the healthy and the sick by ultra-violet burns, but for lack of space I shall limit myself to the following one which prompted me to write this paper.

We have here a case of a tragic end of a

young woman (age 26) treated somewhere with ultra-violet radiation for six months. About that time certain symptoms, among which dyspnea was the most prominent one, became so alarming, that they compelled her to discontinue the treatments and look for help and advice. An accompanying condition was a chronic gc arthritis of the left knee which was also a source of great worry to the patient, and I had a chance to see her in consultation in my clinic.

Of great interest to me was the following part of her history. She stated that she was a mother of two children and had always felt well, except for the arthritis for which she was treated by the same operator who irradiated her with the ultra-violet light. She em-

phasized that she had felt constitutionally perfectly well when the radiations were started, but later on she began to experience palpitation, dyspnea, especially on exertion, and this condition grew rapidly worse. She finished her story with the words, "and how he used to BURN me! . . ." She especially accented the word "burn" uttering it with a pleasant smile which denoted satisfaction and imparted to the listener the impression that the patient and operator were heartily sure that the greater the burning the greater the benefit derived from the treatment. She presented an ideal picture of cardiac decompensation. In addition she was an advanced nephritic. I learned later that she died within two months after this consultation. There was no doubt in my mind that her death was at least hastened (*) by the ultra-violet erythemas. Six months of repeated burning of the skin created all those agents, known and unknown to us, (as we still are ignorant of the mysterious influence of these rays upon the animal body) that caused the damage to her heart and kidneys, manifested by the alarming symptoms which compelled her to discontinue the ultra-violet treatments and look for relief, but it was too late. . . .

It is therefore the aim of this paper to point out a simple and safe method for the use of Quartz Light, and to show that the skin burn, the erythema, is dangerous and is a total unnecessary item in the treatment of diseases where general body radiation is considered of benefit. This method discards the erythema entirely, wherefore the author names it the Sub-Erythema Method.

There are four main factors which are responsible for the injurious effects of ultra-violet radiation and the resulting erythemas. These are: penetration, energy, skin injury, and liberation of histamine.

Penetration. It was always considered that the penetration of the ultra-violet rays is very inappreciable. It was thought that these short rays, having a wave length of about 2900 A.U. do not penetrate even all the layers of the skin. The experiments however, of Gassul and Levy have proven that they do penetrate considerably. These authors, as quoted by Laurens¹, "marshal considerable evidence in favor of their view that ultra-violet radiation has considerably more penetrating power than is usually accorded it." They irradiated mice with a Hg. Quartz Lamp for varying periods of time up to a certain number of hours and then killed them. Upon examination they found severe pathological changes in the lungs, spleen, liver, kidneys

and blood vessels. Irradiation with red light produced no demonstrable changes in the viscera. They regarded this as proof of direct deep action on the part of the ultra-violet on the internal organs and blood vessels.

Parallel with the experiments of these authors, the following incident is of interest. Clausen² quotes MacCormack and McCrea reporting the case of a man who fell asleep during a self-administered treatment from a Quartz Lamp. He received an exposure lasting one hour and ten minutes. This overdose was followed by a grave constitutional illness.

Energy. John Bunker,³ Professor of Biology and Physiology of the Mass. Institute of Technology, sounding his warning with regard to the abuse of ultra-violet radiation says, "Ultra-Violet Light is still a mystery. It is mysterious, it carries energy and transmits it to the patient. Ultra-Violet Light is energy, and this energy, at times, is very powerful. This type of energy can, we know, be absorbed by the body. The laws of the behavior of energy in this universe apply to the behavior of energy in the body. It cannot be lost, but most of it must be transformed because obviously there is a limit to its storage. What the transformation may be we do not know."

So little is written on the possible damage by ultra-violet energy that there is hardly a case on record to cite for illustration. The following however, may serve as examples of damage due to this energy.

a. Ergosterol is a constituent of the skin and a precursor to Vitamin D. The irradiated ergosterol is the Vitamin D. Application of too much energy in the form of ultra-violet light to ergosterol results in destruction of the Vitamin after its formation. (Bunker. *Ibid.*)

b. Discussing the effect of ultra-violet radiation on the blood, Laurence⁴ says, "of considerable interest is the demonstration that too much, or too frequent, irradiation is definitely harmful. Hobart regards the damage as of double nature, first in the too rapid maturing of the red cells, and by the formation of more reds succeeded by an accelerated storing of reds giving rise eventually to an anemia." The rapidity of the process observed only on too much or too frequent irradiation may be explained as due probably to excess of ultra-violet energy absorbed by the body.

Skin Injury. Actinotherapists differentiate four degrees of actinic ray skin reactions (erythemas). In all these reactions we deal practically with various degrees of injury to the skin. Taking into account the physiologic functions that this organ has to per-

* On the supposition that this patient was a mild cardionephritic at the beginning of the radiations.

form, we may appreciate the importance of its integrity. These functions are protection, sensation, EXCRETION, RESPIRATION and HEAT-REGULATION. The last three are particularly influenced by the ultra-violet erythema, and therefore will be discussed from this point of view.

Excretion It is our knowledge that the skin assists greatly the kidneys in their catabolic process. Injury to a large skin area interferes with this assistance. Repeated injury to the skin means repeatedly overburdening the kidneys. Even a first degree erythema (*) causes injury to the skin. This can be judged from the fact that desquamation, though not easily visible, is, nevertheless, present in this degree of erythema, and, to quote Lewis⁵, "desquamation is a sequel to almost all forms of injury" since it may be read legitimately as the removal of the husks of killed cells. Consequently a first degree erythema may interfere with proper excretion.

Respiration The skin excretes carbon dioxide and absorbs oxygen utilized by the body. This cutaneous respiration, as mentioned by Bardeen⁶, equals to about 1/25 of the total normal respiration of the body. When repeatedly injured by erythemas, the skin shares poorly or not at all in the process of respiratory function. This leads to overwork in the lungs and consequent weakening of the latter. We thus find a solution to the strange phenomenon repeatedly observed that ultra violet radiation (erythemas) has caused the mischievous awakening of dormant pulmonary T B foci which resulted in the destruction of this organ.

Heat Regulation This function explains why ultra-violet radiation is contraindicated in cases with fever. The injury to the skin caused by the erythema hinders this function.

Histamine This substance plays a great (or probably the greatest) role in the causation of injury to the body by erythemas.

Histamine is a highly toxic substance. When in sufficient amount in the body, it is capable of producing shock. It is found in the muscles and viscera, and probably in every organ and tissue of the body, and is released from the viscera either by irritation to the latter, e.g. when the liver or intestines are roughly handled by the surgeon, or by injury to the skin, e.g. by an ultra-violet erythema.

According to Lewis⁷, histamine, or substances behaving like histamine, designated by him collectively as the H-substance, are liberated by trauma to the skin or during a

dermatitis caused by various agents, such as scalds, fire, ultra-violet light, etc. Again, the H-substance in the burnt skin may, by way of circulation, reach the viscera, and thus become a constant source of toxin to the body. Simultaneously the dermatitis causes, probably by some reflex action, a release of histamine in the viscera which results in damage to the latter*. Furthermore there seems to exist a definite physiologic relation between the injury produced in the skin (by erythemas) and resulting pathological changes in the viscera. Not only are these changes caused by severe skin burns, but they may follow even mild erythemas.

Bardeen⁸, who studied a number of cases that suffered superficial burns, states, "Death has often followed burns so superficial as to give rise merely to an erythema. It is clear from this latter class of cases, at least, that alterations in the internal organs may follow the burning of the skin which cannot be accounted for on the supposition that they are directly caused by the heat. Thus arises the question as to the nature of the physiologic relations between the lesions produced in the skin and the resulting constitutional effect."

Now,** "it remains to determine to what extent the response (injury) to ultra-violet light is comparable to this more immediate response" (burns by fire, scald, etc.). But the experiments of Lewis⁹ have shown that "the ultra-violet reaction is built up of precisely the same components as is the more speedy response to other forms of injury" (by fire, scald, etc.).

From these authoritative statements it seems logical to conclude that an extensive ultra violet erythema, even of a first degree nature, may be detrimental to some patients at least. For absolute safety therefore to every patient, it were best, using ultra violet general body radiation, to avoid the erythema entirely by employing the sub erythema method (described below).

Apprehension, however, exists in the mind of the physician and public of America and Europe*** that if the patient is not "well sunburnt" by an ultra-violet exposure the treatment is worthless. In order to assure the physician that the sub erythema method is

* Titus, discussing a paper on ultra violet radiation read by Edgar Mayer of Saranac Lake at the New York Academy of Medicine (1931), cited a case of gastric hemorrhage caused by over exposure to quartz light due to liberation of histamine.

** Using the words of Lewis.

*** Rosewarne of London in his book on Actinotherapy page 94 relates that eosin which produces a strong sensitizing effect relatively to ultra violet rays was at one time much used in the hospitals of the City of Berlin (after the war when the demand for ultra violet rays to reduce the length of administration of eosin in the treatment of erythema, the index of proper exposure as accepted by the physicians and the public.

* A first degree erythema is characterized by (a) the pink-which is visible by good light, and (b) exfoliation—which does follow, though not easily visible.

reliable, the following cases may serve as worthy illustrations.

Case 1: A male patient, age 26, presented symptoms of intestinal tuberculosis though not confirmed by X-ray. The lungs and sputum were negative. Meanwhile an ischio-rectal abscess, for which he was operated upon, made its appearance. Due to frequent hemorrhagic diarrheas he developed a secondary anemia with hemoglobin of 45 and red blood cell count to $2\frac{1}{2}$ millions. A blood transfusion was deemed necessary by his physicians, but for some reason it could not be carried out, and they referred him to me for ultra-violet radiation.

The patient had a ghastly look and was emaciated, as he had lost 48 pounds since he had taken ill. Pulse 120 per minute. Temperature by mouth was 102.8. (It was not taken rectally because of the wound from the operation for the abscess, which was healing very poorly.) He received 80 exposures to quartz light (given almost daily). Result: The temperature and pulse went down by lysis. The blood count and hemoglobin became normal. The ischio-rectal wound was healing rapidly. The stools gradually became normal in every respect. His weight increased and toward the end of the treatments he weighed more than before he took ill. His body was mildly tanned in spite of the fact that not one exposure was accompanied by a discernible erythema.

The only medication used was calcium which, as pointed out by the author elsewhere,^{10, 11} may be of benefit in tubercular and other diseases, especially in conjunction with ultra-violet radiation.

Case 2: A widow of 43 years who had worked as a saleslady in a store for the past eighteen years, contracted pulmonary tuberculosis. She was treated for over a year by country rest and medication, but her condition became progressively worse. Almost semi-ambulant she came under our care. Chief complaint: She was unable to utilize food. A small quantity of the latter, in liquid or solid form, would cause distressing cough and vomiting. She lost considerable weight. Her usual weight being 104 pounds, her weight then was 76 pounds. The pulse was 110. The temperature was 101 degrees. There was dullness and sibilant r  ls at both apices. Sputum was negative, X-ray positive. Diagnosis: Active apical tuberculosis of both lungs. The gastric disturbance was of reflex origin. She received exposures to quartz light for a period of ten months. Medications consisted of: Calcium salts, dram doses of Spiritus Frumenti (with the milk) which was of good service, and hypodermic injections of Sod. Cacodilate.

Result: the clinical symptoms disappeared and the patient regained her usual weight.

Modus Operandi. The operator should determine the time necessary to produce a first degree erythema at a distance of 36 inches from the burner to the patient. This is known to every physician who uses an ultra-violet lamp. Special appliances are also sold on the market for this purpose, or the method described in books on Actinotherapy, such as Rosewarne's,* Sampson's,** etc., may be advantageously utilized.

Having found the proper time, expose the patient at the first treatment for $\frac{2}{3}$ and increase each subsequent treatment by $\frac{1}{3}$ of that time. The increase is continued until the patient receives 12 minutes on each side, front and back, making a total of 24 minutes, this being the maximum time for exposure. The patient is instructed to examine his body 6-8 hours after a treatment and note the presence of erythema. If the latter is reported (which will always be negligible) the time of exposure for the next two subsequent treatments is not increased. Then continue as before.

This method, because of its harmlessness, permits ultra-violet radiation to be administered without exception in all morbid conditions (where this treatment is useful) even if the latter are accompanied by such symptoms as fever and hemoptitis, manifestations universally recognized as contraindications to ultra-violet radiation. The interval between treatments evidently may be shortened so that more exposures per week can be received by the patient.

In spite of the fact that no visible erythema is produced by this method, nevertheless, some tanning of the patient's skin is noticed after a sufficient number of exposures. Though the author does not consider this tanning (pigmentation) of therapeutic value, for the sake however of the reader, some authoritative opinions of pro and contra on the subject in question will be mentioned.

The importance of the tanning (pigmentation) produced by ultra-violet radiation has been discussed by many authors, such as Clark, Laurens, Jungling, Hausser, Vahle, etc. The rays that bring about pigmentation must lie between the limits of 290-330 au. From a clinical standpoint the theories as to the therapeutic value of pigmentation have been expressed in two ways.

1. That the formation of pigment has a positive value, and is a sine qua non of cure. Bernhard, and Rollier to a large extent, based their prognosis on the production or non-production of pigmentation in the patient's skin. Rollier

* A textbook on Actinotherapy, Mosby & Co., 1928, page 128

** Practice of Physical Therapy, Mosby & Co., 1926, page 244

is convinced that patients undergoing the sun cure who do not pigment readily do less well than those who do, but many others have not found this correlation between pigmentation and light effect, the amount of pigment at most serving as an index of the reaction of the body to the radiation.

2. That the formation of pigment in the skin is of negative or doubtful value. This view has been expressed by Finsen, Reyn, Peacock, and Mayer, and these writers aim at keeping the skin of their patients sensitive to light by avoiding a heavy pigmentation. (Laurens. *Physiological Effect of Radiation*. *Physiological Reviews*, Volume VIII, No. 1, page 76, January, 1928.)

I believe that pigmentation may be looked upon as a protective substance which appears when the body is constantly or too often exposed to rays possessing an injurious element.

Home¹² came to this conclusion after he performed some experiments on his own skin while being in the tropics. He states that the black skin of the negro living in the tropics is his protection against the scorching power of the sun's rays. . . . The Wise Providence has given extraordinary provision to the negro for the defense of his skin while living within that zone. For, the power of the sun's rays

to scorch is destroyed when applied to a black surface.

In conclusion, the author wishes to mention certain substances which when administered to the patient act as sensitizers to ultra-violet rays. These are: quinine (a very powerful sensitizer), mercury, buckwheat, iodine, iron, glandular extracts, eosin, hematoperphyrine (a purple substance, a derivative of hemoglobin. Some individuals have in their body fluids small quantities of this substance, rendering them especially sensitive to light treatments. Bunker, Lorand and others). It is important to inquire of the patient, before radiation is started, whether he is receiving any of these substances.

SUMMARY

The writer aims to impress upon those who employ the mercury quartz lamp as a therapeutic modality that burning of the skin is dangerous, that death lurks in the erythema, which is totally unnecessary in the treatment of diseases where general body radiation is considered of benefit. Cases are cited showing that patients with apparently poor prognosis were treated by ultra-violet radiation, avoiding the erythema entirely, with desirable results. The author calls this form of radiation the sub-erythema method.

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OBSERVATIONS ON THE TREATMENT OF ACUTE GONORRHEAL URETHRITIS

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BEFORE one can treat gonorrhea intelligently, one must know the salient characteristics of the gonococcus, the pathology it excites, and the actual effect of our remedies on parasite and host.

The Gonococcus.—In the test tube the gonococcus is a rather delicate organism. It dies when

it dries. Heat, sunlight, x-ray, and ultra-violet ray kill it. Cold inhibits it. Any antiseptic, even in great dilution, either kills or inhibits it. Mild alkalinity is inimical to it.

Gonorrheal Urethritis.—Within the human urethra, the gonococcus becomes virile, is unaffected by x-ray or violet-ray; it is inhibited but

not killed by heat, and can resist chemicals to a remarkable degree.

Thirty-six hours after contamination the interstices between the simple columnar cells of the affected part of the urethra are already occupied by gonococci. Thereafter they quickly penetrate into the submucosa; in which, sheltered by the overlying epithelial layer, they strike root and multiply rapidly. The presence of these foreign bodies or their exo- or endotoxins, causes a severe inflammatory reaction. There is a dilatation of blood vessels, exudation of serum; and a local mobilization of phagocytes. The involved mucosa and meatus becomes red and swollen. This is the Cellulitis Stage, and lasts for 1 to 4 days.

The battle begins. Phagocytes apparently ingest diplococci, and fully laden, pseudopode to the surface. Here and there injured epithelial cells die and are shed together with the leucocytes. A discharge appears which gradually becomes frankly purulent. The flow lasts for 6 to 8 weeks.

The fight is biologically won when gonococci are no longer present. The inflammation subsides, resolution occurs; but injured cells continue to be desquamated until a line of demarkation is formed followed by healing with epithelium of the squamous type. This period is characterized by a morning drop of mucus, and by shreds in clear urine.

There are thus in addition to the incubation period, three stages in an uncomplicated case of gonorrheal urethritis: 1—the stage of cellulitis; 2—the stage of pus, and 3—the stage of resolution. Furthermore, while a real biologic immunity against the gonococcus is apparently not established, nevertheless it seems that gonorrhea is a self-limited disease. There is a tendency to get well; and the cure is apparently affected by a "shaking off" of the invader, and replacing the delicate columnar epithelial lining by the more mechanically resistant barrier of squamous epithelium.

Treatment of Simple Gonorrheal Urethritis:—Keeping in mind the all-important fact that we have no cure for gonorrhea, and also that uncomplicated gonorrheal urethritis has a tendency to be self-limited, it should be the aim of the physician to guard his patients against the development of complications. This he can usually accomplish by giving him proper general care, and desisting from the too frequent and too forceful use of local medications which irritate and damage the mucosa.

The following is an outline of the procedures which the writer has instituted over a period of three years with satisfactory results and with a minimum of complications:

1. General Care.

Every patient receives a copy of the instructions printed as follows:

GENERAL DIRECTIONS

1. Avoid physical strain; tennis, running, jumping, bicycle riding, swimming and diving, too active gymnastic exercises, horseback riding, too much driving, lifting heavy bundles.
2. Plenty of rest, but also plenty of fresh air and sunlight.
3. Avoid late hours, salacious shows, mushy movies, etc.
4. Wash frequently, especially hands. Avoid touching eyes.
5. Do not allow your bladder to become overdistended, empty it as soon as the impulse to urinate arises.

DIET

1. FLUIDS: A glass of water every hour, but not after 7 P. M. May also drink vichy, milk, weak tea, weak coffee (not at night), fermented milks, malted milks. Soups and broths are allowed without spices. Avoid liquors of all sorts.
2. FRUITS: Cooked fruits are preferable to raw fruits.
3. VEGETABLES: All except tomatoes, asparagus, cauliflower, cabbage. No dressings.
4. MEATS: Eat moderately, but need not restrict.
5. STARCHY FOODS: May eat bread, toast, etc. Avoid overeating. Avoid pastries. May eat cereals.
6. SPICES: Avoid all spices and seasoning (vinegar, pepper, mustard, horse-radish, ketchup).
7. SMOKING: Smoking is not prohibited, but do not over-do it.

2. Local Care.

A daily instillation of a mild medication, for cleansing purposes is helpful. It is better for the physician himself to do this as most patients do not know how to properly treat themselves and are apt to contaminate their urethra with secondary organisms. Four to six cc. of the *warm* reagent (either sterile saline, boric acid solution, 5% argyrol, 1:5000 acriflavine or 1:5000 potassium permanganate solution etc.) injected slowly and gently by means of a glass, smooth-tipped syringe, with rubber bulb, is the method of choice. The injection is repeated several times at one sitting, the patient retaining the last one for several minutes. The gravity method and the Janet Irrigator have been discontinued. "Burning" is undesirable, and a warning that the medication is too strong. The use of a cotton plug at the meatus has been condemned because the discharge is thereby held back. A sanitary or "gonorrhea bag," changed daily is better and serves, when inspected regularly as an index of the progress of the purulent stage. Forcing fluids and alkalis are

important measures. There seems to be no beneficial effect from the internal use of methylene blue, hexamethylamine hexyresorcinol, or the sandalwood oils, upon either the symptoms or duration of the disease. Their overuse is often accompanied by urgency, and at times hematuria.

When the discharge becomes mucoid and microscopically shows fewer leucocytes and gonococci, and an increased number of epithelial cells, the stage of resolution is reached. The instillation of the medications noted above is either discontinued or replaced by astringents such as 1:10,000 silver nitrate solution or 1:500 zinc sulphate solution. It is unwise to increase the strength of the medication when the mucoid discharge persists, because a chemical urethritis may follow and the discharge becomes purulent once again. This vicious circle happens frequently, the patient loses confidence, goes elsewhere, only to have something similar done to him. The shedding of dead epithelium manifested by the presence of shreds in a clear urine, is also an expected sequel, just as the desquamation of the skin after scarlatina, and one cannot inhibit either. Heroic measures to eradicate a mucoid discharge or shred are not only unsuccessful, but at times disastrous. Patients should be taught that a non-gonococcus containing drop of mucus or shred following an uncomplicated attack of gonorrheal urethritis, is to be expected. They should be discouraged from repeatedly gazing at their urines, and of the habit of milking the urethra to express a possible discharge.

Complications.—It is the development of complications through involvement of the crypts, ducts, lacunae and glands that line the urethra which prolong the infection indefinitely and lay the foundation for sequelae that often last a life time. The clinical picture also changes. Instead of a mere local irritation whose chief feature is a discharge there appear during the acute stage, constitutional symptoms such as general malaise, anorexia and fever. The chronicity of these conditions is caused by poor drainage, for the gonococci may eventually die out, the orifices of the ducts or their tortuosity, or upward inclination, so interferes with the evacuation of the infected cavities as to make them vulnerable to secondary invaders which may arrive via the blood, lymph, urine or by contiguity, or through injections, or instrumentations (Fig 1).

The development of complications is apparently dependent on any of three important factors:

1 **A Low Individual Resistance.**—While an active or passive immunity to gonorrhea, in the biologic sense, apparently does not exist in the human species, nevertheless as already pointed out, this disease has a tendency to get well. There are, however, patients who, in spite of the best of care, go through a prolonged illness marked by many complications. They lack not only im-

munity, but also an efficient fighting mechanism. It is a factor concerning which we know little, yet is probably of some biologic significance. The tall, thin, blond-haired fair-skinned individuals often fare badly. They are the ones with delicate mucosa.

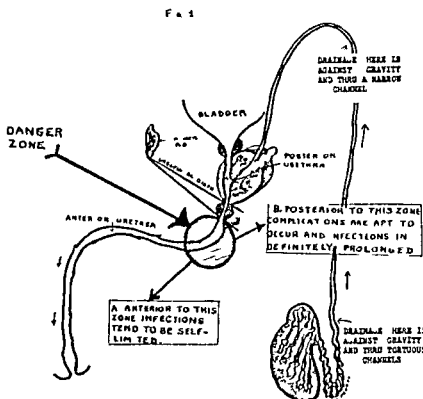


FIGURE 1

Schematic representation of the urethral canal and important structures opening into it

A. Infections of the urethra anterior to the Danger Zone are self limited, and if any structure opening into it becomes involved, the downward direction aids drainage. Should it become chronically inflamed the focus is readily accessible to instrumentation.

B. The structures posterior to the Danger Zone drain against gravity (as the epididymis, or vas deferens), or through narrow channels (as the ejaculatory duct and prostatic ductules), and if involved, the condition has a tendency to be prolonged indefinitely.

2 **Improper General Care.**—It is more important to impress upon patients to avoid fatigue from overwork and excessive use of the lower limbs than to prescribe a complicated diet difficult to carry out. Liquors should of course be banned, water should be taken freely, overeating should be avoided, but there seems to be no harm in meat or "red meat." It is rest which should be stressed. Dancers, chauffeurs, truckmen, bicycle riders, peddlers, etc., must be especially careful. The obviously important interdiction against eroticism, sexual intercourse, should be made routinely, for often sweethearts continue to "pet", husbands maintain the same sleeping quarters with their wives, salacious shows and suggestive movies are frequented.

3 **Improper Local Care.**—This accounts for the greatest number of complications. There seems to be an unbounded faith in the curative value of local injections. Physicians and patients alike consider them of paramount importance. When a patient does not do well, either the im-

stillations are increased in frequency or strength or other potent ones substituted. When a posterior urethritis develops, deep and forceful irrigations are often instituted; catheters are passed

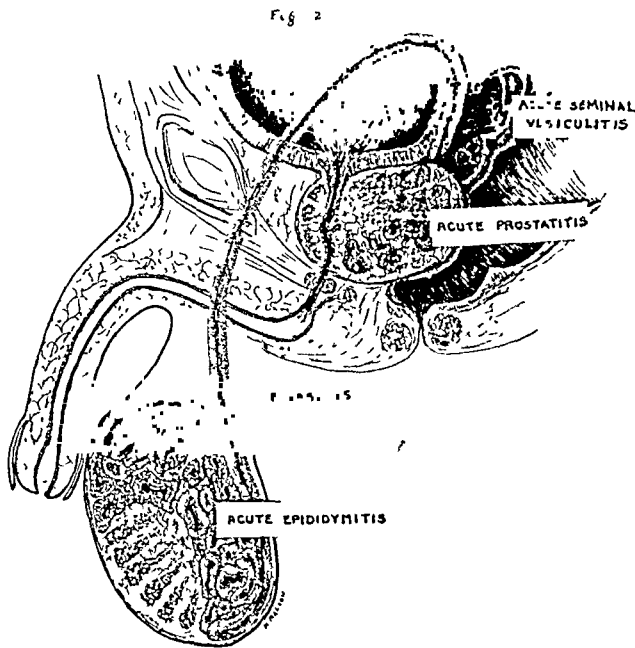


FIGURE 2

Schematic representation of the structures which can become involved when the infection extends beyond the Danger Zone.

It is of interest to note that both the urethra and its appendages are lined by the same type of cell, columnar or transitional; an epithelium which is extremely vulnerable to invasion by the gonococcus. Above the trigone, the bladder is lined by stratified squamous cells, an epithelium which is mechanically resistant to the gonococcus, and thus this organ is practically immune.

into the posterior urethra in order to flush the region directly. Even sounds, Bang's instillators, and diathermy electrodes are inserted. Yet when one recognizes the salient fact that the gonococci are in the submucosa it becomes apparent that mild medications cannot reach them, and very strong ones, sufficient to penetrate and destroy the deep-seated organisms, must necessarily damage the overlying epithelium, interfere with the all-important process of phagocytosis, and thus leave an ideally fertile field for invasion by any cocci that remain. Not any of the chemicals employed today is a specific, not one can pick out the gonococcus, kill it, yet spare the surrounding cells.

Surface organisms and debris can be removed by gentle washings, and therefore, as cleansing agents irrigations are useful, but that is altogether different from the aim in their extensive use today. The passing of any instruments in the presence of a gonococcus-containing discharge (except in cases of retention unrelieved by other means) is absolutely contra-indicated.

The accompanying chart is a compilation of 25

cases, taken at random, in which complications had occurred. (Fig. 3.) In each, the possible causative factor was elicited and tabulated. The role played by improper local treatment is thus well illustrated.

Treatment of Complications:—When a complication occurs, its treatment supersedes that of the urethritis. The discharge, whether from the inhibitory effect of the rise in temperature or some other cause, is usually temporarily checked; whereas the complication fills the clinical picture and urgently demands relief. As already noted (Fig. 1), the structures along the urethra open into it through narrow tortuous tracts affording poor drainage and interfering with the effectiveness of injections or instrumentation. The use of the latter is dangerous. They may aggravate and extend the process. Bed, catharsis, fluids and sedatives are in order. A swollen testicle should be immobilized. Local applications of heat or cold, or some counter-irritant help to lessen the pain. An acutely swollen prostate may be gently palpated in order to establish the diagnosis, but must not be massaged. Hot rectal irrigations, and the insertion of suppositories of opium, codeine or atropine lessen discomfort. Similar measures should be resorted to in cases of seminal vesiculitis. Small doses of vaccine or foreign protein in gradually increased dosage, may be given with benefit. The acute process usually subsides within a week, and then it may go on as follows:

1. **Complete Resolution:**—Resolution similar to that in pneumonia can occur. The patient recovers completely from his complication, leaving the urethritis to be taken care of.

2. **Abscess Formation:**—The breaking down of foci is a frequent occurrence. The abscesses may rupture and drain spontaneously, when large and fluctuating, incision is necessary.

3. **Incomplete Resolution:**—Incomplete resolution and abscess formation often go together. Incomplete resolution constitutes the greatest group. It is the usual cause of failure to cure, of mistaken prognoses and of recurrence. The poor drainage characterizing these foci accounts for their chronicity. In them the gonococci may remain virile, in symbiosis, dormant, attenuated or displaced by secondary invaders. How long a gonococcus will remain alive in a given focus is a moot question. Some claim that within a year or two the organism will become extinct, and cite as an example the frequency of sterile cultures in cases of salpingitis. Others are of the opinion that gonococci never disappear, and call attention to the so-called "spontaneous" recurrences which come after an apparent cure of many years standing, of rheumatic states and iritis traced to long standing gonorrheal foci; and ask why the gonococcus could not persist in its pocket any less than the tubercle or typhoid bacillus. It seems logical to accept both points of view; for while there is

FIGURE 3
ANALYSIS OF POSSIBLE ETIOLOGIC FACTORS IN TWENTY FIVE CASES OF GONORRHEAL URETHRITIS WITH COMPLICATIONS

Case No	Name	Duration of Infection	Duration of Complication	Type of Complication	Possible Etiologic Factors as Elicited from Patient's History
1	P C.	2 wks	23 ds	Acute Prostatitis	Admitted coitus in presence of discharge. Was not warned by his doctor, and he thought that by means of a condom no ill effects could follow. Prostatitis developed 2 days after coitus.
2	J C.	2 wks	1 wk	Acute Epididymitis	Admitted coitus at height of infection, and treated himself immediately afterward with a very strong medicine which he himself prepared. Evidence of posterior involvement occurred next day.
3	J F W	4 wks	4 ds	Acute Epididymitis	Admits occupying same bed with wife while infection was at its height. Erotic effects followed. Not cautioned by his physician.
4	D Mc	8 wks	5 ds	Acute Epididymitis	Went on alcoholic spree two days prior to onset of complication. Not warned by his doctor.
5	D B	4 wks	5 ds	Acute Epididymitis	Three days before onset of epididymitis he went swimming and diving. Overdid it. Posterior involvement noted following day. Was not warned about danger of certain type of overactivity.
6	G H	2 mos	12 ds	Subacute Epididymitis	Two weeks ago his doctor changed the treatment, because the infection was persistent. He gave a deep injection with a strong medicine which burned strongly. That week the testicle swelled.
7	F W	5 wks	3 ds	Acute Epididymitis	Had intercourse 1 week ago. Was not warned.
8	F N	2 wks	1 wk	Acute Prostatitis (Acute Epididymitis later)	Sound passed by his doctor 9 days ago. Posterior involvement noted next day.
9	C E. B	5 wks	1 wk	Acute Epididymitis Acute Arthritis Vesiculitis	His physician passed a catheter daily and irrigated the urethra. Posterior Urethritis developed almost at the beginning of treatment.
10	A O	3 mos	2 mos	Abscesses of Urethra Abscess of Prostate Acute Epididymitis	Treated with catheter from the start. Entire urethral tract involved. In addition to this patient was allowed a young pretty nurse, and was in constant state of eroticism.
11	M K	17 ds	2 ds	Ac Ac	by Janet Irrigator Medicine bladder
12	M S	4 mos	1 wk	Acute Vasitis Acute Epididymitis	Had Diathermy treatments. Electrode passed into urethra twice weekly. Evidence of posterior involvement from the start.
13	J Ca	8 mos	6 mos	Recurrent Epididymitis Seminal Vesiculitis	Treated by Gravity Method. When a complication occurred medicine was changed (a stronger one than the preceding).
14	M H	8 ds	4 ds	Acute Prostatitis	Made up a solution of silver nitrate which he himself injected and noticed severe burning from the start. Meatus black from silver nitrate burn.
15	Ch J	4 wks	3 ds	Acute Prostatitis	His doctor passed a sound because 'he was not doing well'. Two days later evidence of posterior urethritis.
16	M K	10 wks	4 wks	Subacute Epididymitis	His doctor used Gravity Irrigator. Patient injected himself via piston syringe.
17	J K	2 mos	5 wks	Acute Epididymitis	Ate no meat, but drank alcohol.
18	J A.	3 mos	5 wks	Subacute Epididymitis	Treated via catheter. Used cotton as dressing. It acted as a plug and as a source of re-infection. Had tight foreskin. Refused circumcision.

Case No. Name	Duration of Infection	Duration of Complication	Type of Complication	Possible Etiologic Factors as Elicited from Patient's History
19. S. T.	2 mos.	2 wks.	Subacute Epididymitis	Apparently no obvious cause for the complication. Was a chauffeur and drove about all day. Allowed <i>bladder</i> to become <i>overdistended</i> if inconvenient to urinate.
20. M. S.	1 wk.	2 ds.	Posterior Urethritis Prostatic Abscess	Treated with diathermy.
21. J. R.	2 wks.	3 ds.	Posterior Urethritis Acute Epididymitis <i>later</i>	No obvious cause. A <i>blond haired</i> individual.
22. H. B.	5 mos.	3 mos.	Subacute Epididymitis	Used a <i>piston-syringe</i> . <i>Pin-point meatus</i> . Urethritis began to improve with meatotomy.
23. G. D.	6 wks.	1 wk.	Acute Prostatitis	Was treated with <i>Gravity Method</i> . Medicine changed several times because he was not doing well. Each time medicine was " <i>stronger</i> ."
24. P. B.	2 wks.	2 ds.	Acute Prostatitis	<i>Gravity Method</i> used. No advice against taking spices or alcohol.
25. E. A.	10 ds.	2 ds.	Acute Prostatitis	Received diathermy treatments. Electrode passed into urethra.

a tendency for the host to sterilize a gonorrheal focus, this tendency varies with each patient; with the location and character of the infected area, with the type of local treatment (or maltreatment); and with other unknown factors.

It is conceivable then, that any given focus in the urethral tract, if unmolested, can in time develop sufficient local resistance to the gonococcus and build a barrier against it. The organism will become dormant and finally die. However, it is also apparent that at any time before the last gonococcus dies, any favorable circumstance to the organism, such as an alcoholic debauch, or any form of local irritation, can break down the barrier or open up new channels. The interval between the development of the local barrier, and the extinction of the invader varies in each case. It is because of this, that confusion as to relapses, and cures has arisen. Therefore, in the treatment of a chronic focus, the criteria of cure must be applied with special care and patience.

DETERMINATION OF CURE

A. Uncomplicated Case:—Positive evidence of cure in a case of gonorrhea is not obtainable. All the evidence is indirect. One can merely tell the patient that, in view of the tests being favorable to him, the *probabilities* are that he is cured. The writer has taken the following steps before discharging any patient:

1. Prostatic Massage Test:—When the discharge has stopped, and the urine has remained clear for about a week, the patient is given a prostatic massage and the expression, if any, examined for pus and gonococci. If the test is negative, the massage is repeated in three to four days, and if again negative, the next step is taken.

2. Alcohol Test:—The patient is advised to take some alcohol, and is again observed for several days thereafter.

3. Coitus Test:—If the two preceding tests do not elicit any purulent reaction, or the appearance of gonococci, the patient is allowed to have intercourse (using a condom for protection), and then he is observed on several occasions thereafter.

4. A Complement-Fixation Test, and a Wassermann Test are then taken.

It has not been necessary to make use of an injection of a specific vaccine, or the instillation of a strong chemical into the urethra, or the passing of a sound. The tests described above have proven sufficiently reliable.

B. Cases with Complications:—In addition to the procedures already mentioned, the injection of vaccines and the insertion of sounds are valuable aids. The various tests are applied with caution, and over a greater period of time.

CONCLUSIONS

It is important to keep the following facts and principles in mind when treating a case of gonorrheal urethritis in the male:

1. There is no cure at present for gonorrhea, but acute anterior gonorrheal urethritis has a tendency to be self-limited.

2. None of the preparations used today is a specific against the gonococcus.

3. The gentle instillations by the physician (as a surface washing), of small amounts of a warm and mild antiseptic solution, through a smooth-tipped glass syringe with a rubber bulb, is of value in keeping the patient comfortable, and the infected area clean.

4. The development of complications prolongs a case of gonorrhea indefinitely. Complications occur most frequently in cases with posterior urethritis.

5. Posterior urethritis and complications can best be avoided by proper general management,

and avoidance of excessive and irritating local treatment.

6. Complications are most apt to occur if forceful, frequent injections with irritating medications are made. The organisms are thereby enabled to get past the Danger Line. (Fig. 1.) The use of gravity apparatus is unnecessary. The insertion into the urethra of foreign bodies is contra-indicated.

7. Heroic chemical measures to eradicate a morning drop which is free of gonococcus or shreds in a clear urine (*i.e.*, immediately at the end of an attack of acute gonorrheal urethritis)

are unnecessary. They often lead to an intractable chemical irritation and secondary infection.

8. Gonorrhea with complications also has a tendency to get well if treated gently. But owing to the poor drainage of the involved area, its vulnerability to secondary invaders, and inaccessibility to direct treatment, chronicity in most instances is inevitable.

9. The evidence of a cure of a case of acute gonorrheal urethritis is indirect and negative in character. It should be obtained in every case and the patient should be given to understand both the purpose and significance of the tests.

TWO CASES OF THROMBOSIS OF BOTH CORONARY ARTERIES

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IN a previous communication (1) a case of occlusion of both coronary arteries due to thrombosis was reported. The following two additional cases of bilateral coronary thrombosis were noted while analyzing one hundred cases showing cardiac infarction or gross myocardial fibrosis in another study.

Case 1. J. T., age 60—colored. Admitted January 2, 1930 and died twenty hours after admission.

The patient entered the hospital in a state of shock, T. 94.6°, P. 58 and very weak, R. 14 and shallow. B.P. unobtainable, skin cold and clammy. No history could be elicited. Examination revealed equal, somewhat contracted pupils, the right fixed and the left sluggish to light; emphysematous chest with hyperresonance; heart sounds faint with no murmurs; abdomen negative, absent knee jerks and abdominals but no pathological reflexes or evidence of paralysis. Urinary examination showed a trace of albumin, granular casts, a few R.B.C. and many W.B.C. Blood Urea Nitrogen 42 mgm. Blood Wassermann —negative.

The patient showed no response to attempted stimulation. Temperature rose to 103° and pulse to 120. Semi-comatose state persisted along with marked restlessness. Exitus occurred within twenty hours after admission. Diagnosis was cerebral hemorrhage and syphilis of the central nervous system.

Anatomical Diagnoses: Old and recent cardiac infarction, coronary thromboses, syphilis of aorta, arteriosclerosis of brain and kidneys, cirrhosis of liver, chronic suppurative prostatitis and lymphosarcoma of mediastinal and upper abdominal nodes.

Heart: Weight 300 grams. Pericardial sac contained a normal amount of clear fluid. The parietal pericardium on the posterior surface of both right and left ventricles was adherent. All chambers were dilated and filled with currant jelly clot. The valves were all normal. At the apex of the left ventricle was a fresh, moderately adherent clot around the periphery of which were smaller adherent thrombi. The endocardium of the upper portion of the left ventricle extending on to the interventricular wall was depressed, thick, white and scarred. Section of the left ventricular wall revealed a large, white scar occupying about two-thirds of the wall. This scar extended into the upper posterior portion of the interventricular wall. The remainder of the left ventricular wall was very soft and spotted thruout by numerous small hemorrhagic and yellow areas. The entire musculature was very soft and light yellow brown in color. The aorta in its first portion had a crescentic area, thick, raised, firm, yellow white in color, sharply delimited and distinctly pig skin in appearance. The remainder of the aorta showed moderate atheromatous changes. The left coronary commissure was moderately widened.

Coronary Vessels: The mouth of the left coronary was wide. The vessel wall of the main branch was thickened with patchy sclerosis but had a wide lumen. Microscopy of this portion of the vessel revealed intense atheromatous and slight calcific deposits in the wall. At the periphery of the cholesterol deposit there was a lymphocytic and phagocytic cell reaction. The elastica was disorganized and the adventitia showed only a slight lymphocytic reaction.



FIGURE 1

Case 1. Section through the circumflex portion of the left coronary artery at the uppermost portion of the fresh thrombus showing the intense atherosclerosis and narrow extrinsic lumen.

The first two centimeters of the anterior descending branch had a thicker, more calcified wall, and contained a thrombus one centimeter in length, which was organized and canalized. Below this point the vessel wall was thickened with moderate narrowing of the lumen but no thrombosis. Small accessory branches contained recent thrombi.

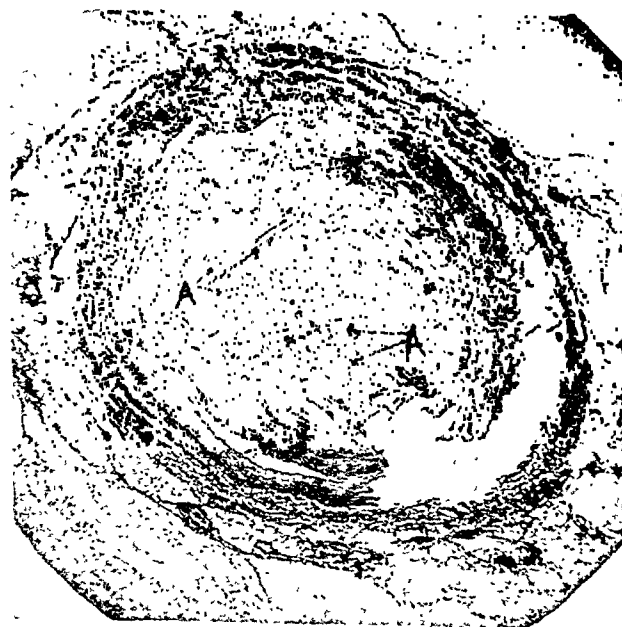


FIGURE 2

Case 1. The circumflex portion of the right coronary artery with the completely organized thrombus and very fine canalization (A).

The circumflex branch of the left coronary artery was also thrombosed, the thrombus beginning just beyond its most proximal portion. Microscopy revealed this to be a recent thrombus within a markedly thickened and arteriosclerotic wall with heavy calcific deposits and active organization. The adventitia showed heavy perivascular lymphocytic foci. The small neighborhood arteries had markedly hyperplastic media. Beyond the thrombus the vessel wall was less sclerotic with a wide lumen and showed no evidence of inflammatory lesions.

The mouth of the right coronary was slightly irregular and slightly narrowed by fibrosis. The proximal third of the main trunk had marked arteriosclerotic changes and a wide lumen. The middle third was intensely arteriosclerotic and apparently completely thrombosed. This thrombus was old and well organized. Microscopy showed some canalization. The right circumflex branch had a good lumen but a thick, stiff wall. In the most proximal portion of the posterior descending branch was an organized thrombus, one-half centimeter in length in a pipe-stem portion of the vessel. Below the thrombus the wall was thickened and fibrosed with a narrow eccentric lumen. Beyond this the vessel wall appeared grossly normal.

Case 2. C.H., age 65 — white. Admitted August 16, 1930, with diagnosis of cardiac decompensation.

His chief complaint was marked dyspnea. His illness dated back twelve years with periodical "heart attacks." These became more severe and frequent as time went on. He also noted swelling of his ankles and nocturia.

Examination revealed a well developed and nourished elderly male evidently markedly dyspneic. Pupils reacted to light and accommodation. Lungs were emphysematous with rales at the bases. Heart was enlarged, apex beat being in the 6th intercostal space outside the nipple line. Sounds were distant. B.P. 108/78. Abdomen was thought to contain some fluid; liver was enlarged to three fingers below the costal margin. Both legs were edematous. No knee jerks could be obtained. Tentative diagnosis was chronic myocarditis with insufficiency and chronic nephritis. Urinary examination: Specific gravity 1.012, albumin two plus, glucose negative, few fine and coarse granular casts.

The evening of admission the patient was obviously in serious condition. Despite medication with morphine, he remained quite restless with progressively increasing dyspnea. The following day he was quite cyanotic with cold extremities. His pulse became imperceptible and he died about thirty-six hours

after admission. His temperature had hovered between 101° and 103°, pulse between 70 and 90, and respirations between 20 and 32.

Anatomical Diagnoses: Old cardiac infarction, coronary sclerosis with thrombosis, chronic myocarditis, general arteriosclerosis, chronic passive congestion of all organs, chronic gastritis.

Heart: Weight 650 grams. Appeared quite enlarged. Many small areas of hemorrhage were noted both on visceral and parietal pericardium. Tricuspid and pulmonic valves were normal. The mitral and aortic valves showed some atheromata at their bases but were otherwise negative. The left ventricular wall from the apex up about seven centimeters showed a marked thinning. At the apex the wall was slightly thicker due to the gelatinous



FIGURE 3

Case 2. The circumflex portion of the left coronary artery proximal to the point of most marked narrowing.

remains of heart muscle. The endocardial surface of the entire area was covered by several layers of organized and adherent thrombus. At the upper end of the area, the thinning was so marked that endocardium and epicardium seemed apposed. The aorta showed marked arteriosclerosis, some ulcer formation and a small area of striation in one portion of the arch.

Coronary Vessels: The mouth of the left coronary was wide with speckled atheromatous deposits. Beyond the mouth in the main branch the same changes were present. At about the mid-point of the left circumflex artery there was a transition from a comparatively soft wall to one with intense arteriosclerosis and complete thrombosis with organ-



FIGURE 4

Case 2. The right coronary artery showing the extremely narrow excentric lumen and the marked arteriosclerosis.

ization. This thrombus occupied the artery for a distance of about one centimeter. Beyond this was a softer wall with an early propagated thrombus. The remainder of this branch was comparatively normal. Just beyond the proximal portion of the anterior descending artery was a thrombus completely occluding the vessel. The wall here was pipe-stem in character. Below the thrombus the lumen was small, almost pin-point and ex-

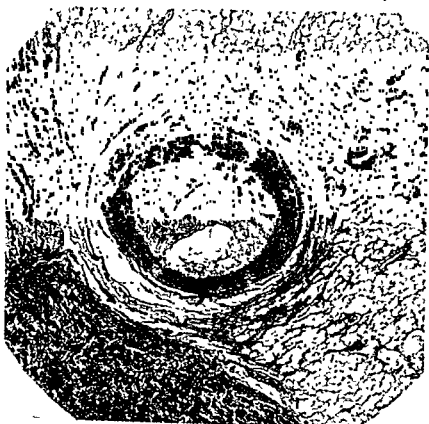


FIGURE 5

Case 2. The anterior descending branch with the organized canalized thrombus.

centric. This was followed by another stretch likewise completely occluded. In about the mid-portion of the interventricular septum the lumen was very narrow but not thrombosed. At about the junction of the middle and lower one-third of the wall there was complete thrombosis again. Beyond this the vessel could not be traced grossly.

The mouth of the right coronary was only slightly narrowed with a funnel-like type of deformity. The proximal portion of the artery was thick-walled with a large lumen but not thrombosed. About one centimeter beyond the mouth was a pipe-stem area completely thrombosed by old, organized thrombus. This extended thruout the major portion of the main and circumflex branches and passed gradually into a portion with an extremely fine and excentric lumen. This change did

not extend into the posterior descending branch to any degree. However, the proximal portion of this vessel had a thick wall with a slightly excentric lumen. The lower three-fourths of the posterior descending branch was grossly normal.

SUMMARY

Two cases are reported showing bilateral coronary thromboses. In one case the thrombi were old and the myocardium showed old cardiac infarction. In the other case in addition to these findings a fresh thrombus with recent infarction was noted.

Thanks are due to Miss L. B. Miller for the microphotographs.

1. Lisa, J. R., and Ring, A.: A Case of Occlusion of Both Coronary Arteries with Rupture of the Auricle. *J. Lab. & Cl. Med.*, Vol. XVI, p. 1083, (Aug.) 1931.

REDUCING DIETS

By ARTHUR H. TERRY, JR., M.D., NEW YORK, N. Y.

In a previous article in the *NEW YORK STATE JOURNAL OF MEDICINE*, October 1, 1929, page 1192, the reducing diet was discussed with special reference to its effect on blood pressure in the obese. This present article aims to present concrete diets for the many people whose principal complaint is obesity, and who come to the doctor's office for the purpose of getting thin.

Patients expect the doctor's directions regarding their diet shall be as explicit as those regarding their doses of medicine—what to eat, how much, and when. They will eat a specified diet prescribed by their physician much more willingly than one which they estimate for themselves after much effort and confusion of thought. However, after patients have seen the effect of the diet prescribed by the doctor, they will use their intelligence and experience in devising changes, to suit their individual tastes.

Two types of diet are here presented, together with lists of vegetables arranged according to carbohydrate content. The amount of food is measured in grams, in order to conform to the

amount of carbohydrate, protein, and fat contained, so that the total calories may be seen and calculated by those to whom arithmetic is no burden. Household measures are also provided for those preferring neither to toil nor to spin.

The strict diet is very low in calories, but ample in choice of protein from the meat, fish, and fowl groups. This pattern may be further reducing without injury by elimination of the 10% vegetables. It may also be rendered less severe by adding a 20% vegetable, or a slice of bread at each meal, thereby increasing the carbohydrate content about 60 grams, and consequently the total calories by about 240 grams.

The Seven-Day Diet is less exacting physically or mentally, providing an average of 900 calories daily with 55 grams of protein. Vegetables and fruits may be varied to suit the taste by substituting others of the same carbohydrate content. No fats are to be used in cooking.

Either of these regimes has ample protein, yet such an insufficiency of total calories that the fat melts away like a lighted candle.

CARBOHYDRATE CONTENT OF FRUITS AND VEGETABLES

	5%	10%	15%	20%
Asparagus	Brussel sprouts	Beets	Green peas	Beans—Lima
Celery	Broccoli	Carrots	Parsnips	Beans—Baked
Cucumber	Cauliflower	Pumpkin	Apples	Beans—Shell
Chard	Cabbage	Squash	Cherries	Green corn
Endive	Egg plant	Turnip	Grapes	Macaroni
Greens	Artichokes	Blackberries	Huckleberries	Potato
Lettuce	Leeks	Muskmelon	Pears	Rice
Marrow	Mushrooms	Oranges	Raspberries	Banana
Rhubarb	String beans	Peaches		Figs
Spinach	Sea kale	Pineapple		Plums
Sorrel	Tomato	Strawberries		Prunes
Sauerkraut	Grapefruit	Watermelon		

Explanations

1 gram (G) of carbohydrate (C) = 4 calories	A H = average helping
1 gram of protein (P) = 4 calories	h tb = heaping tablespoon
1 gram of fat (F) = 9 calories	30 grams = 1 ounce = 2 tablespoonfuls
1 gram of alcohol = 7 calories	8 ounces = 1 glass
House measurement (H) = tablespoonfuls	6 ounces = 1 coffee cup

THE SEVEN-DAY DIET

First Day	BREAKFAST	G.	H	C.	P.	F.
	½ large grapefruit	300		15	0	0
	Tea or coffee	180	1 cup	0	0	0
	Sugar—1 lump	6	one	6	0	0
	Cream—average	15	1 tb	1	1	5
	Egg	60	one	0	6	6
	LUNCH					
	Lamb chop	100	one	0	22	30
	String beans	100	2 h tb	3	1	0
	Uneeda crackers	12	two	10	1	1
	DINNER					
	Consomme or bouillon	180	1 cup	1	3	1
	Roast beef—lean	100	A.H.	0	23	2
	Spinach	100	2 h tb	3	2	0
	Bread—½ inch slice	30	1 oz	18	3	0
	Lettuce (vinegar and lemon)	15	A H	1	1	0
	Pineapple	100	2 slices	10	0	0
	Demi-tasse	60	1 cup	0	0	0
	Total daily grams			68	63	45
	Calories per gram			4	4	9
	Total calories—938			272	252	405
Second Day	BREAKFAST					
	Orange (large size)	250	one	25	0	0
	Tea or coffee	180	1 cup	0	0	0
	Sugar—1 lump	6	one	6	0	0
	Cream—average	15	1 tb	1	1	5
	Egg	60	one	0	6	6
	LUNCH					
	Roast beef—lean	100	A H	0	23	2
	Tomato—medium size	200	one	10	1	0
		15	A.H.	1	1	0
		30	1 oz	18	3	0
		180	1 cup	1	0	0
	DINNER					
	Consomme or bouillon	180	1 cup	1	3	1
	Bluefish, cod or halibut	100	A H	0	21	3
	Peas (canned or fresh)	100	A H	10	3	0
	Potato (baked or boiled)	120	A H.	24	4	0
	½ large grapefruit	300	A H.	15	0	0
	Total daily grams			130	63	11
	Calories per gram			4	4	9
	Total calories—871			520	252	99
Third Day	BREAKFAST					
	½ large grapefruit	300		15	0	0
	Tea or coffee	180	1 cup	0	0	0
	Sugar—1 lump	6	one	6	0	0
	Cream—average	15	1 tb	1	1	5
	Shredded wheat	30	one	23	3	0
	Skimmed milk	180	1 cup	9	6	3
	LUNCH					
	Skimmed milk	180	1 cup	9	6	3
	Uneeda crackers	25	4	20	2	2
	Orange—large size	250	one	25	0	0

DINNER						
Raw oysters.....	60	6	4	6	1	
Roast chicken OR $\frac{1}{2}$ broiler.....	100	A.H.	2	32	4	
Onions (boiled).....	100	A.H.	7	2	0	
Potato (small size).....	120	one	24	4	0	
Endive—mineral oil and vinegar.....	50	A.H.	1	1	0	
$\frac{1}{4}$ honey dew melon.....	150	A.H.	20	1	0	
Total daily grams.....			166	64	18	
Calories per gram.....			4	4	9	
Total calories—1,082.....			664	256	162	
Fourth Day:						
BREAKFAST						
$\frac{1}{4}$ Honey Dew melon.....	150	A.H.	20	1	0	
Coffee.....	180	1 cup	0	0	0	
Sugar—1 lump.....	6	one	6	0	0	
Cream—average.....	15	1 tb.	1	1	5	
Toast— $\frac{1}{2}$ inch slice.....	30	1 oz.	18	3	0	
LUNCH						
Chicken.....	100	A.H.	2	32	4	
Bread ($\frac{1}{2}$ inch—sandwich).....	30	1 oz.	18	3	0	
2 lettuce leaves and pickle.....			3	1	0	
Tea—with lemon.....	180	1 cup	1	0	0	
DINNER						
Clam or tomato juice.....	180	1 cup	8	1	0	
Round steak.....	100	A.H.	0	27	8	
Broccoli.....	100	A.H.	4	1	0	
Potato (baked or boiled).....	120	A.H.	24	4	0	
Bread— $\frac{1}{2}$ inch slice.....	30	1 oz.	18	3	0	
Lettuce and tomato.....	150		5	1	0	
Orange (medium size).....	200	1	20	0	0	
Total daily grams.....			148	78	17	
Calories per gram.....			4	4	9	
Total calories—1,057.....			592	312	153	
Fifth Day:						
BREAKFAST		G.	H.	C.	P.	F.
$\frac{1}{2}$ large grapefruit.....	300			15	0	0
Tea or coffee.....	180		1 cup	0	0	0
Sugar—1 lump.....	6		one	6	0	0
Cream—average.....	15		1 tb.	1	1	5
Egg.....	60		one	0	6	6
LUNCH						
Tuna fish, shrimp, lobster.....	100	A.H.	0	21	3	
Lettuce and tomato.....	150	one	5	1	0	
Uneda crackers.....	12	2	10	1	1	
Tea (with lemon and 1 lump of sugar).....	180	1 cup	7	0	0	
DINNER						
Consomme or bouillon.....	180	1 cup	1	3	1	
Lamb—roast.....	100	A.H.	0	20	13	
Carrots.....	100	3 tb.	6	1	0	
Potato (baked or boiled).....	120	A.H.	24	4	0	
Lettuce—mineral oil and vinegar.....		A.H.	1	1	0	
Peach or pear.....	120	one	15	0	0	
Demi-tasse.....	60	1 cup	0	0	0	
Total daily grams.....			91	59	29	
Calories per gram.....			4	4	9	
Total calories—871.....			364	246	261	
Sixth Day:						
BREAKFAST						
Orange (large).....	250	one	25	0	0	
Tea or coffee.....	180	1 cup	0	0	0	
Sugar—1 lump.....	6	one	6	0	5	
Cream—average.....	15	1 tb.	1	1	0	
Bread— $\frac{1}{2}$ inch slice.....	30		18	3		
LUNCH						
Lamb—roast OR 2 lean chops.....	100	A.H.	0	20	13	
String beans.....	100	3 tbs.	3	1	0	
Bread— $\frac{1}{2}$ inch slice.....	30	1 oz.	18	3	0	
Tea (with lemon and 1 lump of sugar).....	180	1 cup	7	0	0	

DINNER					
Clam or tomato juice	180	1 cup	8	1	0
Fish (boiled, broiled or baked)	100	A H	0	21	3
Spinach	100	2 h tb	3	2	0
Potato (baked or boiled)	120	A H	24	4	0
Lettuce and tomato	150	one	5	1	0
½ large grapefruit	300		15	0	0
Total daily grams			133	57	21
Calories per gram			4	1	9
Total calories—919			532	228	189
Seventh Day BREAKFAST					
	G	H	C	P.	F.
½ large grapefruit	300		15	0	0
Tea or coffee	180	1 cup	0	0	0
Sugar—1 lump	6	one	6	0	0
Cream—average	15	1 tb	1	1	5
Toast—½ inch slice	90	1 oz	18	3	0
LUNCH					
Potcheese	100	½ glass	5	24	1
Celery		3 stalks	2	1	0
Uneda crackers	12	two	10	1	1
Tea (with lemon and 1 lump of sugar)	180	1 cup	7	0	0
DINNER					
Consomme or bouillon	180	1 cup	1	3	1
Corned beef	100	A H	0	24	18
Cabbage	100	A H	3	1	0
Potato (baked or boiled)	120	A H	24	4	0
Endive and lettuce		A H	1	1	0
Jello		A H	1	5	0
Demi tasse	60	1 cup	0	0	0
Total daily grams			94	68	26
Calories per gram			4	4	9
Total calories—882			376	272	234

STRICT REDUCING DIET

BREAKFAST					
	G	H	C	P.	F.
½ grapefruit	300		15	0	0
Clear tea or coffee—saccharin	180	1 cup	0	0	0
Egg	60	one	0	6	6
			15	6	6
LUNCH					
CHOICE { Round steak	100	A H	0	27	8
{ Roast or broiled chicken	100	A H	2	32	4
{ Bluefish, cod, haddock, halibut, trout, weakfish	100	A H	0	21	3
{ Clams or oysters	100	12	8	12	2
{ Lobster	100	A H	0	17	2
{ Potcheese	100	½ glass	5	24	1
Averaging					
5% vegetable	100	2 h tb	3	22	3
10% vegetable	100	2 h tb	3	2	0
5% or 10% fruit	150	2 h tb	6	2	0
			15	0	0
			27	26	3
			27	26	3
DINNER (same as lunch)					
Total daily grams			69	58	12
Calories per gram			4	4	9
Total calories—616			276	232	108

A STUDY OF THE DEEP AND SUPERFICIAL REFLEXES OF THE NEW-BORN

By JOHN H. NOLAN, M.D., NEW YORK, N. Y.

THIS study was undertaken because of the many conflicting reports on reflexes in infants. Garrod, Batten, Thursfield and Patterson,¹ without indicating that their examinations were done on new-born, state that the "abdominal reflexes are not present in young babies." They add that the "cremasterics are also developed during the first year of life. Knee jerks are present. Ankle jerks may be absent if knee jerks are absent." Their view of the plantar reflexes is as follows: "In babies the toe is sometimes flexed, but more often the big toe is sharply extended and, in association with this, the little toes are extended. It is the slow extension of the big toe which is of important diagnostic value."

Dunn² says that the knee jerks are hard to elicit, and should be disregarded if absent unless there are some additional signs of disease of the nervous system.

Crothers³ states that the superficial reflexes are extremely erratic in childhood, and that the Babinski phenomenon, if constantly present on one side alone, is significant. Rolando⁴ gives it as his opinion that, because of the variety in type and intensity of reflexes in the new-born, no standardization is possible.

Von Reuss⁵ comes to the conclusion that: "Opinions concerning the condition of the various reflexes in the new-born are by no means in agreement. This fact is doubtless due in part to the fact that some reflexes, even when they are quite active, cannot always be elicited, owing to the low tone of the muscles of the extremities. The knee jerk can almost always be elicited as early as the very first day, and is usually fairly active. During the first weeks, Furmann was frequently able to obtain reflexes on both sides of various strengths. According to Furmann, the ankle jerk is positive in sixty per cent of cases. Bychowski was only able to elicit it four times out of sixty-four children under six months old. Babinski's plantar reflex is, according to Furmann, positive in the majority of cases. Stroking the inner border of the sole always produces dorsiflexion of the big toe under normal conditions (Engstler). The reflexes are often very brisk. According to Furmann, the cremaster reflex is positive in the majority of cases in the first six weeks; Cattaneo was not able to observe it during the first three months; Peritz thinks it is seldom present; Farrago, on the other hand, only failed to obtain it in 10% of cases. Furmann considers that the abdominal reflex is but seldom observed in the first period of life; Bychowski also does not count it among the congenital reflexes. Farrago, on the other hand, was always successful in eliciting it in 117 children, by stroking the region above the mons veneris

with a needle. The pharyngeal and nasal reflexes are usually but not always observed, premature infants especially often show a very slight reaction in this respect."

There seems to be a prevailing belief that the presence or absence of reflexes may be normal and that a Babinski sign appearing up to the age of two years may be regarded as normal. Moreover, no effort has thus far been made to indicate the relative degree of activity of the reflexes. In the present study, observations were made upon the reflexes of thirty-three new-born babies in the service of Dr. L. S. Loizeaux at the Fifth Avenue Hospital, New York City, ranging in age from a few moments to fourteen days. Six additional breech presentations were examined before birth. In specifying the degree of reflex activity, the symbols used in the neurological department of the Vanderbilt Clinic were employed, *i.e.*, 0, absent; 1, weak response; 2, active; 3, very active; 4, with transient clonus; 5, with permanent clonus.

In order to insure more satisfactory conditions a routine procedure was closely followed.

The Method: Usually the baby was picked up asleep on its pillow. It was not undressed, excepting insofar as was necessary for proper exposure. At first the diaper was loosened and laid open and then the abdominal binder was opened to give a proper field. The reflexes were then tested in the following order:

(1) Abdominal Reflex. These were the most difficult to elicit and were always tested before the baby had a chance to wake up or cry. If he could be examined while asleep or when quiet, the sharp point of an open safety pin was lightly stroked in the usual manner over the lower and upper abdominal quadrants. At first a very light touch was tried and, if successful, the results recorded. If not successful varying degrees of pressure were brought to bear. Of the thirty-three babies examined, thirty-two gave a prompt reaction in all quadrants the first day tested; the thirty-third baby responded the second day. The failure on the first examination may have been due to overdistension of the abdomen with gas. I also found that babies with considerable wrinkling of the skin due to loss of weight or whose abdomens were wet or covered with vernix caseosa did not respond readily.

(2) Cremasteric Reflexes. The testicles being in the scrotum and the scrotum being relaxed, light stroking of the inner and upper side of the thigh elicited this reflex promptly in each of the eight boys in the series. Even pricking the sensory area in almost any spot in the distribution of the genito-crural nerve gave positive results.

(3) Plantar Reflexes. A safety pin point was

used in making this test. Because of the exquisite hyperaesthesia of the outer portions of the soles of the feet in all babies, considerable time had to be spent in an effort to offset the resulting defensive withdrawal of the foot. The sole was touched lightly here and there with the point of a safety-pin. The baby at first would violently jerk his foot away, but after a little while he would become accustomed to the stimuli. Then the test was made as lightly as the pin could be drawn along the outer edge of the sole from heel to toe. In all the children during repeated tests, both plantar and dorsal flexion could be obtained, but twenty-seven showed more plantar than dorsal flexion responses and six showed about equal reactions. In no case was a constant Babinski present.

It is my conviction that the dorsal extension of the great toe usually observed (alternating with plantar flexion) is part of a normal defense reaction but that a Babinski reflex, if constantly present without such alternation, cannot be considered normal.

The plantar reflex was tried in at least six breech presentations before the baby was born and plantar flexion was obtained in all more frequently than dorsal flexion.

The plantar reflex is one of the earliest if not the first of the reflexes to appear in the new born. In two cases of asphyxiation I was able to obtain the plantar reflex at least several minutes before I could elicit the corneal, pupillary or pharyngeal reflexes during the process of resuscitation. The plantar reflex is obtainable in breech presentations before delivery even when the mother is deeply anaesthetized.

(4) Patellar Reflexes. It was found that even a small reflex hammer was too large to tap the quadriceps tendon exactly in the right spot. The method used was to employ a heavy teaspoon as a percussion hammer. The leg was flexed on the thigh, the tendon was localized with the thumb and was tapped briskly by the edge of the bowl of the teaspoon. Twelve babies gave a very active (3) response, sixteen gave active (2) responses, and five gave weak (1) responses. If the response was not forthcoming at once, many attempts were made, placing the leg at different angles. In every event all babies reacted during the first trial.

In six breech extractions, the patellar reflex could not be obtained during the process of birth.

(5) Achilles. The baby was now turned over on his abdomen, the foot was gently grasped and dorsiflexed to stretch the Achilles tendon and take up the slackness of the calf muscles. The tendon was struck in the same manner with the

edge of the teaspoon. Fourteen cases were (1) plus, seventeen (2) plus, and two gave no reaction on the first day. These two reacted promptly the next day. My experience has shown that these tests cannot be performed satisfactorily unless the babies are relaxed and quiet.

In the six breech cases, the normal Achilles reflex was obtained before birth, in every case, if the mothers were lightly anaesthetized. Under deep anaesthesia, the reflex was not elicited.

(6) Biceps. The upper clothing was now gently removed, the arm was flexed to a right angle, and the biceps tendon was isolated by finger and tapped smartly with a small reflex hammer. Twenty gave (1) plus, thirteen a (2) plus reaction.

(7) Triceps. The arm was flexed to bring out the tendon which was tapped with the edge of a spoon. Twenty eight gave a (1) plus reaction and five a (2) plus.

Various other reflexes were tested, such as the jaw jerks which were always active. The pectorals were usually (1) plus. The pharyngeals were always present and active in normal cases.

(8) Corneal Reflexes. These were tested by applying a small point of paper or a wisp of cotton to the cornea. It was necessary to give a definite amount of touch. The reflex response was prompt in every case.

(9) Pupillary Reflexes. The baby's head was turned away from the light, the eyelids were gently opened by the nurse and light was introduced from the side. The size of the pupils naturally depended upon the degree of darkness of the room. In twenty seven cases they were 2 mm., in six they were 3 mm in diameter. The reaction in the thirty-three cases was present but not brisk.

The results show that in following the technic described in a series of thirty-three quiet babies, the deep and superficial reflexes are present in new born normal infants and that a plantar response was more frequently obtained than a defense Babinski reflex.

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For list of officers of County Medical Societies, see this issue, advertising page xx.

VENEREAL DISEASE CONTROL

The civic aspects of the treatment and prevention of venereal disease were considered by the Committee on Public Relations of the Medical Society of the State of New York as reported on page 979 of this Journal. The history of the anti-tuberculosis movement is repeating itself in venereal disease control. Most general practitioners in past years have

not welcomed venereal patients for several reasons:

1. Social stigma.
2. Unreliability of the patients.
3. Lack of accepted standards for diagnosis and treatment.
4. Unwillingness of doctors to provide the

diagnostic and therapeutic equipment without the prospect of an adequate financial return for their outlay.

Departments of Health and genitourinary specialists have developed standard methods of diagnosing and treating venereal diseases.

Public Health organizations and laymen have popularized the education of the people regarding venereal diseases and the methods of their control, and have aroused public sentiment to demand the establishment of facilities

for the diagnosis and treatment of this class of affections.

Medical societies are giving more and more consideration to the opportunities and duties of practitioners of medicine in venereal disease control.

The Committee on Public Relations is in close contact with the New York State Department of Health and the State Charities Aid Association, and is developing a working plan for the satisfactory cooperation of the three groups in venereal disease control.

A HOSPITAL MEDICAL LIBRARY

An article on a Hospital Medical Library by Charles Frankenberger, Librarian of the Medical Society of the County of Kings, New York, was printed in the June Bulletin of the American College of Surgeons. The author outlines a plan adapted to the larger hospitals which can afford to purchase the books and to employ a librarian to look after them. (See page 983)

The Associated Physicians of Long Island is developing a plan by which the resources of a large central library may be made available to medical societies and smaller hospitals in the surrounding territory. The Library of the Kings County Medical Society ranks among the largest medical libraries in the United States; and its governing board offers its services to medical

groups throughout all Long Island. The plan was first suggested over twenty years ago, but was not developed because of the lack of organized groups of physicians in the several geographic centers of Long Island. But the organization of hospital staffs and of group medical societies subsidiary to the county societies, have provided the means by which the books may be distributed and returned. The clerk of a hospital, for example, may attend to the routine of ordering the books, keeping a record of their distribution to the doctors, and attending to the details of their return to the Brooklyn library. It is probable that the service will be inaugurated in the Fall, and demonstrate how a library may serve the physicians of several surrounding counties.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

The Alcohol Problem: That there is very little new in the alcohol problem is shown by the following items in this Journal of August, 1907:

"Provision for Drunkards.—The annual report for 1906 of Bellevue and Allied Hospitals shows that the State abounds in charitable enterprises for almost every class of unfortunates, but as yet provides no institution for those who have become the slaves of alcohol. Such institutions if they could be established, might convert a certain proportion into useful citizens again. It is suggested that habitual drunkards should be committed by proper judicial authority to State

or municipal institutions in which they might be restrained and treated scientifically. The cost of maintaining such institutions would be considerable, but their need will not be questioned.

"To check the prescribing of liquor:—The Jefferson County Medical Society, in Alabama, has placed itself on record as being opposed to the indiscriminate prescribing of liquor by physicians, and suggests, to limit such illicit prescriptions, that every prescription be recorded in a book open to inspection by the county health officer, the record to show the name of the prescriber, date, amount and kind of liquor."



MEDICAL PROGRESS



The Inoperable Prostate.—Kenneth Walker, writing in *The Practitioner* for June, 1932, while claiming that prostatectomy is the ideal treatment in the majority of cases of prostatic obstruction, admits that there are a certain number of patients who for one reason or another cannot or will not consent to this operation. The author therefore notes the different methods of treatment other than exsection which may give relief to the prostatic sufferer. These he considers under the headings of (1) medical treatment, (2) electrotherapy, (3) minor surgery. It is not possible, he says, to reduce the size of the gland by medical treatment, yet symptomatic relief may sometimes be so obtained. Retention may be due to the size of the prostate or to spasm of the sphincter, the latter being often that which calls most urgently for relief. The symptoms in such a case may vary greatly, the patient at one time being able to pass water with the greatest ease and being disturbed only once or twice in the night. This condition calls for the avoidance of any kind of exposure, especially to cold and damp. Warm clothing is most important and overfatigue of mind or body is to be most scrupulously avoided. There is little to be said concerning the diet other than to caution against alcohol, strong coffee, and highly spiced viands, which are absolutely forbidden. Alkaline drinks are to be recommended and the bowels must be kept open, though without purgation; warm enemas may be useful.

The most usual forms of electrotherapy are diathermy, the static wave current, galvanism, and the x -rays. Diathermy probably acts by diminishing spasm of the sphincter vesicae. The x -ray may be used alone or in conjunction with the static wave or diathermy. In order to effect a reduction in the size of the prostate enormous doses must be given, thereby incurring the risk of injury to the skin or to the mucous membrane of the rectum. Electricity in the form of the sinusoidal current, the static wave, galvanism, or the high frequency current acts by causing either contraction or relaxation of the muscle fibers. The effect of contraction of the sphincter brought about by massage or by electrical means is to dispose of the prostatic secretion and epithelial cells which fill the acini of the enlarged gland.

When the amount of the residual urine increases and renal efficiency is thereby threatened, partial emptying of the bladder is im-

perative, and for this it may be necessary to resort to catheterization which, however, reduces markedly the life expectation of the patient. Better is it to establish permanent suprapubic drainage with all its inconveniences. But if the main obstruction comes from the presence of an enlarged middle lobe or a fibrous bar, "forage" is indicated and will enable micturition to be reestablished. The operation may be done satisfactorily under low spinal anesthesia.

The Physiopathology of Senility and the Neurochemism of the Aged.—A study of the problem of senility shows, says Nicola Pende, that in the entire complex of senile changes it is the mesenchymal apparatus that is failing. To this belong not only the so-called histiocyte and reticulo-endothelial system, but also the elastic tissue, the adipose tissue, the adrenal cortex and the interstitial and lutein tissue of the genital glands. The mesenchyma is the *nutritive sponge* which bathes all the parenchymal tissues, sustains them with its elastic fibers, protects them from exogenous and endogenous poisons and repairs their losses. We know today that the earliest senile changes are not chargeable to the so-called noble differentiated parenchymal cells but to the mesenchyma. The atrophy of the elastic tissue of the skin, together with the capacity for fixation of water and salts on the part of the colloid micellæ, with passive accumulation of water in the connective tissue, is what causes the first wrinkles and the first collections of fat in face, chin, and abdomen, where the skin most readily yields to the action of gravitation; and it is the atrophy of the connective tissue that produces the first senile changes in the lung and in the intima of the arteries. Similarly the atrophy of the lymphatics and connective adipose tissue substitutes hard fibrous connective tissue for the nobler elements of the mesenchyma. In short, there is in the aged an involution, a decadence of the great mesenchymal apparatus, between the ages of 50 and 75. We know that the mesenchyma, together with certain endocrine glands of mesodermal origin which probably stimulate the reticulo-endothelial function, is the regulator of lipid metabolism and of acid-base equilibrium. A senile insufficiency of this entire apparatus must lead to deficient fixation of lipoids in the tissues, with all its secondary results in loss of nervous and muscular energy. We may therefore conceive that in the last analysis the essential morphologic-dynamic change is the functional degenerescence of the mesenchyma, that is, of the group of tissues whose function is to protect the

parenchymal tissues from physiologic intoxication by their own catabolized acids, and to furnish them with their indispensable lipoids in a form readily utilizable. It is not the noble elements of the parenchyma that degenerate, but the humoral medium in which they are bathed. Prolongation of the period of vitality of such organs as brain, heart, liver, kidneys, and endocrine glands can be accomplished only by caring for the integrity of the humble working class of cells represented by the mesenchymal vegetative apparatus.—*Riforma medica*, October 12, 1931.

Endometriosis and Endometriomata.—Daniel Dougal discusses the principal etiological, pathological, and clinical features of endometriosis and endometriomata on the basis of 137 cases in which he has operated during the past five years. He defines endometriosis as the pathological state brought about when endometrial fragments invade the uterine wall or, passing through the Fallopian tubes in regurgitant menstrual blood, reach the pelvic cavity and structures within it. When these endometrial implants proliferate sufficiently to form tumors they are known as endometriomata. Cullen's diverticula and Sampson's retrograde menstruation and cellular spill are accepted as providing the most reasonable explanation of uterine and extrauterine endometriosis, respectively. The tumors are largely made up of hyperplastic fibromuscular tissue, containing numerous islets of misplaced endometrium, some of which become cystic and filled with blood. Stress is laid on the multiple character of these lesions. Tumors are not infrequently found on the Fallopian tube, round or uterosacral ligaments, pelvic colon, small intestine, and more rarely in the appendix, umbilicus, inguinal canal, or scar of a previous abdominal operation. In Dougal's series the tumors were distributed as follows: Diffuse uterine, 6; cornual, 6; ovarian, 44; rectovaginal, 44; ovarian and rectovaginal 34. There appears to be no relationship between endometrioma and carcinoma of the uterus. There are no pathognomonic symptoms of endometrioma, but increasing dysmenorrhea, menorrhagia, and dyspareunia should lead one to suspect the condition. In the case of intrauterine growths, any fixation of the uterus and ovaries associated with a shotty nodular tumor behind the cervix affords conclusive evidence. While endometrioma, in the early stages is not an absolute bar to pregnancy, it seriously interferes with childbearing. Owing to its wide distribution and infiltrating character conservative measures are possible only in the early stages. In the author's series the uterus and all ovarian tissue were removed in 83 per cent of the cases. Total is preferable to subtotal hysterectomy; it is quite unnecessary to excise infiltrating growths in the rectum or other parts of the alimentary

tract, as atrophy will follow if both ovaries are removed.—*British Medical Journal*, November 21, 1931, ii, 3698.

Silent Pneumonia in Children.—G. Mouriquand and J. Savoie, writing in the *Journal de médecine de Lyon*, say that there is a form of silent pneumonia appearing in children, and especially in infants, which is not betrayed by any of the classic signs, such as râles, souffles or dullness. Its diagnosis is accordingly difficult, unless, with the possibility of pneumonia in mind, the physician has recourse to radioscapy, which will reveal the characteristic triangular shadow. The onset is sudden, the child runs a high temperature, usually without remissions; a dry cough may or may not be present, with expectoration. Respiration is superficial, and slightly labored. Nervous or meningeal phenomena may easily mislead in the diagnosis of this condition, of which persistent fever remains the essential symptom. Unexplained fever continuing for several days should lead the physician to look very carefully for 3 signs: (1) Limited sub-dullness that cannot be called true dullness; (2) respiratory obscurity, or, to a less degree, diminution of murmur; (3) exaggerated resonance of the cry. The sub-dullness, although not constant, is a good sign of the affection, and may be the only one. It must not be looked for in any considerable zone of the thorax, but should be sought not only in the back, but also in front, under the clavicle and in the axilla. The area of dullness may extend, so to say, only the breadth of a fingertip. It is not at all unusual to find the focus at an antero-axillary spot, or deep within the axilla. Respiratory obscurity is not so constant, but deserves to be looked for, as it is an early sign; it is ordinarily quite localized, and may be masked by a compensatory emphysema around the hepatized focus. The type of cry constitutes the best sign of all. A comparison of the sound when one listens alternately to the healthy lung and the hepatized focus shows in the former case a cry that sounds distant and badly transmitted, as if interrupted by a tissue that in some way deadens it, while in the latter case it seems close by, and piercing, produced immediately under the wall. This sign has been an invaluable means of diagnosis in a good many cases. In children too old to cry the same information is given if the child is asked to say *EE*. The sound undergoes a transformation in the pneumonic focus, and becomes *EH* (English long A) or even *AH* in transmission. A possible explanation of silent pneumonia is that it is not the triangle of hepatization that gives râles and souffles in any pneumonia, but the surrounding splenization and congestion. This congestion might conceivably be lacking, for some reason that at present eludes the most painstaking study.

The Shape of the Pelvic Brim as the Determining Factor in Childbirth. — Kathleen Vaughan points to the fact that in India the women who live out of doors, tending cattle, planting crops, doing heavy work, have their children safely and with no more difficulty than the animals around them have in parturition. Women of the same race who on account of the custom of "purdah" remain in seclusion find their confinements increasingly difficult. That difficult labor is not a racial question is further illustrated by the Negress. In her natural surroundings she gives birth to her children with ease, but when living in large cities in America she has more difficulty than the white woman herself. The fundamental cause of difficult labor and high maternal mortality is that the child's head and the mother's pelvis do not fit. The writer examined and measured the pelves of various races in the museum of the Royal College of Surgeons, and at once noticed that the female pelvis assumed a great variety of shapes—kidney-shaped, oval, round Y-shaped, and irregular, or one side larger than the other. The part of the fetal head which engages the pelvic brim is always a circle. This is the part known as the occipito-bregmatic circumference, which in full flexion is brought into the maternal brim; it is in this plane alone that the fetal head can be safely diminished in volume, while still preserving its circular form. Unequal pressure or pressure in other planes leads to tearing of the tentorium and hemorrhage. In England and America rickets is almost universal, and affects the bones most where growth is most rapid and calcification is proceeding most quickly. Such a part of the body is the pelvis. Pelvic development is influenced by the sacroiliac joints, and we know that ankylosis of these joints produces atrophy of the pelvis. The pelves at the Royal College of Surgeons showed that in native races the sacroiliac joints were well developed. All circular pelves have this joint well developed. Most important in the development of this joint is the crouching posture used by women living out of doors in attending the calls of nature. In England the still soft pelvis is bent by long sitting in school, and this is not counteracted by the proper action of the sacroiliac joints, which should be used daily, if only during the acts of defecation and urination. The wearing of high heels also limits and cramps movements, throwing the body weight forward on the arch of the foot, altering the pelvic angle and causing the back to be unduly hollowed to preserve the balance. It is of interest that perfect teeth are found with the round pelvis, and this is well understood among primitive people, who consider such teeth essential in a bride. These facts are the real explanation of our increasingly difficult maternity.—*British Medical Journal*, November 21, 1931, ii, 3698.

The Frequency of Syphilis of the Aorta.—On the basis of 1,000 autopsies performed on cadavers of adults in a large public hospital of the Middle West (U. S. A.) with 3,300 beds, whose patients are drawn from the poorest classes, R. H. Jaffé reports that he found syphilitic changes of the aorta in 10.3 per cent. The examinations covered the entire aorta, descending as well as ascending, which may account for differences in his figures from earlier statistics, which customarily relate only to the ascending aorta, although frequently the descending aorta alone is affected. These changes were 3 times as frequent in colored as in white patients (22.02 against 7.43 per cent). In females the discrepancy was much less marked (Negroes 10.14, whites 8.53 per cent). Despite the relative frequency of syphilis of the aorta in women, the mortality among these is small in comparison with men, being in white women 1.8 against 4.67 per cent in white men, and in colored women only 0.7 against 10.1 in colored men. The total mortality was 4.9 per cent. The importance of syphilis of the aorta is seen by a comparison of the figures with those for cardiac affections of rheumatic origin. Rheumatic valvular affections, acute and chronic together, were the cause of death in 2 per cent, while they were noted as secondary findings in 5.6 per cent. There was no essential difference between white persons and colored. The average age of death from lues of the aorta was 9 years younger in Negroes than in white persons, which is attributed to the early infection of the former. The overwhelming majority of the cases of syphilis of the aorta had received no specific treatment. Of the cases that terminated fatally, 76.5 per cent gave a positive precipitin reaction (Kahn's). Syphilis of the aorta in the colored race is marked by the great extent of the necrotic changes present. This may perhaps account for the great frequency of aneurysm of the aorta among colored persons. Lues of the pulmonary artery was observed in 3 cases of the 1,000. In one of these it was combined with a large aneurysm of the abdominal aorta; in both of the others the changes in the aorta were very slight in comparison with those in the pulmonary artery. In all 3 cases, which exhibited a moderate hypertrophy of the right auricle, luetic arteritis of the pulmonary artery was the cause of death, due to an advanced thrombosis which had led to almost complete occlusion of both main branches.—*Klinische Wochenschrift*, November 7, 1931.

Cardiac Pain and Sudden Death.—Alexander Lambert, writing in the *American Journal of the Medical Sciences* for December, 1931, clxxxii, 6, says that, contrary to the beliefs of both the medical profession and the laity, sudden and unexpected death is but rarely produced by cerebral

hemorrhage. Statistics prove that the great majority of sudden unexpected deaths occur in certain forms of heart disease, but the overwhelming majority of deaths in heart disease are neither sudden nor unexpected. Thrombosis of the coronary artery without rupture of the heart is probably the most common cause of sudden and unexpected death. In discussing cardiac pain Lambert states that most of the theories held concerning it are unsatisfactory. He offers a theory based on many years of clinical observation, which explains cardiac pain logically, and is borne out in each of its separate factors by experimental work in physiology. Pathological anatomy does not offer an explanation of cardiac pain. Experimental evidence strongly indicates that the myocardial muscular tissue is insensitive, and does not cause pain by ischemia or failure of action through anoxemia or degeneration. Cardiac pain is expressed only through the afferent nerves of the sympathetic portion of the autonomic nervous system. The sensory afferent nerves of the heart and aorta originate and run in the adventitia of the first portion of the aorta and of the coronary arteries and belong only to the sympathetic system or the autonomic nervous system. Stretching and overdistention of these vessels is brought about by normal circulatory reflexes which in diseased tissue cause excessive stretching of the aorta before the depressor reflexes bring relief, or by overfilling cause overdistention of arteriosclerotic walls of the coronary arteries. So long as the circulatory reflexes do not upset the equilibrium between the myocardium and its blood vessels there is no pain. When, however, the afferent functions of the nerves are adequately disturbed, or the myocardium is so degenerated that it cannot contract normally under reflex stimulation, the normal increased rise of blood pressure and the circulatory reflexes produce excessive dilatation of the diseased blood vessels and pain results when the heart endeavors to answer the demands for increased work. This theory explains the various clinical exhibitions of pain in coronary infarcts and thrombosis. It also accounts for the fact that in some operations of sympathectomy, even with none of the sensory fibers cut or disturbed, the attacks of pain may entirely cease when the continuity of reflex action is prevented, and the rise of blood pressure does not take place, and on exertion the adventitia of the aorta is not over-stretched to give pain. Experimental evidence strongly indicates that vascular distention is the usual cause of cardiac pain rather than vascular spasm.

The Problem of Stiff Joints—Sir Robert Jones has chosen this subject because the text-

books deal with it in an indefinite way, with the result that unqualified practitioners render stiff joints mobile with success sometimes disconcerting. He lays down a rule, admitting a few exceptions, that a joint stiffened by simple adhesions, whether intra- or extra-articular, should be moved actively or passively, or even forcibly if necessary. A joint stiffened by arthritis should be kept at rest until pain and inflammation have subsided, when active, rather than passive movements should be practised in the absence of weight-bearing. It is essential, therefore, to make a differential diagnosis between the two conditions. As a rule a joint whose movements are limited in *all* directions, is, or has been, subject to arthritis, while a joint is limited in certain directions *only* is not arthritic. In adult tuberculosis an ankylosing operation on the ankle, knee, or hip is justifiable as soon as an accurate diagnosis is made, as it saves time, lessens danger, and secures a firm joint for all time. In treating joints the aim should be to combat all elements which make for stiffness. When a joint has recovered from fracture or mild arthritis, the patient may be allowed to move his joint within a painless area, or the surgeon may employ one single movement in each direction once a day, and then let the joint rest. If ligaments are torn they should be protected from strain until movements can safely be practised. Massage immediately after an injury (before effusion has taken place, checks hemorrhage into the part, relieves pain, and leaves the tissues ready to commence immediate union. If the joint is sprained, elastic pressure should be firmly applied in order to prevent or minimize effusion, and to allow repair of the injured structures. When ankylosis seems inevitable the surgeon should recommend measures which will insure its fixation in the position in which the limb concerned will be most useful and least crippling to the patient. What these positions should be in the various joints the author clearly indicates. Stiffness following fracture is usually only temporary. It should be remembered, however, that a joint stiffens much more readily if it is rested in a fully extended, rather than the slightly flexed, position. In the presence of traumatic myositis ossificans neither massage nor movements should be employed. An arthrodesis near or at the hip-joint will transform a weak painful joint which cannot bear weight to a strong, painless limb. It should be reserved for comparatively young and healthy individuals. It should never be undertaken in the presence of active disease, but should be delayed until at least two years after its cessation. The technique applicable to the various joints is described.—*British Medical Journal*, December 5, 1931, ii, 3700.



LEGAL



INSURANCE—DEATH BY SUICIDE

By LORENZ J. BROSNAN, ESQ.

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One of the difficult problems which our courts frequently face is that of determining the manner in which an individual's life came to an end, whether by accident, natural causes, suicide or at the hands of another. A large group of interesting cases has been brought before the appellate courts of this State where the issues involved whether a deceased died by suicide or otherwise. The question is of first importance where a contract of insurance contains a clause preventing recovery of the amount of the policy if the assured died by suicide during a specified period of time after the policy was taken out.

Circumstances may combine to make up a picture which, to the average person, would seem to indicate nothing else than that the deceased person took his own life, but yet the law in general will not presume suicide unless the facts afford no other reasonable explanation. A review of the facts of a few of the adjudicated cases will serve to illustrate the application of the rule.

In one case the deceased was last seen alive walking toward a railroad bridge over a culvert, across a stream emptying into Long Island Sound. His body, which indicated death by drowning, was found not far from the bridge a few days thereafter. It appeared that the deceased some years before had been temporarily insane and had been confined for three months in an institution. He had, however, been discharged therefrom as cured. Under the circumstances it was held that since the death might have been caused by either accident or suicide, the law presumes the cause of death to have been accidental.

Another similarly simple case was that of a collection agent who left home one morning in apparently good spirits. He was seen later in the day at his office by a man whom he asked to go with him to Staten Island to make some collections, but who declined. He was never seen alive thereafter, and eight days later his body was found floating in the bay near Staten Island. Examination of the body by a physician revealed no marks of violence or any conditions which would indicate the presence of epilepsy. It was definite, however, that he had lost his life by drowning. The court held that a jury was authorized upon such evidence to say that death was caused solely by accident and not by suicide, even though the case was destitute of direct proof of any accident befalling the deceased,

Somewhat less clear is a case in which an insurance company defended, on the theory that its assured had died by suicide through the use of cyanide of potassium. Upon the trial the plaintiff established the fact of death, and the defendant introduced into evidence a copy of the record of proceedings at a coroner's inquest. The said record showed that the coroner's jury had determined that the deceased had committed suicide by poisoning. No other proof of suicide was given by the defendant's attorneys. The court, on appeal from a judgment based upon a determination that the defense of suicide was established, ruled that the proceedings before the coroner were not conclusive of the matter and were not binding as admissions on the beneficiaries of the deceased's insurance. The court ordered a new trial to permit the insurance company to establish, if possible, by direct proof its defense of suicide.

Another case of death by poisoning is interesting. The plaintiff was the widow of a man who had carried a life insurance policy, and in her attempt to collect thereon litigation had arisen over the so-called "suicide clause." The deceased had registered as a guest at a hotel in the evening, had done some drinking at the bar and then gone to his room. He was found dead the next morning with the door locked on the inside. Three letters written by the deceased were found in the room, one to his wife, one to the chief of police, and one to his employer. However, what was contained in these letters did not get into the trial record. On the bureau was found a box of white powder and a glass containing a sediment. A medical witness testified that he had ascertained the powder and the sediment to be bichloride of mercury. With such evidence before them, the jury decided for the plaintiff against the insurance company, thereby deciding that suicide had not been shown. On appeal the higher court declined to change the jury's determination.

A rather surprising result was reached in a case where the defense was that the deceased died by suicide and where it was conceded that he died from self-administered carbolic acid. The plaintiff conducted her case under the theory that the dose was taken accidentally. The deceased was a barber by trade about thirty-eight years of age. For some time his health had been poor and his eyesight bad, and he had suffered great pain at intervals. It appeared that he was under a

doctor's care and frequently carried medicines with him. Shortly before his death he had bought a four ounce bottle of carbolic acid. He then went into a saloon and ordered two glasses of beer. He took one glass into the washroom, and he came out declaring that he had killed himself and asked for a doctor. A doctor was called but the man soon died. His lips, mouth, throat and stomach were found burned from carbolic acid, and the bottle about a third empty was found upon his person. A letter was also found addressed to his wife, asking her forgiveness and requesting her to take care of the children, and containing the further statement that he could stand it no longer. There was also testimony that he had previously had a revolver permit and that his wife had seen him standing in front of a mirror with the revolver in his hand, after which she had taken steps to have the permit revoked and the revolver taken away from him. Said circumstances spell out a very clear case of deliberate, premeditated suicide, but the appellate court faced with said facts ruled that the evidence was insufficient to permit the court to dispose of the matter as a question of law and that a jury question was presented, and that the jury might reasonably determine that the acid was taken by mistake in the belief that it was proper medicine for the man's illness.

The sort of case, however, that the court will take from a jury and determine as a clear case of suicide, is illustrated by a case of death by illuminating gas. The deceased had sometime prior to her death been operated upon and had there after suffered from hemorrhages, and about two weeks prior to her death she had been discharged by her physician as cured. The evening before her death it was observed by her landlord that "she appeared greatly excited. Her eyes were very glassy in color. Her hair was somewhat disheveled, which was unusual with her, and she said nothing." The next day she was found in her room dead, lying on her bed, with the two gas jets in the room fully turned on. The room was filled with illuminating gas. There was no evidence to show that the supply of gas had been in any way interfered with or that there was any draft which might have extinguished the flames. A gas engineer was called by the plaintiff to testify that there might have been a leak in the gas main which might have caused water to get into the pipes, which might have accidentally put the lights out. On such evidence a verdict was rendered based upon accidental death. The appellate court ruled that the testimony of the gas engineer was improper, being wholly speculative as there was no proof of a single fact upon which his theories as an expert were based. The court, therefore, reversed the verdict as against the weight of all the evidence.

A somewhat different type of case arose where the question to be determined was whether the

deceased had lost his life by suicide or by murder. His body was found early one morning hanging from a rope attached to a railing in a secluded part of a railroad station. Obviously the man had not met with an accident, and his death had been premeditated either by himself or by others. There was nothing to indicate the existence of any signs of a struggle. The spot where the body was found was a place the deceased would not ordinarily visit so that either he went there deliberately to hang himself or he was abducted and taken there by murderers. There was evidence that he had been suffering from pains in the head and had the fear that he might become insane. There was also evidence that he had complained about his family relations. On the other hand, there was no evidence that anyone would have had the slightest motive, even that of robbery, for taking his life. The appellate court definitely ruled that the decision necessarily had to be that the deceased took his own life. The court summarized the principles controlling its decision as follows:

"Upon the trial the burden rested upon the defendant to establish by a preponderance of evidence its defense that the deceased came to his death as the result of suicide. If there was a dispute in the evidence as to the controlling facts or if, there being no dispute as to said facts, the latter were still so inconclusive in their nature that reasonable men might draw different inferences therefrom, an issue of fact was presented which should have been passed upon by a jury. Upon the other hand, it would not have been permissible to allow a jury to indulge in conclusions and deductions which were not legitimately and legally deducible from the facts testified to, but which would be mere speculation and guesswork. No principles have been laid down in any of the recent decisions referred to which in any way destroy or impair such well-grounded rules."

"Keeping such principles in our mind it seems to us that the defendant produced evidence which fairly and legitimately sustains the claim that the deceased committed suicide, and that upon the other hand, to permit a jury to find that he was murdered would be to allow the wildest kind of speculation to pass for legitimate inference."

The law has set up a presumption against suicide, and it seems properly so. It would be extremely harsh if, on mere speculation a deceased person could be branded as having taken his own life and his estate thereby often deprived of the financial benefits of his insurance. Hence the presumption is against suicide, and the party seeking to rebut that presumption must clearly establish that the deceased did in fact die at his own hands. The result is that the cause of death is legally considered other than suicide, unless suicide is the only reasonable conclusion that can be drawn from the proven facts.

ALLEGED NEGLIGENT TREATMENT OF BURNS

A doctor engaged in general practice was called to the home of a man who had accidentally received certain burns about his legs. The doctor was told that the man's trousers had caught fire as a result of the explosion of a stove in which he was starting a fire. The doctor examined the man and found extensive second and third-degree burns on both of his legs and his feet. The doctor immediately suggested that he go to a hospital for treatment, but the patient refused. The doctor then treated the man at his home, using unguentine for an ointment and applying sterile dressings which he changed every twenty-four hours. A large number of blebs developed on the legs and feet, and the doctor opened them as the condition required. The condition of the burns was such that after nine days of treatment at the man's home the burns had not healed but gave indication of infection setting in. The doctor, therefore, insisted on the patient entering a hospital in order that he might have proper nursing care.

The patient accordingly was taken to a hospital where he remained a patient for about five

months. During this period of hospitalization a great amount of slough developed and it was necessary that skin-grafting be resorted to in the treatment of the man's condition. The doctor attributed the infection and slough which developed both to the severe nature of the original injury and the extremely unsanitary conditions in which the patient had lived.

A damage suit was brought against the doctor claiming that as a result of negligent treatment by him the man's injury developed from a first-degree burn to a third-degree burn and caused infection to set in. Contrary to the facts of the case, the patient also charged that the doctor had prevented him from entering a hospital and obtaining proper care for his injury. The case came on for trial and at the close of all the evidence introduced on behalf of the patient, it appeared that he had been unable to produce any proof to the court to show that the doctor in any way departed from proper and approved practice, and, therefore, on motion of the attorney for the defendant the plaintiff's complaint was dismissed.

CLAIMED FAILURE TO PROPERLY TREAT MENTAL CASE

This was an action brought against the defendant, a specialist in psychiatry. It appeared that the mother of the plaintiff came to the office of the doctor and explained to him that her daughter was confined for some mental disease in a sanitarium, asking the physician if he would visit the sanitarium and examine the patient. The doctor went to the sanitarium the following day and was taken to a room in which the patient was locked up. He psychoanalyzed the patient's condition and after an examination advised the family that he thought he might be able to improve her condition. Acting on the suggestion of the doctor, the family brought the patient home.

The doctor saw her almost daily for the next two months at his office, and attempted by psychiatric treatment to eliminate the mental hazards which he felt were responsible for her condition. After he had treated the patient at his office for a short time, the doctor diagnosed her condition as manic-depressive insanity and immediately attempted to treat her along the lines which are proper and accepted for this condition. On one or two occasions the patient was so unruly and restless that the doctor, in his best judgment, prescribed codeine.

After the doctor had seen the patient for approximately two months and she had not improved to any great extent, he advised the family that she be put in some sanitarium as it was evident to him that her condition had so far progressed that he could not effect a cure. The family assented to this and the doctor arranged to have the patient put in a State sanitarium. He never saw her after this.

Sometime thereafter an action was instituted by the patient in which it was alleged that the doctor had failed to use reasonable or proper care in endeavoring to cure her of the malady from which she was suffering, and that he had unskillfully and negligently prescribed certain drugs which were injurious in their nature, all to plaintiff's damage. The action was commenced by the plaintiff herself, but later a motion was made by the plaintiff's attorney to substitute the parents of the patient as her guardians ad litem for the purpose of prosecuting the action. This motion was granted by the court. The parents, however, evidently realizing the futility of the claim of neglect and malpractice, permitted the case to be dismissed on motion of the doctor's attorney, thus terminating the action in the doctor's favor.



NEWS NOTES



PUBLIC RELATIONS COMMITTEE

A meeting of the Committee on Public Relations of the Medical Society of the State of New York was held on July 26, 1932, in the Hotel Roosevelt, New York City. There were present Dr. James E. Sadlier, Chairman; Dr. W. H. Ross, Secretary; Dr. George M. Fisher, Dr. A. J. Hambrook, Dr. T. H. Cunningham, and Dr. O. W. Mitchell. There were also present Dr. F. H. Flaherty, President-Elect; Dr. T. P. Farmer, Chairman of the Committee on Public Health and Medical Education; Dr. J. S. Lawrence, Executive Officer; and Dr. Frank Overton, Executive Editor.

The principal subject of discussion was the relation of the Medical Profession to the State Department of Health and the State Charities Aid Association in regard to public measures for the control of venereal diseases. The specific subject was the interpretation of a circular letter of January 12, 1932, issued by the Committee on Tuberculosis and Public Health of the State Charities Aid Association describing a project for the control of venereal diseases. This project had been adopted by the State Charities Aid Committee at a regular meeting on December 9, 1931, and was as follows:

A Project to Be Undertaken by the State Charities Aid Association, Through Its State Committee on Tuberculosis and Public Health, to Secure Citizen Interest and Support for the Control of Venereal Diseases in Up-State New York

1. *Purpose:* The purpose of this project is to provide the State and local health authorities, in the more intensive work they are about to undertake, with that supplementary interest and assistance which they need from voluntary organizations of public spirited, informed citizens, in order to round out and make their programs of work for the control of venereal diseases increasingly effective.

Medical science in recent years has made a number of discoveries for the detection, treatment and control of these diseases, and real progress can be achieved if this new knowledge is put to use. The problem of the control of these diseases is second only in its social significance to that of tuberculosis in the entire field of public health. Syphilis, which is the most serious of these diseases, is also the best understood scientifically from the point of view of prevention, diagnosis and care.

The tragic happenings that may follow in the train of this disease, if inadequately treated, cannot be overstated. Among them are: many thousands of deaths of infants before birth; thousands of patients in the wards for the incurable and crippled, who sit in wheel chairs year after year, or drag themselves about with feeble and halting steps; multitudes of patients in the hospitals for the insane suffering from a special and extremely serious type of mental and physical breakdown, until just recently always incurable.

On the recommendation of the Governor's Special Health Commission, of which President Farrand of Cornell University is Chairman, and the State Commissioner of Health, Dr. Thomas Parran, Jr., is Secretary, the State Department of Health is about to undertake a more thorough-going effort in conjunction with local health authorities for the control of syphilis and gonorrhea.

The State Commissioner of Health feels that the support of voluntary organizations and of public spirited citizens is urgently needed for this intensive campaign, and he has said that our Association's State and Local Committees on Tuberculosis and Public Health are, by reason of their successful and extensive experience over a period of 24 years in the fields of tuberculosis prevention, health legislation, diphtheria prevention and general health education, the voluntary societies best fitted for participation in such intensive social hygiene work up-State.

The State Charities Aid Association has voted to enter this field of work if special funds for the purpose become available, and a special committee was appointed to formulate a suggested program of work of which the State Commissioner of Health was Chairman, and of which the General Director of the American Social Hygiene Association, Dr. William F. Snow, was a member. The report of that committee has been accepted by the Association, and the program of work recommended by it is set forth below.

The sum of Six Thousand (\$6,000) Dollars is needed by the State Charities Aid Association with which to undertake a modest beginning program in this field.

2. *Program:* Following is an outline of the program, all the items of which supplement the present or proposed activities of the State and local health authorities:

1. To promote the extension to nearby rural communities of the social hygiene clinical facilities that are now available in particular up-State cities.

The State Department of Health would advise our Committee as to what counties or rural areas immediately adjacent to cities are in great need of clinical help.

2. To endorse and secure legislative support for the proposal of the State Health Commission that *State Aid* (at present available for counties only) be extended to *municipal* boards of health as a means of securing the establishment of satisfactory local diagnostic and treatment facilities for venereal diseases.

3. To secure the *help* of the Local Committee on Tuberculosis and Public Health *in improving the organization, equipment and service of local public venereal disease clinics* along the following lines:

(a) Providing funds over a temporary demonstration period for the salary or salaries, in part or in full, of qualified medical personnel, or of a technically qualified public health nurse or nurses, or funds for a qualified epidemiological investigator to search out cases and contacts and to help develop and put into effect new administrative techniques for bringing and keeping "lapsed" cases under effective clinical supervision.

(b) Providing the funds for the *post-graduate* education of locally employed clinic personnel, including physicians, nurses and social workers.

(c) Using their good offices, and funds, if need be, for making the local clinic quarters more commodious, inviting, attractive and better adapted for the efficient performance of the work of the clinic.

This may involve the renovating, painting or papering of the quarters, the provision of suitable floor covering, of furniture, including comfortable chairs in place of hard, stiff-backed benches; pictures and posters for the walls; plants and cut flowers; appropriate literature, magazines and other reading matter for waiting patients.

4. To assist in building up an informed public opinion regarding venereal diseases and the essential measures for combating them. Also to be of service to the State and local education authorities, if desired, in work they may undertake or have in hand in the field of sex-character education in the schools.

5. To endorse and secure legislative support for the State Health Commission's recommendation that the State Health Department be enabled to carry out in at least two areas—one a rural area, and the other an urban area—model programs for venereal disease control.

Endorsement by the State Commissioner of Health: A letter from the State Commissioner of Health, Dr. Thomas Parran, Jr., follows, in

which he endorses this project, and expresses the hope that funds may be secured with which to enable the State Charities Aid Association to undertake it:

"December 28, 1931.

"Mr. George J. Nelbach,
Executive Secy., State Committee on Tb. & P.H.,
State Charities Aid Association,
105 East 22nd Street,
New York City.

"My dear Mr. Nelbach:

"I was very much gratified with the discussion which took place at the last meeting of your Executive Committee, and pleased with the approval given to the report of the special committee appointed to recommend a social hygiene program for the State Committee.

"It is my personal feeling, which I think is shared by many members of the Governor's Health Commission, that our next big advance in public health should come in the control of venereal diseases, and particularly in the control of syphilis. As I have recently read the history of the anti-tuberculosis movement in the State, I have been impressed with the fact that the effort of your Association in this field was started at a time when there was much less scientific knowledge as to specific measures of control for tuberculosis than we have today for the control of syphilis. During the past twenty-five years, tuberculosis has been reduced by one-half.

"I am sure that during the next quarter century even more than that can be accomplished in the control of syphilis if public education and the provision of better medical care for its victims can be stimulated by voluntary agencies in the same way as anti-tuberculosis measures were stimulated. The technics need to be different, but the general purposes are the same.

"I attach considerable significance, therefore, to your decision to enter the social hygiene field, and hope you will find it possible to develop an active program.

"Sincerely yours,

"(Signed) THOMAS PARRAN, JR."

This project had been reported to the Executive Committee of the Medical Society of the State of New York on February 11, 1932, by Dr. J. N. Vander Veer, and referred to the Committee on Public Relations. The Committee on Public Relations had expressed its opinion of the project in a resolution which endorsed its educational features, while opposing the general establishment of clinics. Dr. Sadlier presented the correspondence which he had carried on with Mr. Homer Folks, Secretary of the State Charities Aid Association, in regard to its plans for establishing clinics for venereal diseases. Mr. Folks had referred to clinics already established in

cities, some of which admit cases from the surrounding rural communities. He said that the Association would not establish new clinics in any rural section; but it planned to utilize the existing clinics of some city for the benefit of a rural section around the city, the object being to determine the response of the rural cases and physicians to the clinic, and to develop a practical plan for conducting a clinic in a rural community, if one should be needed.

The Committee considered the excellent work of Dr. N. Vander Veer, who had been appointed a liaison officer to represent the State Medical Society in its relation to the Venereal Disease Division of the State Department of Health. The plans of Dr. Vander Veer had been outlined in a clear and comprehensive report printed in the Journal of June 1, 1931, page 712. A further development of his work is reported in the Journal, describing the method by which any doctor may take a specimen of serum from a suspected carrier for examination by the State Department of Health, thereby greatly promoting the early diagnosis of syphilis. (See page 869 of the Journal of July 15.)

Dr. Ross described the satisfactory development of the work of the Department of Health of Suffolk County by which family doctors were paid by the County for treating indigent cases of venereal diseases. A large element in the success of the work was that the treatments by county departments of health were mandatory under the State Law. The fiscal boards of the counties seem to be willing to assume financial burdens provided the responsibility is imposed on them by the State.

The members of the Committee on Public Relations felt that the methods of venereal disease control are now in a stage of development and evolution, and that the greatest prospect of success lies in the cooperation by the trinity of public health organizations:

1. The Medical Profession.
2. Official Departments of Health.
3. Unofficial Lay Health Organizations, especially the State Charities Aid Association.

The peculiar field of work of the Committee on Public Relations is to study the activities of these three groups of public health workers and to advise their members how they may coordinate their efforts in a friendly way. The Committee has already established a reputation for dealing wisely with all public health workers, and for fair impartiality as referee in public health disputes.

The subject of the private practice of medicine by members of the Medical staffs of the State hospitals, prisons, and other State institutions was discussed. Dr. Ross reported that the attitude of the leaders in the State Department of Mental Hygiene was that the State employs its physicians on a full-time basis; and that any time left over after the performance of their daily duties should be devoted to study, or to recreation, in preparation for the efficient performance of their professional work in the institution. The Committee will consider this subject further as occasion arises.

The Committee considered a letter from Dr. William A. Howe outlining the tentative plans of the State Department of Education for promoting the physical examination of school children through the cooperation of family physicians. The members of the Committee expressed their appreciation of the cooperative attitude of Dr. Howe in consulting the representatives of the family physicians in regard to the proposals of the Department.

The Committee also approved a plan submitted by Dr. W. P. Brown of the Medical Inspection Division of the State Department of Education for promoting anti-tuberculosis work among school children, especially by taking x-rays.

The Committee gave considerable time to the consideration of details of border-line problems which had been referred to it for advice.

The meeting closed with a discussion of methods of reaching the county medical societies, and inspiring their leaders to enter into active cooperation with other health agencies in the local communities. Dr. Sadlier called attention to the great progress which has already been made, one-third of the counties having established cordial relations with the other health organizations during the five years of the existence of the Committee on Public Relations of the State Medical Society.

Dr. Sadlier also called attention to the interest aroused by the district conferences of the chairmen of the County Public Relations Committees, as reported in the Journals of April 1, 1932, page 406, and May 15, page 614. The next meeting of the Committee is scheduled for September 15 in Buffalo, and will include a regional conference of the Public Relations Chairmen of the counties in the western end of the State.

WILLIAM H. ROSS, *Secretary*.

JAMES E. SADLIER, *Chairman*.

The State Department of Health would advise our Committee as to what counties or rural areas immediately adjacent to cities are in great need of clinical help.

2. To endorse and secure legislative support for the proposal of the State Health Commission that *State Aid* (at present available for counties only) be extended to *municipal* boards of health as a means of securing the establishment of satisfactory local diagnostic and treatment facilities for venereal diseases.

3. To secure the *help* of the Local Committee on Tuberculosis and Public Health *in improving the organization, equipment and service of local public venereal disease clinics* along the following lines:

(a) Providing funds over a temporary demonstration period for the salary or salaries, in part or in full, of qualified medical personnel, or of a technically qualified public health nurse or nurses, or funds for a qualified epidemiological investigator to search out cases and contacts and to help develop and put into effect new administrative techniques for bringing and keeping "lapsed" cases under effective clinical supervision.

(b) Providing the funds for the *post-graduate* education of locally employed clinic personnel, including physicians, nurses and social workers.

(c) Using their good offices, and funds, if need be, for making the local clinic quarters more commodious, inviting, attractive and better adapted for the efficient performance of the work of the clinic.

This may involve the renovating, painting or papering of the quarters, the provision of suitable floor covering, of furniture, including comfortable chairs in place of hard, stiff-backed benches; pictures and posters for the walls; plants and cut flowers; appropriate literature, magazines and other reading matter for waiting patients.

4. To assist in building up an informed public opinion regarding venereal diseases and the essential measures for combating them. Also to be of service to the State and local education authorities, if desired, in work they may undertake or have in hand in the field of sex-character education in the schools.

5. To endorse and secure legislative support for the State Health Commission's recommendation that the State Health Department be enabled to carry out in at least two areas—one a rural area, and the other an urban area—model programs for venereal disease control.

3. *Endorsement by the State Commissioner of Health:* A letter from the State Commissioner of Health, Dr. Thomas Parran, Jr., follows, in

which he endorses this project, and expresses the hope that funds may be secured with which to enable the State Charities Aid Association to undertake it:

"December 28, 1931.

"Mr. George J. Nelbach,
Executive Secy., State Committee on Tb. & P.H.,
State Charities Aid Association,
105 East 22nd Street,
New York City.

"My dear Mr. Nelbach:

"I was very much gratified with the discussion which took place at the last meeting of your Executive Committee, and pleased with the approval given to the report of the special committee appointed to recommend a social hygiene program for the State Committee.

"It is my personal feeling, which I think is shared by many members of the Governor's Health Commission, that our next big advance in public health should come in the control of venereal diseases, and particularly in the control of syphilis. As I have recently read the history of the anti-tuberculosis movement in the State, I have been impressed with the fact that the effort of your Association in this field was started at a time when there was much less scientific knowledge as to specific measures of control for tuberculosis than we have today for the control of syphilis. During the past twenty-five years, tuberculosis has been reduced by one-half.

"I am sure that during the next quarter century even more than that can be accomplished in the control of syphilis if public education and the provision of better medical care for its victims can be stimulated by voluntary agencies in the same way as anti-tuberculosis measures were stimulated. The technics need to be different, but the general purposes are the same.

"I attach considerable significance, therefore, to your decision to enter the social hygiene field, and hope you will find it possible to develop an active program.

"Sincerely yours,

"(Signed) THOMAS PARRAN, JR."

This project had been reported to the Executive Committee of the Medical Society of the State of New York on February 11, 1932, by Dr. J. N. Vander Veer, and referred to the Committee on Public Relations. The Committee on Public Relations had expressed its opinion of the project in a resolution which endorsed its educational features, while opposing the general establishment of clinics. Dr. Sadlier presented the correspondence which he had carried on with Mr. Homer Folks, Secretary of the State Charities Aid Association, in regard to its plans for establishing clinics for venereal diseases. Mr. Folks had referred to clinics already established in

working in city clinics, clearance of compensation cases for arbitration, practice of medicine by corporations purporting to render medical service, neighborhood health development, illegal practice, city comfort stations, examination of pre-school children, electric light rates, and the change in the sanitary code with regard to laboratories.

The Subcommittee on Radio Broadcasting of the Committee on Public Health reports the completion of its first year of work as of the first of July. Weekly broadcasts have been given over WBBC, a considerable number of broadcasts over WCGU and announcements with regard to diphtheria have been broadcast recently over these two stations as well as over WLTH and WAIL.

The Committee on Public Health in cooperation with the Health Department is urging greater activity with regard to diphtheria immunization—particularly in the Fort Greene health area.

The Milk Commission and the Special Committee on Certified Milk appointed by the Council have arranged trips to farms, conferred with producers; and in various ways even conducted more than the usual activity required by the routine of certification.

The Cancer Committee has practically completed arrangements for cancer study as a cooperative effort between the County Society's Committee on Public Health, the Cancer Committee, and the Brooklyn Cancer Welfare Service.

The Fall Series of the Friday Afternoon Practical Lectures scheduled to begin in October have been completed by the Clinical Committee. The subjects and the speakers to discuss the same promise much of interest and value to every practitioner of medicine.

The President of Kings County, as a subcommittee of the Coordinating Committee, with a group of advisers representing the Five County Societies, has been considering the Municipal Hospital Law and the report of the plan for further study of the relationship of the profession to Municipal Hospitals—particularly in connection with remuneration for services rendered when the patient was in a position to pay for professional service received—especially in compensation cases.

The President-elect, in getting ready for 1933,

has already begun to plan the work for his committees and make committee appointments. In June his Scientific Committee held its first meeting to map out programs for the coming year. The January and February programs are all laid out.

The routine activities of the Society in the Library, through the information service, and the like, continue without abatement.

The hospital and dispensary question has been quite a feature in medical discussion and action during the month. The President of the Medical Society of the State of New York, the Chairman of the Committee on Public Health of the County Society, and the Secretary of the Coordinating Committee of the Five County Medical Societies attended an all-day conference of a group working on the medical phases of the problem of neighborhood health development in preparation of a program for presentation to the representatives of the County Medical Societies to the Committee on Neighborhood Health Development for discussion and final recommendation.

The Director of Medical Activities has been appointed a member of the Committee on Nomenclature in Uniform Staff Organization of the American Hospital Association. The Chairman of this Committee is Mr. Boris Fingerhood, Superintendent of the Israel-Zion Hospital. Mr. Fingerhood was recently elected President of the New York State Hospital Association.

The Hospital Medical Library

Our Librarian, Mr. Charles Frankenberger, has given this subject a lot of thought during the past years, has helped many of our members with their hospital library problems and prepared a paper entitled "A Suggested Hospital Medical Library" and an exhibit for the last Clinical Congress of the American College of Surgeons. This article—with its carefully prepared lists of journals, books for a minimum working library and a suggested list for expansion will answer the questions of any hospital staff library committee—appears in the June, 1932, issue of the *Bulletin of the American College of Surgeons*. (See page 971.)

JOSEPH RAPHAEL, Reporter.

THE AMERICAN ACADEMY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY

The recognized sources of authority in the several specialties are the national organizations of their practitioners, a list of which is printed in alternate numbers of the *Journal of the American Medical Association*. The issue of July 23, 1932, contains the announcements of over fifty special societies whose scope is nation-wide.

A meeting of a national medical organization of interest to physicians of New York State is that of the American Academy of Ophthalmology and Otolaryngology to be held September 19-23, 1932, in Montreal, Canada. Dr. Arthur J. Bedell of Albany is the Chairman of its Committee on Publicity and Legislation.



THE DAILY PRESS



MUTE, INGLORIOUS MILTONS

Whatever theologians and psychologists may say about foreordination and freewill, heredity and training, most unsuccessful persons feel that they could become presidents or millionaires if they cared to do the unpleasant things that famous persons have to do in order to achieve

I never need to chide myself
Because my futile labors
Have brought me in no store of pelf
Like that of my rich neighbors.
That poverty has been my lot,
That hopes of wealth evade me,
I know is due alone to what
Heredity has made me.
That I cannot in box or vault
A heap of gold sequester,
I'm certain, is alone the fault
Of some remote ancestor.

My loathing for all forms of toil
Is not of my own making,
Nor is the fact that I recoil
From any undertaking.
I take no blame for being poor
For, back in ages hazy,

success. Moreover the unsuccessful are prone to say that their ill luck is a family trait.

James J. Montague writing in the New York *Herald Tribune* of August 5, expresses the plaint of the inglorious majority in the following verses, which contain more truth than poetry.

Some relative of mine, I'm sure,
Was slack, and loose and lazy.
From men I cannot even name
My troubles I inherit,
But I refuse to take the blame;
It's they who have to bear it.

While other men have done high deeds
I've tipped the foaming seidel;
While they have served their country's needs
I've been remiss and idle.
While they have made their names renowned
And spent their waking hours
In splendid works, I've sat around
And wasted golden hours.
The fact that I am not today
A governor or senator
And crowned with wealth and fame, I lay
To some remote progenitor.

DEATHS FROM VIOLENCE

The *Herald Tribune* of August 4 has an editorial on "Careless America" which says:

"The National Safety Council has published a lugubrious and instructive booklet, called 'Accident Facts,' by which the average American may learn how much more careless the average American is than anybody else. From the booklet's forest of statistics let us glean a few significant branches.

"No other country in the world that keeps any records is as rich in mechanical marvels as we are or as utterly careless in preventing them from hurting us. Our death rate from accidents is three times that of the safest country, Denmark, and considerably more than that of our nearest competitor, Canada—where, in spite of proximity and example, they have not yet learned to throw life away as fast as do we."

After discussing railroad accidents, drownings, and other forms of so-called accidental deaths, the editorial writer takes up the subject of automobile fatalities and says:

"The death rate from automobile accidents has been steadily increasing, while that from all other causes has been going down. Possibly because we spend so much more time in automobiles, we have less opportunity to drown, to be bitten and to fall downstairs than formerly.

"When you, as a passenger, step aboard a regular, scheduled commercial plane you will (statistically speaking) be killed only if you fly from coast to coast once a week for fourteen years, while each year one American out of every four thousand inhabitants is killed by an automobile.

"It seems as if the air were safer than the ground after all. And it is tragically and irrefutably certain that if a fraction of the effort expended in making the air safe were applied to the road, booklets such as 'Accident Facts' would not be so thick, or such melancholy proof of the incredible unwillingness of Americans to take elementary care of either their neighbor's life or their own."

CREDIT PLAN FOR MEDICAL FEES

The New York *Times* of July 21 contains a half column account of the operation of a mutual association of one thousand physicians and dentists of New York City, incorporated for the purpose of enabling patients to pay their professional advisors on the installment plan. The article says:

"A patient needing treatment signs an agreement with his physician or dentist, whom he selects himself, for the total amount of the fee. The association then advances to the physician 50 per cent of the amount and the patient pays it back on a monthly installment plan, in accordance with his income, at a receding interest rate of 6 per cent, amounting to \$2.75 for each \$100 if paid in ten months. The physician or dentist pays a collection and service fee of three-quarters of one per cent a month for the period of the note, amounting to \$7.50 for each \$100 on ten monthly installments. The patient is relieved of the burden of paying the entire fee at one time and thus is made to feel that he can afford the treatment. The physician is assured of his fee and is spared the task of collecting his own bill.

"Physicians have found that only 50 per cent of their patients remember to pay them in full, 20 per cent pay them in part and 30 per cent do not pay at all.

"On the other hand, 98 per cent of the patients who have agreed to pay on the installment plan have paid their doctors and dentists in full.

"The entire transaction is handled at the doctor's office, and the patient is not required to get co-signers on his note if he is a wage earner or has any other source of income. Many wealthy persons, inconvenienced by the depression, are availing themselves of the service, however, a majority of the patients are small wage earners and their families."

Commenting on the plan the New York *Herald Tribune* of July 25 says editorially:

"Enigmatically sensible—so sensible that one wonders why it was not thought of and put into effect long, long ago—is the plan whereby doctors will collect their fees in installments, via a central agency. About a thousand dentists, physicians and surgeons in New York have become members of such an organization, to which we wish success. It is a two-way plan, offering relief to both parties involved on the following basis: The patient, before sitting in the dentist's chair or lying on the operating table, agrees upon the amount of the fee, signs a note and pays it off in monthly installments geared to his income, plus interest of 6 per cent, to the central agency, which in turn advances immediately to the physician one-half the total amount of the fee.

"Such a plan would cure—at any rate, alleviate—the peculiar and unusually highly irregular financial relations of patient and physician. Doctors do not like to be demanding, as theirs is a vital service which should always be given, when really necessary, regardless of reward. And the public is incredibly lax and mean where doctor's bills are concerned, putting them at the bottom of the monthly pile, delaying them a good part of the time or never paying them at all. It always seems harder to pay for repairs than for acquisitions, and patients—unless they are visibly the richer by a handsome set of gold teeth—dislike parting with money for a state of health which they feel should be theirs by natural right.

"It is to be hoped that the plan will succeed as it deserves and be extended until the most important service one man can perform for another is on a basis at least as secure and accepted as the ownership of a vacuum cleaner or an electric icebox."

CREDIBILITY OF POPULAR SCIENCE

The alleged discovery of a live toad embedded in the masonry of an old wall inspired the following editorial in the *Herald Tribune* of March 13, 1932, on the subject of accuracy in observations:

"Among the thousands of relics of prehistoric man, the vast majority have had their scientific value ruined utterly because they were dug out hastily by inexperienced and ignorant bystanders, who destroyed what evidence there may have been of such vital

matters as original burial and age. What to do until the doctor comes may involve positive prescriptions. What to do with mysterious finds until the trained scientist comes is always negative.

"Do nothing. Let no one touch anything at all, until experience and trained observation are on the ground. Were this injunction universally known and observed, many facts even more interesting than the truth about buried toads might be saved to science."



BOOK REVIEWS



HANDBOOK OF TROPICAL FEVERS. By N. P. JEWELL, M.D., D.P.H. and W. H. KAUNTZE, M.D., D.P.H. Octavo of 485 pages, illustrated. New York, William Wood & Company, 1932. Cloth, \$6.00.

The authors, who write from their experiences in Kenya, a British possession in the eastern central portion of Africa, state that they have considered three classes of the medical profession,—the student, to supply the basic facts of tropical diseases, the practitioner in the tropics, who needs a handy reference book and the physician in temperate climates, who may be called upon to treat these diseases in patients who have been abroad. The methods which the authors have themselves found to be the best, are the ones described in the most detailed manner. Some of the diseases described, will of course not be met with in a lifetime, by practitioners in these parts, but it is very convenient to have so reliable a reference book with clinical data and laboratory facts combined.

Among the chapters on diseases most often seen by local physicians are those on Heat Exhaustion and Stroke and Cerebro-Spinal Fever, and there are some diseases described, which though uncommon here, are of much importance and interest, as they may be encountered but easily overlooked, at any time. Among these are Amoebiasis, Bacillary Dysentery, Psittacosis, Typhus, Tularemia, and Undulant Fever.

There are many observations of interest noted. With regard to Cerebro-Spinal Fever, the authors state that sub-conjunctival hemorrhages in the lower fornix of the conjunctiva are almost always present and are practically pathognomonic.

W. E. McCOLLOM.

SURGERY OF THE CHEST. By GEORGE F. STRAUB, M.D., F.A.C.S. Octavo of 475 pages, illustrated. Springfield, Charles C. Thomas, 1932. Cloth, \$10.50.

This book can be read with a great deal of interest and profit by most of the profession when we consider the tremendous advance in the surgical treatment of pulmonary tuberculosis. In the opening of his book the historical background and evolution of Thoracic Surgery is very lucidly and competently given by Dr. Straub. Although most of the common problems of chest pathology are discussed in the book the most practical portion is that given over to pulmonary tuberculosis. A commendable trend of conservatism is apparent in this book, always admirable in any new surgical contribution.

The rarer problems of mediastinal, esophageal and cardiac surgery are discussed, but, considering their rarity it does not have the same practical importance.

The book is unusually well illustrated.

E. J. GRACE.

THE WAY OF HEALTH INSURANCE. By A. M. SIMONS and NATHAN SINAI. Octavo of 215 pages. Chicago, The University of Chicago Press (c.1932). Cloth, \$2.00. (Publications of the Committee on the Study of Dental Practice of the American Dental Association: No. 6.)

The Committee appointed by the American Dental Association to cooperate with the Committee on Costs of Medical Care felt the need of definite information on health insurance. Most important was the lack of adequate information concerning the human relationships involved. With the American College of Dentists they provided the fund to make the investigation which is reported in this book. They only required the subject to be impartially studied and presented. To remain impartial, not swerved by the existing accounts and reports must have been a difficult task. There is a dearth

of literature on all phases of the subject. The articles and books are numbered in the thousands but there are few, very few, free from bias. Health insurance is not State Medicine, the authors show us, because "the physicians and dentists in insurance are not government employees; nor does it obtain its main support from taxation." In that sense there is no State Medicine in Europe.

How health insurance is obtained in different countries, how it grew from the lodges, clubs, workingmen's societies to its place of government recognition, regulation and political advantages, how the funds are raised, how the doctor or dentist is remunerated by single service fee, by fixed salary or by per capita fee for each person on his panel, are here concisely and clearly stated.

It does not suffice for a few doctors to know much about this subject, nor for many to know a very little about it. We can never forget that in the present inequitable distribution of this world's goods, many people in this country cannot secure and do not receive all the necessities of medical care, and what they do receive is principally from the charity of the medical profession. Until that distribution is right plans and laws for health insurance are and will be proposed in the legislatures of many states, and every doctor should be qualified to help in the enactments, the control and the direction of these health activities.

This book of 210 pages deserves reading by every doctor, whether or not he *thinks* he has interest in the subject, and the authors and dental profession deserve for it rightly merited appreciation and praise.

THOMAS A. MCGOLDRICK.

THE COSTS OF MEDICINES. By C. RUFUS ROREM, Ph.D., C.P.A. and ROBERT P. FISCHER, B.S., Ph.D. Octavo of 255 pages. Chicago, The University of Chicago Press (c.1932). Cloth, \$2.50. (Publications of the Committee on the Costs of Medical Care: No. 14.)

The authors of this book have presented in a most interesting and attractive way, facts and opinions that are of value to all Physicians and Pharmacists and would serve a good purpose if brought to the attention of the public.

The dependence of the Physicians upon the Pharmacist, even in these days of changing methods of treatment and use of remedies that are administered by other than the prescription method and the ability of the Pharmacist through experience and because of the additional knowledge gained in more extensive compulsory college courses, to meet the most delicate and exacting requirements of the Physician, is admirably and consistently set forth.

The detrimental effect upon the general practice of Medicine that is occasioned by inconsiderate, habit forming methods of ordering and directing the use of remedial agents, that is explained in such plain and convincing terms, should have the serious consideration of all Physicians for a decided change in some of these methods will prove to be one of the most effective means of curbing the much discussed and condemned self medication.

The need for thorough cooperation between Physicians and Pharmacists in a determined effort to protect the public by decreasing the number of persons that, through ignorance, rely upon commercial advertisements, rather than ability, training and education for their medical treatment, is fully covered.

The statistics contained in this book emphasize the need for such cooperation.

The costs of medicines as they apply to the charges made by the Physicians and Pharmacists are fully justified by the statements and records of this publication
WILLIAM C ANDERSON

DISEASES OF THE KIDNEY By W GIRLING BALL, FRCS and GOREFFREY EVANS, M.D., FRCP. Octavo of 424 pages, illustrated Philadelphia P Blakiston's Son & Co, Inc, 1932 Cloth \$7 50

Blakiston presents a four hundred odd page book about the kidney, written by a surgeon and a physician. It is about three parts surgery and one part medicine. The authors, particularly Dr Evans quote quite freely from the German and American literature, but in the main the book follows the English tradition. The two aspects of renal disease are well presented. The preface promises a "view point of a physician and surgeon in close collaboration". From this standpoint the book is disappointing. Perhaps another edition will do more to remind the physician how many times the mechanical skill and special knowledge of the urological surgeon will benefit his patients, and tell more of the real medical problems that beset the operating urologist.

TASKER HOWARD

METHODS AND PROBLEMS OF MEDICAL EDUCATION (Twentieth Series.) Quarto of 250 pages, illustrated New York, The Rockefeller Foundation, 1932

The Twentieth Series of this publication, issued in April 1932 is as usual very attractive and of excellent typographical make up. Much of the space is devoted to the Medical Schools of Yale and the American University of Beirut. A fine article on The Place of Preventive Medicine in the Medical Curriculum is reprinted from Public Health London. It would be well if subsequent volumes could be devoted to that most important subject
CHARLES A GORDON

GROWTH AND DEVELOPMENT OF THE CHILD. Part III Nutrition. Report of the Committee on Growth and Development, KENNETH D BLACKFAN, M.D., Chairman. White House Conference on Child Health and Protection. Octavo of 532 pages. New York, The Century Company (c1932) Cloth, \$4 00

Whether one gets satisfaction from this book depends on what he is seeking. If he opens it, expecting from its one word title and its source, that it will be a simple or a complete guide to Infant Feeding, he will be woefully disappointed. The amount of direct value to a general practitioner or a pediatrician in his practice is but slight.

However, if he reads a few lines that "nutrition implies, for present purposes, a study of the food substances and of the bio chemical processes which utilize them" and that is what he wishes, this book is an excellent presentation, not only of protein, carbohydrates and fats and the vitamins but also of Iodine Amino Acids, and the more and the less common minerals.

Moreover, in addition to what it tells, the Bibliography is extensive and you can go as far as you wish to original sources
W D LUDLUM

THE INSANITY PLEA By EDWARD HUNTINGTON WILLIAMS, M.D. 12mo of 169 pages. Baltimore. The Williams & Wilkins Company, 1931. Cloth, \$2 00

Throughout the law the question of insanity as a defense has always been a problem. Particularly since the time of the McNaughton case, law and medicine have been struggling to meet on a common ground, for apparently the concept of legal responsibility as understood by law and medicine is hard to harmonize.

Doctor Williams in an interesting manner discusses insanity as a defense. It is the result of his own experiences. In no manner is it a text book. The question of insanity as a defense is raised and discussed in the light of our medical information.

It is interestingly written
GEORGE I SWETLOW

BIOCHEMISTRY IN INTERNAL MEDICINE. By MAX TRUMPFER, Ph.D. and ABRAHAM CANTAROW, M.D. Octavo of 454 pages, illustrated. Philadelphia, W B Saunders Company, 1932. Cloth, \$5 50

The material presented in this book represents a good introduction to the interpretation of biochemical phenomena in internal medicine. The authors have devoted very little space to a description of technique in laboratory methods, but have on the contrary, devoted most of their efforts to a clinical evaluation of all biochemical methods. Their descriptions take on a didactic form and frequently eliminate controversial interpretations. The chapter on carbohydrate metabolism contains a description of the physiology of glucose utilization, significance of post-absorptive blood sugars, sugar tolerance tests, including glucose, levulose, and galactose, and a chemical differential diagnosis of the various glycosurias including dextrose, lactose, levulose, pentose and galactose. There is a chapter on protein metabolism containing a description of normal nitrogen metabolism and of clinical phenomena associated with the presence of pathological nitrogen constituents of nitrogen in blood and urine. Chapters follow on cholesterol, chloride, calcium and phosphate metabolism. A good part of the book is devoted to a discussion of the laboratory findings in diabetes, nephritis, nephrosis, hepatic disorders, gastric and pancreatic function.

The authors deviate from their general procedure by including descriptions of a number of methods employed in the study of hepatic and gastric disorders. They close with a valuable chapter on chemico-clinical differential diagnosis in which the important metabolic disorders are recorded with a listing of all the pathological chemical changes that are encountered in each of these diseases.

On the whole, the book is written in clear, simple style and is well organized. It is devoid of a bibliography and is intended to be a practical presentation of the subject to the student and physician.

WILLIAM S COLLENS

TEXT BOOK OF MASSAGE AND REMEDIAL GYMNASTICS. By L. L. DESPARD. Third edition. Quarto of 474 pages, illustrated. New York, Oxford University Press 1932. Cloth, \$6 00 (Oxford Medical Publications.)

In writing this third edition the author has given a work not only to the physio-therapist but also to the orthopedist.

A brief survey is made of the histology and physiology of the skin, muscles, cartilage and bone.

The work contains three chapters of beautifully illustrated anatomical plates covering every important detail of the skeletal and muscular systems, followed by a like chapter on the nervous system.

Massage movements are thoroughly dealt with including effleurage, stroking, massage a friction, petrissage, tapotement, vibration and shaking.

This is followed by two chapters describing the most modern methods and technique on Swedish remedial gymnastics.

Following this is worthy information to the orthopedist considering our recent epidemic of acute anterior poliomyelitis, namely, the re education of muscles, beginning with the facial, neck, and including all the groups in the body, then the correction of residual deformities is taken up thoroughly, including the various spinal deformities.

A good deal of ground is covered on the various deformities of the feet both congenital and acquired.

The final chapters deal with materials to be used in administering treatments such as compresses types of bandages and electrical apparatus.

The work is worthy of study by those who may prescribe as following sprains, fractures, paralysis, deformities and nerve lesions
JOSEPH H NEVINS



OUR NEIGHBORS



HEALTH ADMINISTRATION IN ARKANSAS

The June issue of the Journal of the Arkansas Medical Society contains the minutes of the 1932 House of Delegates, filling twenty-four pages, of which eight are on the relations of physicians to the State Department of Health and local administrators, including public health nurses. The subject was introduced in the report of the Committee on Health and Public Instruction of which the State Health Officer, Dr. C. W. Garrison, of Little Rock, is chairman. In regard to corrective clinics, Dr. Garrison reports:

"The early corrective clinics, usually tonsil and adenoid clinics, were not inspired nor organized by the health authorities, nor by members of the medical profession. They came about more or less logically as the result of a desire of the interested mothers of the State to have the children suffering with correctable defects given medical and surgical attention. An investigation on the part of the State Health Officer revealed that in almost every instance where clinics were organized by lay individuals unscrupulous and incompetent physicians were called in to do the surgical work.

"There is no law to prevent such a procedure. It, therefore, was felt that the only proper and logical agency was the State Board of Health. The following definite instructions were issued years ago and have been restated in writing and verbally many times.

"That the clinic is to be held only with the approval and under the auspices of the county society. In the counties where there are no societies, the practicing physicians control.

"That under no circumstances should the health personnel select the specialist or operator, this being left entirely with the county society, or physicians interested.

"That the physical examinations made by the health personnel shall not be accompanied with a diagnosis, but referred to the physicians for further determination.

"That a notice be sent to the parents directing that they confer with their family physicians.

"That reasonable fees be charged in accordance with the family's ability to pay.

"That it not be called a free clinic and the price each individual pays should be regarded as confidential.

"Clinics operated in this manner have afforded surgical service to thousands of seriously affected children who otherwise could not have received this service. Many others able to pay and did, and who have benefited by this service, probably never would have received this attention.

"The effect of these clinics has been to educate the parents to the necessity of having their children examined and corrections made when necessary, which has resulted in an increasing number going to the private physicians for examination and treatment."

Regarding free immunization, the report says "The Law directs that the State Board of Health make investigations as to the cause, prevalence, and distribution of communicable diseases and take such steps as may be necessary to ameliorate the same.

"The trained health officer is a specialist in the prevention of disease just as in any other branch of medicine. It, therefore, would seem that immunization of all classes against small pox, typhoid and diphtheria would be the duty as well as the professional privilege of the health authority.

"The medical profession of Arkansas is divided on this question. A number of the county societies, as well as many physicians outside of the societies, feel that it is not only the duty of the health authorities to do this work, but that it offers great relief to the medical profession in caring for many who will not or do not pay for the service, and ultimately results in increasing revenue due to stimulation of general desire for the service. On the other hand, another group is actually insistent that this practice is an infringement on the rights of the general practitioner and tends to alienate the public from the old established custom of depending on the private physicians for medical care, or in other words, tends to promote State medicine.

"This fact must not be overlooked, however, namely, that there is an increasing demand on the part of the public to have general immunization against the above enumerated diseases. A spirit of fair play and full cooperation must obtain on the part of the medical profession. This applies not only to the immunization question, but involves a prompt reporting of notifiable diseases to the health authorities, the filing of birth certificates, the signing of death certificates, and proper instructions to the patient and family members as to the proper precautions to avoid infection. The responsibility reaches even further than this. Hygienic and sanitary environment is a matter which should concern every physician; he, more than anyone else, can contribute to the improvement of the same."

The three associates of Dr. Garrison gave a written report opposing the non-pay feature of

(Continued on page 990—adv. xii)

It's QUICK ACTION

PREVENTS DEFORMITIES—

NO antiricketic substance will straighten bones that have become misshapen as the result of rickets. But Mead's Viosterol in Oil 250 D can be depended upon to prevent ricketic deformities. This is not true of all antiricketic agents, many of which are so limited by tolerance or bulk that they cannot be given in quantities sufficient to arrest the ricketic process promptly, with the result that the bones are not adequately calcified to bear weight or muscle-pull and hence become deformed.

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BUILDS FOR THE YEARS AHEAD

(Continued from page 988)

the clinics and immunizations. In the discussion
Dr. E. H. Hunt said:

"The wholesale mutilation of children in the
public schools, etc., is to be condemned by all of
us. He says the State Office isn't back of that.
The county health nurse in my county said she
was instructed to attempt to get up such a clinic
in Johnson County. The doctors in Johnson
County didn't back her in any way nor will we.
So far there have been no clinics and there will
not be any in Johnson County wherein the doc-
tors are connected with it. The nurse tells me
she has been in service for several years, and
before coming to Johnson County, she thought
the doctors should do the immunization, but she
had been instructed to do it. Dr. Horner of
Coal Hill said she knocked him out of \$600
during this past year.

"In Morrilton the other day, the county health
nurse received patients right there in the court-
house. The State Board of Health undoubtedly
knows about all this, and it is directly antagon-
istic to the doctors of the State of Arkansas."

Dr. C. E. Dungan said:

"Aside from the financial part of vaccination,
I don't believe the doctors will ever starve to
death because they don't get to vaccinate chil-
dren. I personally would like to get rid of that
part of my practice. I have helped to conduct
some clinics, especially following the flood of
1927, for typhoid immunization. The thing that
I saw that I thought was the most hazardous thing
about vaccinating against typhoid was the use of
those serums that may produce a reaction where
there was a lack of understanding of the physical
fitness of the patient to be vaccinated. I noticed
so many nurses, and even have seen some doctors,
give typhoid vaccination to tuberculars that pro-
duced a very profound reaction, and in some
cases, I thought, caused a reactivation of the
condition, a reaction that produced active tu-
berculosis when otherwise it may have become
quiescent. I think that is to be condemned, be-
cause the nurses are not acquainted; they give
little children the same size doses as adults."

A committee on an investigation of public
health administration had been working for a
year and submitted a report which said:

"During the investigation much objection was
found to the activities of the health agencies.
The activities objected to may be briefly stated
as follows:

"1. The free immunization of large numbers
of people against typhoid and diphtheria with-
out attempting to differentiate between those able
and those unable to pay for such services.

"2. The activities of unsupervised County
Health Nurses.

"3. The practice of curative medicine by full-
time salaried health officials.

(Continued on page 991—adv. xiii)

(Continued from page 990—adv. xv)

"4. The conducting of tonsil-removing and other clinics without consultation with physicians resident in the locality where the clinics are held.

"Of these, the greatest part of the objection was to the immunization program, and a minor part of the actual practice of medicine by health officers and nurses, and the manner in which the clinics were conducted.

"In fairness to the health authorities it was found that in certain counties the health work has been approved by the county medical society. The committee is convinced that these counties are in the minority.

"The reasons given above, the resentment of physicians to the activities of the health authorities in some of the counties of the State, is a real menace to all of the health program. It is further convinced that this resentment is growing rather than subsiding.

"We believe that plans should be perfected by the Board of Health whereby the physicians of the different counties may, if they wish, have active participation in any health program that is instituted. We believe that the physicians can be utilized in the examination of school and pre-school children for remedial physical defects. We would recommend that, in those counties, where objection has been raised to the wholesale immunizations by health nurses, this work be done by the physicians.

"Your committee would recommend that county medical societies actively participate in the management of tonsil-removing and other clinics. We think that there is a demand for such clinics and other clinics, and that they will be held regardless of whether the physicians of the county participate or not. To this end it would be wise for each society to establish general rules providing for such clinics and give publicity to them for the guidance of Parent-Teacher and other interested organizations. As outlined by its Secretary, your committee has not found any defects in the policies of the Board of Health for management of such clinics."

Dr. Garrison and his associates made a supplementary report which embodied the suggestions of the Council and proposed a plan for the cooperation of the medical profession with the Department of Health in regard to clinics. The essential features of the plan are as follows:

"Since conditions vary widely in different sections of the State as to population, accessibility, economic status and adequacy in number of physicians, that the plan be modified to meet the needs of each county as determined by the physicians therein and the State Board of Health.

"That every effort be made by the health personnel under the direction of the State Board

(Continued on page 992—adv. xiv)

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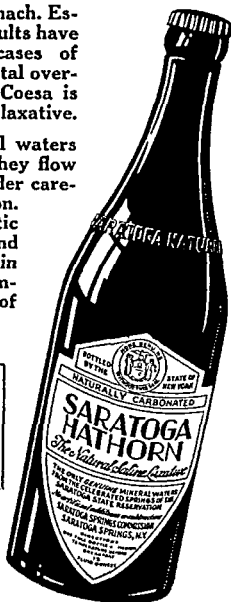
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(Continued from page 991—adv. xiii)

of Health to keep the physicians advised as to the health program.

"That the State Society requests and urges its members to cooperate to the fullest extent in promoting the health program, and where possible attend and participate in any clinics or group meetings occurring in their community.

"That publicity precede the holding of immunization clinics, setting out that they are to be held for the benefit of those who are unable to pay for same and that all be urged to secure immunizations from their family physicians.

"That the County Society be requested to authorize one or more of its members to be in attendance.

"That the State Society request the physicians of each county to fix a nominal immunization fee for those unable to pay the regular professional fee and offer free service to those who are unable to pay, and that biologicals be furnished the physicians through the local health personnel at the State Board of Health contract price for the under-privileged group.

"That all physicians fill out record cards to be furnished by the State Board of Health and filed with the local health personnel as a matter of permanent record for school use and other purposes.

"That corrective clinics—orthopedic, eye, ear, nose and throat; fact-finding, etc. be held in accordance with the prescribed policy of the State Board of Health as approved by the Council."

This report was unanimously adopted as the public health policy of the Arkansas Medical Society.

GRADUATE COURSES IN WISCONSIN

The June issue of the *Wisconsin Medical Journal* has the following description of a course in Pediatrics, sponsored by the State Society:

"An attractive opportunity for taking a post-graduate course in Pediatrics near at home will be offered by the Society this summer to physicians in the southeastern counties. A six weeks' course will be conducted at five centers under the leadership of Dr. Wayne A. Rupe of Washington University, St. Louis, Missouri.

"This is another in the series of post-graduate courses which have been sponsored by the Society in cooperation with the University of Wisconsin Medical School and the University Extension Division.

"The meetings will begin during the week of July 11 in the following cities:

"Milwaukee (2 classes), Racine, Waukesha, Kenosha, Burlington.

"The meetings in each center will be held on the same day each week and at the same hour and

(Continued on page 993—adv. rv)

(Continued from page 992—adv. xiv)

place. The arrangements for each group will be determined with reference to the desires of the greatest number of physicians registering. All registrants will be informed well in advance concerning these local arrangements.

"1. Discussion relative to newer methods of prevention and treatment of certain contagious diseases.

"2. Discussion of newer ideas about the breast feeding and the artificial feeding of the normal infant through the first year of life.

"3. Causes and treatment of the various types of infantile colic, including the so-called nervous colic. Diagnosis and treatment of pylorospasm, pyloric stenosis.

"4. Causes, prevention, and treatment of diarrhea in infancy. Treatment of the premature and immature baby. Treatment of the marasmic.

"5. Treatment of infantile skin diseases, eczema, the diaper rash, etc. Treatment of asthma. General discussion of the tonsil and adenoid problem.

"6. Treatment of pyelitis, enuresis, nephritis, and nephrosis. In discussing clinical cases the handling of many physical diseases as well as the handling of psychic disturbances and behavior problems will be taken up. The following disturbances will be touched upon: breath holding, nervousness, intestinal parasites, anorexia in older children, the underweight child, thumb-sucking, convulsions, etc."

EX-PRESIDENTS' CLUB OF MISSISSIPPI

The June issue of the New Orleans Medical and Surgical Journal contains the following account of the Ex-Presidents' Club of the Mississippi State Medical Association.

"One of the interesting side-lights of the State Medical Association meeting was the annual banquet of the ex-presidents. This took place at 12:30 on Wednesday in the Tea Room of the Robert E. Lee Hotel, where an excellent chicken dinner was served. The chairman presides in the order of sequence. Dr. D. J. Williams of Gulfport, president in 1912, was the presiding officer. After dinner, Dr. Williams called on a few of the members for remarks beginning with Dr. P. W. Rowland, Oxford, president in 1895, and the oldest member present. Dr. Rowland has been a member of the State Medical Association for 49 years, and has attended nearly every meeting. Four years ago at the organization of this club, he issued a challenge to the ex-presidents to meet him every year for the next ten years. He certainly looks good for the balance. Chairman Williams next called on Dr. John C. Culley of Oxford, as the youngest ex-president, his term of office expiring with this meeting. Dr. Culley is an old Jackson boy, son of our Dr. B. L. Culley, and has made good as an executive officer

(Continued on page 994—adv. xvi)

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(Continued from page 993—adv. xv)

of the association. Dr. W. S. Leathers, formerly dean of the Medical Department of the University of Mississippi, and for many years executive officer of the State Board of Health, now dean of the Medical Department of Vanderbilt University, was next called upon and made a very enjoyable talk. Dr. James M. Acker, President-Elect, whose administration begins at the close of this meeting, was next called. He expressed his appreciation for the honor conferred upon him and asked the advice and assistance of his fellow club-men in carrying out the work of the new year. Another veteran, Dr. H. H. Haralson of Vicksburg, president in 1896, was called on and responded with some reminiscences of former days.

"This is the fifth meeting of the Ex-Presidents Club, which has shown a remarkable attendance, the last three years showing the high water mark of 80 per cent present. Considering their ages and residences in many states, this certainly is a remarkable showing of continued interest on the part of the ex-presidents, and should be an example well worthy of emulation by the younger members."

MENTAL HYGIENE IN PENNSYLVANIA

The Medical Society of the State of Pennsylvania has a Committee on Medical Hygiene. Dr. J. Allen Jackson is Chairman. The objects of the Committee are set forth editorially in the May issue of the *Pennsylvania Medical Journal* as follows:

"1. Arrange programs on mental hygiene before:

"(a) County medical societies, stressing neuroses and psychoneuroses this year.

"(b) The woman's auxiliary of each county medical society.

"(c) Parent-teacher associations, federated clubs, service clubs, etc.

"(d) Radio audiences, by encouraging and promoting the broadcasting of mental hygiene subjects in the central and western sections of the State under the auspices, respectively, of the Dauphin and Allegheny County Medical Societies.

"(e) Medical readers, by preparing editorials for the *Pennsylvania Medical Journal* on Mental Hygiene and Psychiatry.

"2. Arrange, if possible, for one paper on mental hygiene before the General Session of the Medical Society of the State of Pennsylvania, and for a combined symposium on surgical and psychiatric problems, before either the Section on Surgery or the Section on Medicine.

"3. Request county, municipal, and State men-

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tal hospitals, institutes, and schools to arrange a clinic for the county societies in their hospital or school district at the hospital, school, or institute.

"4. Stimulate our medical colleges to the need of further practical training of medical students in psychiatry through clinical and didactic lectures and during internship training

"5. Procure the cooperation of our general hospitals in treating certain bordering cases.

"Speakers for such a program may be procured through the cooperation of the Pennsylvania Mental Hygiene Committee of the Public Charities Association and the members of the Mental Hygiene Committee of the State Medical Society, which has augmented its membership to include all neuropsychiatrists in the eastern, central, and western sections of the State"

JOURNAL OF CALIFORNIA

The June number of *California and Western Medicine* contains the minutes of the House of Delegates of the California Medical Association, held on May 2, 1932. The finances of the Journal are described by the editor as follows:

"During recent years, in round figures, the advertising income was as follows: In 1928 the advertising income was \$34,830; in 1929 (when the Journal advertising rates were raised 20 per cent) the advertising income reached \$40,098 (a gain of \$5,268); in 1930, was \$37,070 (a loss of \$3,028); in 1931 (our present fiscal year), was \$33,561 (a loss of \$3,509)."

The treasurer reported on the finances of the Journal as follows:

"The income of *California and Western Medicine* from advertising was \$33,561.19; \$3,500 less than in 1930 due to cancellation of advertising contracts; from subscriptions (including allocated county society dues of \$9,803), \$12,440.50; and from miscellaneous income, \$180, making total income \$46,181.64.

"The expense of Journal production and distribution totaled \$28,653.81; selling expense, \$5,802.39; salaries of the editors and one-third of the clerical force, and miscellaneous general expense amount to \$15,252.10; a total of \$49,708.30. Journal loss of \$3,526.61, a loss somewhat less than the direct loss in advertising for that year."

The budget of expenses that was adopted included the following items for the Journal:

Salaries, editorial	\$7,400.00
Salaries, clerical (one-third that of the office staff)	2,435.00
Publication expense	30,000.00
Commissions to local advertising agent	3,500.00
Commissions to A.M.A. Cooperative Advertising Bureau	2,500.00

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Springs at Vichy also owned by the French Government such as Grande Grille and Hôpital which are imported by these Agents but these are not sent here in as large quantities as the "Vichy Célestins." This Agency also imports the Vichy Salts and Vichy Pastilles which are called Products of Vichy-Etat because they are made from the Salts extracted from the waters of these government-owned Springs. Medical Profession of the United States annually sends many patients for the treatment of diseases of the stomach, liver, etc.—See page v.—*Adv.*

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ARTIFICIALLY INDUCED FEVER IN THE TREATMENT OF DISEASE

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DURING the last five years a few groups of investigators have undertaken an intensive study of fever as it occurs naturally during the course of an infectious disease, as well as that type artificially induced for therapeutic effects. Although there has been a decided change in the attitude of physiologists and physicians towards the value of fever, its significance is still not appreciated. During the vogue of the administration of febrifuges, a body temperature elevated above normal was considered as a passive factor, and the result of an increased heat production of no particular value. Because of the disagreeable sensations experienced by the patient, antipyretics were prescribed in an attempt to make him more comfortable. Such practice is still customary with certain physicians. Cases of extreme hyperpyrexia should so be treated, but the rationale of physical means of dissipating the heat seems superior to the use of drugs. In our present concept of fever we should consider it to be a natural active factor produced within the body to aid in destroying an infectious agent and to repair tissue injury from any cause. Fever is undoubtedly as important as phagocytosis, or antibody production, in the defense mechanism of the body. Furthermore, it may be fundamentally concerned with, or responsible for, the other processes associated with the production of a local or general immunity.

Although the exact cause of increased heat production, or of decreased heat loss, is not well understood, much information has been accumulated concerning its effects. Dubois¹ has studied the results of fever on metabolism, and has shown that, in general, the rate of metabolism follows van't Hoff's law; namely, that for every 10° C. rise of body temperature there is a 13% increase. The effect of temperature on phagocytosis is most interesting. Commandon² made moving pictures of leucocytes and noted that they creep faster

from 30° to 35° C. than from 25° to 30° C. At 25° C. he observed them to travel 9.6 microns per minute, while at 35° C. they moved 25.2 microns per minute. As the temperature of the body becomes elevated above normal, the physical property of the leucocyte changes from the gel toward the sol state, thereby becoming more permeable and able to ingest greater numbers of bacteria or other foreign particles. We have observed from the hourly examination of cervical smears an increased phagocytosis of gonococci during the course of an induced fever. Fenn,³ who analyzed the data of Madsen and Watabiki⁴ on the effect of temperature on the phagocytosis of bacteria, showed that the rate of phagocytosis is very nearly a logarithmic function of temperature.

One of the most significant effects of fever temperatures is its destruction of infectious agents by heat within the body. The more susceptible a virus is to changes in the temperature of its environment, the shorter the thermal death-time. We have studied the effect of fever temperatures on the spirochæte of syphilis, the gonococcus, and the tubercle bacillus, as well as on many other micro-organisms. It was found that *Treponema pallidum* is killed in vitro by a fever of 39° C. in five hours, by 40° C. in three hours, by 41° C. in two hours, and by 41.5° C. in one hour. The gonococcus was more resistant, but some strains were destroyed in five hours at 41.5° C. which, for the most part, is the exposure used by us in our clinical studies. Other strains were destroyed in from six to eight hours at 41.5° C., but a study of the hourly death rate as determined by reductions in plate counts showed that 99.9% of the organisms were killed during the first two hours at this temperature. At the lower fever temperatures (40° and 41° C.), the thermal death-time was correspondingly longer. The tubercle bacillus, however, is still pathogenic

for guinea pigs after two hundred hours' exposure to 41.5° C.*

Certain chemical changes in the blood constituents are affected by fever temperatures. Nasset, Bishop, and Warren⁵ observed in dogs that, with an increased respiratory metabolism, the CO₂ content of the blood was decreased, the blood sugar concentration fell rapidly, while the non-protein nitrogen concentration was increased. Other changes in the red and white cell count have been noted during fever, but different observers have reported dissimilar findings. The interpretation of such data is difficult because of a certain blood concentration due to fluids lost in the body during fever therapy.

There are five general methods for producing fever in man for therapeutic purposes: Radiant heat, hot water baths, foreign proteins, infectious agents, and the use of electrical energy. All of these methods depend upon heat, which must either be produced by and within the body, or supplied from without by some form of energy that is transformed to heat when applied to the body. The first is the use of radiant heat by exposure to hot air, with a temperature that can be withstood by the skin of the body. The air surrounding the body may be heated in various ways, but in all cases arrangements must be made to prevent heat losses. Many experiments on heating the bodies of animals by this method have shown that such a method is practical, although the peripheral structures of the body are heated first, and the heat is then conducted to the enclosed viscera.

The second method consists of conducting heat to the body by the use of hot water baths. The hot water not only elevates the body temperature, but the immersion also prevents heat losses. This method is impractical if the fever is to be maintained for several hours. Certain men have stated that this method is very depressing to the patient. Furthermore, the prolonged hydrostatic pressure from without may cause passive congestion of the abdominal viscera.

The injection of foreign proteins for stimulating febrile reactions in man is a common practice. Sterile milk, tuberculin, killed cultures of various micro-organisms, especially *B. typhosus*, and many other proprietary preparations are used with various degrees of success. The uncertainty of these agents in producing fever is well known, and, as a rule, they do not produce sufficient elevation of body temperature to be of great value. A second disadvantage is that toxic substances are frequently introduced, especially when vaccines are used, which may be injurious to the patient. The inability to control reactions that may follow such injections is a third undesirable factor.

The use of living infectious agents for the treatment of dementia paralytica, especially the

work of Wagner-Jauregg⁶ with *Plasmodium malariae*, has greatly encouraged the study of fever therapy. *Spirocheta morsus muris* and *Spirocheta recurrentis* have likewise been used for the fever treatment of paresis. Although the use of these agents has proven of value, their administration is accompanied by those disadvantages resulting from the use of foreign proteins described above. Their effects are uncertain, may be difficult to control, and likewise are disease-producing.

The employment of electrical energy for producing generalized fever is most desirable. We have used two methods that have been designated as "diathermy" and "radiothermy." Frequently both are designated as "high frequency" methods, and the induced elevation of body temperature is termed a "high frequency fever." Some men use the term "ultra high frequency" to differentiate radiothermy from diathermy. We employ the term "diathermy" for the method in which large, flexible, block tin electrodes are bound anteriorly and posteriorly over the thorax of the patient, and a high frequency current (300 meters) is passed through the body. Due to the resistance of the body to the passing current, heat is produced locally between the electrodes, and is conducted through the other tissues of the body by the circulation of the blood.

We designate "radiothermy" as the method used for the heating of the body in a field of short radio waves that are "broadcasted" from two condenser plates. The energy is derived from a short wave (30 meters) oscillator, designed especially for this method of heating. We have previously described this equipment and method. The heating in radiothermy depends upon the same fundamental principle as described above in the case of diathermy, except that the radio waves induce electric currents within the body from which the heat is produced. The accepted theory of heating is that the body furnishes resistance to the conduction of current between the surfaces adjacent to the opposed plates. At each alternation of polarity of the plates, the corresponding polarities are induced upon the adjacent boundaries of the interposed body, and current is conducted through the material for a brief interval.

Satisfactory fevers may be produced with either method. No specific effects with either procedure have been demonstrated, other than heating. However, in the case of the short wave oscillator, greater heating is possible at certain frequencies, depending upon the conductivity of the body or solution to be heated.

The advantage of diathermy over radiothermy is primarily one of economy. The short wave oscillator is more complicated and expensive equipment. The use of radiothermy is more comfortable for the patient because he is free to move about in the chamber used to prevent heat loss, and his respiratory movements are not inter-

* These observations on the tubercle bacillus were made by Peter Cohen, part-time Research Fellow in the Division of Radiology.

ferred with as in diathermy, where electrodes are bound to the chest. The body is more uniformly heated in a field of short radio waves. Burning of the skin is possible with both methods. If, during a diathermic treatment, the edges of the electrodes are not in direct contact with the skin, arcing occurs. When the patient is restless the electrodes may become maladjusted with the same result. If measures are not taken to prevent the accumulation of excessive sweating on the body of a patient treated with radiotherapy, the concentration of short waves in the drops of sweat and the resultant heating cause burning of the skin. We experienced some difficulty with this factor when we attempted to maintain in a patient a fever of $+1.5^{\circ}\text{C}$. for five hours.

In our experience the nursing care has been simpler with diathermy than with radiotherapy. However, this disadvantage is one that can be readily overcome by rearranging the equipment to suit our needs. The use of either of these electrical methods for the production of a therapeutic fever is superior to any of those previously mentioned. The advantages are obvious. The height of the temperature can be controlled at will by increasing or decreasing the amount of energy supplied, or by adjusting whatever arrangement is used to prevent heat loss. Moreover, no toxic substances are introduced within the body.

Previous to our studies on the production of fever in man, considerable time was spent determining the maximum body temperature that can be withstood safely by animals. It was observed that 42.5°C . was safe for normal dogs, rabbits, and guinea pigs, if the temperature was not maintained at this level for more than five hours. Similar observations on man indicated that a rectal temperature of 41.5°C . was safe for a five-hour interval, providing, of course, the patient was not suffering from some severe lesion of the cardiovascular system, the kidney, or the lung. In some instances a temperature of 41.5°C . has been maintained in our patients for seven hours. Occasionally the rectal temperature has registered 42°C ., but for only brief intervals during the treatment.

Description of Methods Used in Diathermy and Radiotherapy

The nude patient is placed in a celotex box, which prevents heat loss. He lies on a mattress that fits into the lower half of the box. The upper half is shaped like an octagon and is 18 inches shorter than the lower half, being hinged to the lower half over which it fits tightly. The patient's head is allowed to project through a semicircular opening in the short end of the upper half of the box. Eight carbon filament lamps are placed in the cover (the upper half) to heat the air enclosed to a temperature of from 45° to 50°C . This compensates for the loss of heat from the body through radiation.

Block tin electrodes, 28 cm. \times 46 to 60 cm., are bound by a many-tailed surgical binder to the anterior and posterior thoracic wall. The electrodes are then connected to a diathermy machine with a capacity to pass 5,000 to 6,000 milliamperes through the patient's trunk between the electrodes. The lights in the box are turned on, and a recording rectal thermometer is inserted. The pulse, respiration, and blood pressure are taken before beginning the treatment. The pulse and respiration are taken at ten-minute intervals during the treatment, as well as the rectal temperature, to check the recording thermometer. The blood pressure is taken as frequently as necessary.

When the temperature has reached 41.5°C ., which requires from one hour and twenty minutes to two hours, the current is turned off. The electrodes are removed from the trunk of the patient, and he is left lying in the box with the air temperature kept at a level sufficient to prevent a lowering of the body temperature. The patient's rectal temperature is maintained at a practically constant level of 41.5°C . for five hours.

At the end of the fastigium of the fever, defervescence is accomplished by opening the cover of the cabinet and exposing the body to a current of cool air blown across it with an 18-inch oscillating electric fan. The body returns to normal in from two to three hours. As the fever subsides, the pulse and respiratory rate likewise return to normal.

The procedure used for radiotherapy is similar. The cabinet for the patient has to be constructed differently to prevent energy losses and burns from metals should they come in contact with the patient. The shape of the box is practically the same as that used for diathermy. The condenser plates are built within the side walls of the box, being covered externally and internally with celotex. The patient lies on a hammock of interlaced tapes or on canvas, so that there is an air chamber below, as well as above, the body. Warm air is circulated around the body to evaporate the sweat during the treatment. The cabinet may be placed on top of the oscillator, or be adjoined to it as a separate unit, which necessitates longer leads, thereby decreasing the input of energy for the patient. One cannot use a recording thermometer in such an electrostatic field; therefore, rectal temperatures are taken with a mercury thermometer at ten-minute intervals during the treatment. The current must be turned off to make this observation.

Before patients are subjected to fever therapy, it is important that a very thorough physical examination be made. This is especially true in arthritis, where a possible focus of infection may be discovered and easily removed, providing relief without such therapy. When it has been determined that the patient is a suitable risk for fever therapy, the general preparation is as follows: A cleansing soapsuds enema is given the night before

the treatment. The patient is allowed to have his breakfast, and two hours before the treatment two grams of sodium bromide are given per mouth. As soon as the patient's temperature begins to rise, 0.325 grams of chloral-hydrate are given per mouth. If the condition of the patient demands more sedative, 0.650 grams of chloral-hydrate are given two or three hours later. Some patients require no sedative, while others require more than prescribed above. Considerable experience with various narcotics has demonstrated that none are very satisfactory for this purpose. Deep narcosis is undesirable. The most satisfactory effect results from the amount of sedative that causes short naps and tends to overcome apprehension, giving the patient the impression of a brief fever period. Almost all drugs cause a preliminary period of excitement before the desired narcosis. They likewise depress respiration and blood pressure. Normally, in the absence of drugs, a delirium is frequently noted, especially between 40° C. and 41° C.

Warm fluids, such as hot water, tea, milk, etc., are given the patient ad libitum during the treatment. Fluids are forced, if necessary, to replace losses from perspiration. After the treatment is over, cold fluids are given per mouth, and cool currents of air aid in lowering the temperature to normal. The temperature of the patient should be normal before he leaves the treatment room, and observed at hourly intervals for a period of four hours after he has been returned to the Division. We desire to have ambulatory patients remain in the hospital for twenty-four hours after treatment.

Occasionally we have found it necessary to discontinue the treatment. This has been due, usually, to a low blood pressure. Cyanosis of the fingers and lips, as well as a beginning pallor about the mouth, serve as a warning of inadequate peripheral circulation. At first the blood pressure (systolic and diastolic) rises slightly with the temperature, but when the fastigium, 41.5° C., is reached it usually declines, and, if there are no complications, is rather uniform throughout the fever period, registering a systolic of from 80 to 70 with a diastolic pressure of from 60 to 50 millimeters of mercury. Occasionally lower levels have been recorded, with no serious results. Frequently the diastolic sound may be heard to zero. In one or two instances it has been necessary to discontinue the treatment because the patient became unmanageable, and more sedative was contra-indicated. Decreasing respiratory rate is frequently a warning sign. The temperature may rise rapidly, due to the failure of the blood and other tissues to be cooled by the inhalation of air at room temperature.

This type of fever therapy is distinctly a hospital procedure, and requires experience to insure safety and as much comfort as possible to the patient. Some patients complain considerably

about the severe heat, while the more intelligent patients tolerate the treatment very satisfactorily. A very competent nurse is extremely important and can save the physician in charge of such therapy much valuable time. A quiet, darkened room, well isolated, is preferable.

Types of Diseases Treated and Results

The type of disease treated for the most part has been that of a chronic, afebrile nature with a high morbidity. A few of the patients have been incurable. In general, they have been those who have failed for several years to respond to other types of therapy. The majority of those subjected to induced fever therapy were suffering from either dementia paralytica, sub-acute or chronic gonorrhea, or arthritis. A few miscellaneous cases, such as multiple sclerosis, tumors, encephalitis lethargica, and undulant fever, have been treated.

Our results in the treatment of paresis have been very gratifying. The percentage of complete remissions and improved cases compares favorably with results obtained from chemical and malaria therapy^{8, 9 and 10}. The most significant difference is the decrease in the percentage of deaths, which, with diathermy and radiotherapy, is much smaller than that observed in other forms of therapy. Perhaps the best results have been obtained with cases of gonococcal infection of the lower birth canal. Many cases that received chemical treatment for comparatively long periods before fever therapy, and had a long series of cervical smears positive for *Neisseria gonorrhea*, became negative after one treatment at 41.5° C. and remained negative except when reinfection occurred. The fever treatment of arthritis has, in some cases, been very striking, while in others no improvement could be noted. The infectious or rheumatoid arthritis has, in general, responded best to the use of high frequency fevers. Gonococcal arthritis has usually resulted in cures, although in one case there was complete failure even after seven hours at 41.5° C. It was determined later that the thermal death-time of the gonococcus, isolated from the joint in this case, was much longer than the fever given the patient.

Too few cases of other diseases have been treated to make statements concerning the value of such treatment. One important improvement shown by nearly all cases is a gain in weight of from 20 to 30 pounds.

To date, 180 treatments over a period of about two years have been given to 122 patients. Only two fatalities have occurred. We, therefore, do not consider the risk greater than that from an abdominal surgical operation. The first fatality occurred in the second patient of the series treated. She was a 25-year-old colored girl, who had recently recovered from an alcoholic psychosis. She was suffering from syphilis of the central nervous system. After an hour at 42° C. (rectal

cause there is quite an amount of pheochrom tissue present in connection with the sympathetic nervous system, outside of the adrenal gland proper.

The function of an endocrine gland can be determined by various methods:

1. By preparation of extracts or isolation of the active principle, the properties of which are established by the usual physiological procedures.
2. By removal of the gland in animals and observation of the deficiency symptoms.
3. By clinical and morbid anatomical observation of cases in which nature supplies experiments often so much more illuminating and clear cut than some of the too artificial laboratory procedures.

The effect of medullary extracts and their potent principle: adrenalin or epinephrine has been the subject of exhaustive studies ever since Oliver's and Schaefer's time in 1894, yet many new facts are constantly brought out by the efforts of physiologists and biochemists. It is impossible to do justice in a brief survey to the wealth of interesting information available. All I can attempt to do here is to enumerate some of the salient points.

Adrenalin is produced and discharged under stimulation of the sympathetic nervous system and its main effect seems to be the stimulation of the sympathicus and of those organs or tissues which function under sympathetic control. Yet the effects produced by adrenalin are dependent upon a great many other factors which if overlooked are likely to obscure the picture. The effect of adrenalin is determined first of all by the medium which carries it to the tissues. Changes in the pH, in the electrolyte or lipoidal content of the blood accentuate or depress, occasionally even invert the effects produced by adrenalin. The susceptibility of the various tissues to adrenalin stimulation also varies considerably, as the result of the momentary state of nervous tension and according to physico-chemical conditions which might be the result of functional, nutritional or pathological changes.

Under ordinary physiological circumstances adrenalin elicits contraction of the heart muscle, the smooth musculature of blood vessels with exception of the coronary arteries, and most of the other smooth musculature with the exception of that of the bronchi and intestines. The latter relax as the result of adrenalin action. Whether adrenalin is instrumental or even active in the maintenance of normal vascular tonus, has been questioned by many physiologists. Clinical and pathological evidence, however, strongly supports such a contention.

Besides its effect upon muscular tonus and circulation, the most striking effect of adrenalin is its relation to carbohydrate metabolism. Injection of adrenalin, particularly if given subcuta-

neously, mobilizes sugar from its depots, increases the amount of the blood sugar, and may yield glykosuria. The antagonism between adrenalin and insulin is one of the most striking physiological observations of recent years. It seems that the injection or increased discharge of insulin, while depressing the bloodsugar level, elicits an increased discharge of adrenalin which thus prevents the development of hypoglycemia. A deficiency of bloodsugar invariably occurs if insulin is injected into animals the adrenals of which had been removed or were incapacitated by sectioning of the splanchnic nerves or ligation of the adrenal veins. The proper balance of carbohydrate metabolism thus depends upon a harmonious concerted function of pancreas and adrenal glands.

Search for the active principle of the adrenal cortex remained longer unsuccessful. In 1907 Lohmann demonstrated the presence of large quantities of cholin in the adrenal cortex and I showed experimentally 20 years ago that cholin is actually discharged from the adrenals through their veins upon stimulation with pilocarpin. Yet cholin did not relieve the symptoms of adrenal insufficiency and thus did not fulfill what the adrenal cortical hormone was expected to do. Various authors abroad had demonstrated during the last 5-6 years that remarkable physiological effects could be obtained with the use of crude cortical extracts. In 1927 I succeeded in isolating the cortical hormone by a method similar to that previously used with success for the isolation of insulin. I suggested the name *interrenin* for this hormone. Subsequently other authors who were engaged in similar research obtained the same substance by using the same or somewhat different methods of extractions. They have described *interrenin* under various other names such as *cortin*, *corticin*, *interrenalin* or *cortical hormone*.

Interrenin is indispensable to life. It relieves the symptoms of adrenal cortical insufficiency and is capable of resuscitating animals practically moribund after removal or destruction of their adrenal cortex. In view of the fact that our knowledge of *interrenin* dates back only a few years, the information available about the various physiological properties of this hormone is still scanty. We know, however, that it is instrumental in relieving muscular fatigue; it is a potent factor in the processes of oxidation in the tissues. It affects nitrogen and sulphur metabolism. It regulates fat and particularly cholesterol metabolism and it bears some still quite obscure relationship to the function of the sex glands. In regard to adrenalin a definite antagonism of these two hormones seems to exist which relates to their effect upon blood pressure, cardiac action and fat metabolism, but apparently does not prevail in connection with some of their other activities.

All these data were made available by experiments in which interrenin or similar cortical preparations were injected into adrenalectomized animals or administered to patients suffering from cortical insufficiency.

Removal of both adrenal glands in animals produces symptoms of disturbed metabolism, low blood pressure, anoxemia and an initial rise followed by a terminal fall of temperature. Destruction of the glands by pathological processes is by no means rare and gives us the opportunity of studying adrenal insufficiency on homo under conditions more illuminating than in laboratory experiments. The most striking form of acute adrenal insufficiency is that due to hemorrhage which is quite frequent in the newborn, but occurs also in older children and occasionally in adults. Thrombosis of major blood vessels with subsequent anemic or hemorrhagic necrosis of the glands is observed in infectious conditions. More often do we find, particularly in pneumonia, circumscribed areas of softening with diffuse degenerative changes of both cortex and medulla. The clinical symptoms accompanying such impairment vary according to the extent of the lesion and to the rapidity of its development. Another factor to be considered is that of age. Hemorrhagic destruction of the glands in the newborn elicits a syndrome which I have called pseudo-pneumonia neonatorum. The striking clinical picture consists of: rapid respiration suggestive of pneumonia yet with negative chest findings, high temperature and occasionally petechiae on the skin. Examination of the blood reveals a low blood sugar and increased urea nitrogen. The clinical symptoms in older children or adults in sudden destruction of the adrenals are often identical. The respiratory embarrassment, however, may be less accentuated, particularly if the lesion of the cortex is not quite diffuse.

An altogether different clinical picture, well known, under the name of Addison's disease is obtained if the destruction of the gland develops slowly and gradually, mostly due to chronic caseating tuberculosis, occasionally to gummatous or other inflammatory lesions. Without trying to describe a syndrome which is extensively discussed in every textbook, I want to enumerate but the cardinal features of this disease; loss of muscular power leading to complete adynamia, bronzing of the skin with pigmentation of mucous membranes, low blood sugar, high blood nitrogen and low blood pressure. It is impossible to definitely establish which of these symptoms are due to deficient phaeochrome function and which to disturbance of cortical activity. It so seems, however, that low blood pressure and blood sugar as well as hyperpigmentation depend upon lack of adrenalin secretion and decreased sympathetic tonus, whereas most of the

other symptoms seem to result from cortical impairment.

It stands to reason that besides complete or almost complete adrenal insufficiency, a good many cases occur in which cortex, medulla or both are affected to a minor degree and in which some of the symptoms mentioned stand out while others are not noticeable. The recognition and diagnosis of such cases confront us with the same difficulties as that of the form frustes of diseases affecting other endocrine glands.

The only way of recognizing these obscure conditions is by thorough study of the patient, according to the principles of modern endocrinology. We shall have to take into consideration all the facts which are experimentally or clinically ascertained as consequences of insufficient adrenal function. Foremost among these symptoms is asthenia, loss of weight, gastro-intestinal pain and functional disturbances, anemia, low blood pressure, hypoglycemia and increased sugar tolerance. The basal metabolic rate may or may not be affected. Lymphocytosis is present as a rule, sometimes with eosinophilia. Occasionally, higher figures for Urea N. and creatinin are obtained. Pharmacological tests with adrenalin or some of the alkaloids used in such tests show abnormal response.

Symptoms of adrenal insufficiency, to a less striking, but certainly not negligible extent are noticed in infectious conditions. A fall in blood pressure, accompanied as a rule by low blood sugar, indicates a decreased sympathetic tonus which is apparently accounted for by an injury of the adrenal medulla. Many a case of so-called cardiac failure in diphtheria, pneumonia and other acute infections could be identified as peripheral circulatory failure brought about by adrenal medullary insufficiency. Rapid respiration and other evidence of anoxemia observed in pneumonia, but also in other acute infections are directly referable to a lack of interrenin as a result of adrenal cortical failure. Muscular weakness, adynamia in acute infectious or toxic conditions or as the symptom of a chronic ailment is equally indicative of cortical failure. Pathological leanness, that is the inability to deposit fat, is often observed jointly with asthenia, fatigueability, low blood pressure and low blood sugar as the result of adrenal failure including medullary weakness and cortical insufficiency. Extreme cases of this kind which occasionally develop in adolescents or children were characterized by the appearance of precocious senility. The French and British authors who observed the first cases of this type described them under the name of progeria.

Besides hypofunction of either or both components of the adrenal gland the occurrence of hyperfunction of the same tissues is also to be expected. Hyperfunction of the adrenal medulla,

or the pheochrome tissue at large is present whenever an excess of these tissues is formed by some pathological process. I have reference in particular to the tumors of the pheochrome system, which are accompanied by a very characteristic syndrome in the majority of the cases observed. The outstanding symptom is high blood pressure which from time to time shows further excessive increase. This paroxysmal hypertension is accompanied by hypertrophy of the left cardiac ventricle, premature and severe generalized arteriosclerosis, development of renal changes with albuminuria and cylindruria and gradual retention of nitrogenous metabolites. Most of the cases observed went on to a comparatively rapid death, and the tumor of the adrenal or some other part of the pheochrome tissue was unexpectedly found at autopsy. There are some forty odd cases on record at present which bear out the relationship of pheochrome tumors to the syndrome of paroxysmal hypertension. In recent years moreover, the diagnosis of this condition was made in several instances during the life of the patient, and three of these cases, all in this country, have been operated on successfully by Mayo, Shipley and Porter. Surgical removal of the tumor brought about disappearance of hypertension and prevented further damage to the heart, arteries and kidneys.

It is logical to assume that large palpable tumors of the pheochrome tissue are not the only cause capable of producing an excess of adrenalin and an increase in blood pressure, followed by pathological changes of the blood vessels. The same might be expected in diffuse hyperplasia of the pheochrome tissue or even in the absence of demonstrable anatomical changes. The role of hyperadrenalinemia, as a possible cause for hypertension, has been considered for a long time, yet in spite of all the evidence produced in its favor this conception was not generally accepted, mainly for one reason: The methods worked out by the physiologist to demonstrate adrenalin even in extreme dilution failed to show a measurable increase of this substance in the blood of patients suffering from hypertension. In view of this failure hyperadrenalinemia was eliminated as a possible factor in hypertension, although it would have been wise to consider the possibility that the physiological methods used were perhaps inadequate or that adrenalin may circulate in the blood in a form or combination which is not amenable to detection by the ordinary methods. Recently, I have tried to call attention to the various fallacies involved in this attitude and attempted to stress the evidence, speaking in favor of adrenal hyperfunction as one of the main factors in the pathogenesis of hypertension. I described changes of the adrenal glands met with in hypertension which are so characteristic that their presence suffices to make the diagnosis of hypertension and arteriosclerosis

by mere microscopical examination of the adrenal glands. In my studies made on several thousand adrenals, I do not recall a single case in which these criteria have misled me. One of the most important among these is the muscular hypertrophy of the wall of the adrenal veins. These veins are provided for with a peculiar apparatus of smooth muscle bundles the contraction of which blocks the lumen and diverts the flow of blood from the main draining vessel to the collaterals. The latter connect the adrenal circulation with the diaphragm and kidney on the left side and the liver on the right side. In hypertension a tremendous hypertrophy of these muscles is found indicating excessive function, suggestive of an attempt to divert the discharged adrenalin from its ordinary course. Such diversion is likely to result in inactivation of the adrenalin before it reaches the heart and arterial circulation. These observations which I have published with Dr. Sherman a few years ago, have since been corroborated by Allen from the Mayo clinic. Another important fact, suggestive of adrenal hyperfunction in hypertension is the increase in the adrenalin load of the glands demonstrable by simple chemical methods. Determinations on 1,000 cases which I published more than twenty years ago, showed that adrenals from hypertensive cases contain 50 to 100% more adrenalin than those of persons with normal blood pressure. Quite recently I also described the frequent occurrence of microscopical nodules in the adrenal medulla in cases of hypertension which are well comparable to, altho much smaller, than the pheochrome tumors observed in paroxysmal hypertension.

Hyperfunction of the adrenal medulla is likely to produce also other symptoms besides hypertension. In recalling the physiological effects of adrenalin you will remember that adrenalin is the chief factor in the mobilization of sugar from its depots, thus producing hyperglycemia and glycosuria. Moreover, it acts as a stimulant upon the whole sympathetic nervous system and upon all the glands which are under sympathetic control. Adrenal medullary hyperfunction, therefore, has to be looked upon as one of the causes in general sympaticotonia, vasomotor disturbances, diabetes mellitus and so-called hyperthyroidism. I do not hesitate, particularly to maintain that a good many of the cases, habitually classified as hyperthyroidism are due to hyperactivity of the adrenal medulla or to relative insufficiency of the antagonist, the adrenal cortex. This applies especially to those cases in which definite enlargement of the thyroid gland is not demonstrable. In diabetes mellitus the prevalent conception considers only the pancreatic pathogenesis, yet anatomical studies have failed to confirm the consistency of the changes in the pancreatic islands, nor do these changes, if present, always impress us as sufficiently severe to account

for the disturbance in metabolism. An attempt to discuss here the pathogenesis of diabetes would lead us too far. Let me draw your attention only to the frequent coincidence of hypertension with diabetes and to the fact that the blood sugar level in hypertension is with very few exceptions noticeably higher than that of the average person of the same age. Without stressing the point too much I would like to say that an excessive function of the pheochromic tissue and subsequent increased sympathetic tonus is one of the factors which are capable of disturbing the normal utilization and storage of carbohydrates.

Hyperfunction of the adrenal cortex is a much more involved problem, at least for the time being. The first information pointing to the possibility of such a condition was obtained by observations made in cases of adrenal cortical tumors. These tumors are accompanied by a variety of symptoms, the manifold appearance of which brought about a good deal of confusion. The diversity of these symptoms was understood only when the age of the patient at the time of the development of the tumor was taken into consideration. If cortical tumors develop in the adult there is a change in the sexual character of the patient. In females, where these tumors are by far more frequent, they bring out masculine tendencies, such as development of hair in the face and all over the body, deep male voice and changes in the external genitalia, particularly enlargement of the clitoris. Malignant tumors are sometimes accompanied by loss of weight but more commonly by a deposit of fat which leads to excessive obesity. This is a constant feature of the benign cortical tumors. In males only a few cases have been observed in which feminization was suggested by loss of hair in the face and over the body, atrophy of external genitalia, obesity of female type and increase in size of the breast gland.

Cortical tumors may develop also in early childhood. Their first symptom is premature sexual development with growth of pubic hair and enlargement of the genital organs. Obesity is present as a rule. Finally congenital cortical tumors have been observed which were accompanied by hermaphrodite development of the genitalia. Thus cortical hyperfunction, if congenital, seems to express itself in hermaphroditism. It leads to precocious sex development in childhood and to an inversion of sex characters in the adult. It is worth while to mention that this adrenogenital syndrome occurs only in tumors of the adrenal glands and is never observed in the so called hypernephroma of the kidney. The latter, according to most textbooks, is derived from aberrant cortical tissue misplaced in the kidney capsule. This belief has been contradicted already on the basis of purely morphological evidence by Stueck and a few other

prominent pathologists. It appears to be definitely shattered by the difference in the biological effects of real cortical tumors and renal "hypernephromas."

The following case, observed sometime ago, beautifully illustrated that obesity is not merely concomitant to the adrenogenital syndrome but actually due to cortical hyperfunction.

A young woman, 23 years old developed extreme obesity. Her weight reached 335 pounds although dieting and liberal administration of thyroid medication were resorted to. Distribution of fat was fairly equal over the trunk, but her legs and forearms seemed to be comparatively slender. Another noticeable symptom was the growth of hair on face and body with masculine distribution of pubic hair. Her voice was deep. Amenorrhea was concomitant. A diagnosis of cortical hyperfunction was made due to either benign cortical tumor or bilateral hyperplasia. Dr. H. Koster explored upon my advice both adrenals. He confirmed the diagnosis of bilateral hyperplasia by inspection and removed the left adrenal, which was several times the size of a normal gland. The result of the operation was startling. The patient sustained a gradual loss of weight, which reached in eight months the figure of 145 pounds, so that at the last time I saw the patient her weight was only 190. This was achieved without dieting or any kind of medication. Her menstruation returned and she seems to be perfectly normal with the exception of her hirsute condition which did not change. This case which we reported but recently, seems to prove three points. First—that diffuse bilateral hyperplasia of the adrenal cortex produces similar symptoms as cortical tumors. Second—these symptoms are amenable to surgical treatment. Third—adrenal cortical hyperfunction must be considered as one of the endocrine causes of obesity.

The recent advances in physiology and pathology of the adrenals have favorably reflected upon the field of therapy. Thus therapy of adrenal disease is giving so much more promise than it was thought possible but a few years ago. We shall divide our therapeutic considerations in two parts, according to the use of either medical or surgical methods. The former are preferably resorted to in hypoactivity or insufficiency of the adrenals, while the latter find their place in the treatment of pathological hyperactivity.

The effectiveness of orally administered adrenal gland is at least questionable although some French authors report beneficial results of their treatment in the milder forms of chronic adrenal insufficiency. Better results are to be expected from the use of isolated hormones.

The use of adrenalin in medullary insufficiency, although advocated for a very long time, was limited partly by its toxicity and partly by its ephemeral effect. The introduction of epinephrine

as a substitute seemed to broaden the possibilities of therapeutic usefulness in view of both its lesser toxicity and its more lasting effect. A new drug, brought out recently in Germany, and marketed under the name of "Sympathol," is said to have quite a prolonged effect and to lack the toxicity of adrenalin. A few recent papers claim that Sympathol is effective also if given orally in contradistinction to adrenalin and ephedrine. Any one of these drugs, if administered timely and in sufficient quantity, might prove useful in combating acute medullary insufficiency. In chronic cases, however, the sympathetic tonus must be braced up also by other remedies, such as thyroïdin, strychnine, nicotine and high protein diet.

In cortical insufficiency administration of the cortical hormone appears to be the logical procedure. I found interrenin useful in case of acute cortical insufficiency. The first case of this kind properly diagnosed and successfully treated with interrenin has been published by myself and Dr. Greenwald four years ago. At present I am using interrenin quite extensively in cases of hyperthyroidism with striking effect. The patients thus treated gain weight, become much calmer and less apprehensive, their pulse rate and blood pressure quiet down and their metabolic rate recedes. I have not seen, however, any definite effect upon the thyroid gland itself, particularly in case of marked enlargement.

The value of the cortical hormone in Addison's disease has been shown by Rowntree and his co-workers from the Mayo clinic and a number of recent papers emphasized its value in case of adynamia. I firmly believe that interrenin will also prove of great value in acute infectious conditions inasmuch as it improves oxidation in the tissues, relieves anoxemia and strengthens the resistance of the organism against invading bacteria and toxic substances. It is to be hoped that further research on more extensive material than I have at my command will soon definitely establish the value of the cortical hormone in these and other conditions.

Hyperfunction of the medullary tissue is not amenable to effective medical treatment. In

pheochromic tumors surgery is the only remedy and an exploratory operation would seem to be justified in every case of paroxysmal hypertension. In the absence of such tumors, adrenalectomy has been resorted to by a few courageous surgeons. Their results were unsatisfactory, as could be expected. Two years ago Dr. Crile presented his experiences in this line, at a meeting of the New York State Medical Society in Rochester. In discussing his paper, I called attention to the fact that by adrenalectomy, not only the guilty overactive medulla, but also the cortex, its antagonist, is removed. Thus no really beneficial results can be obtained. The operation of choice seems to be the denervation of the adrenal gland either unilateral or bilateral. Severing of the numerous nerves which connect the adrenal medulla with the abdominal sympathicus invariably results in atrophy of the medullary tissue. The cortex remains unimpaired, as its function does not depend upon sympathetic stimulation. The operation leaves the main vein and the three arteries intact and otherwise completely liberates the gland from the surrounding tissue. At the meeting in Rochester I quoted two cases of so-called hyperthyroidism, both unimproved after thyroid surgery, which were operated on in the method described by Dr. H. Koster in Brooklyn. Both cases showed remarkable improvement with a return of blood pressure, pulse rate and basal metabolism to normal figures. Dr. Crile just recently reported on a series of some 140 cases upon which he has since performed this operation with highly gratifying results. I feel confident that adrenal denervation will be performed in the future in ever-increasing number on cases of hyperthyroidism, hypertension, diabetes mellitus, and other manifestation of pathologically increased sympathetic tonus.

Surgery will also find new activities in cases of cortical hyperfunction, either due to real neoplasms or to hyperplastic conditions. I would like to warn, however, against indiscriminate operation on obese hirsute women because both obesity and hirsutism might be due to other glandular troubles besides adrenal cortical hyperfunction.

THE MODERN CONCEPTIONS OF HAY FEVER

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HAY-FEVER is a seasonal state of allergy, occurring in individuals hypersensitive to the proteins of various pollens, with clinical manifestations usually limited to the mucous

membranes of the eyes and respiratory tract.

There are three distinct hay-fever types:

(1) The Spring Type (April 15-June 15) which is caused by the pollen from such trees as:

White Ash
Beech
White Birch
Elm
Shelbark Hickory
Sugar Maple
Red Oak
Black Walnut

This hay-fever season does not last so long for each patient as those suffering from the summer and fall types, and they are usually not sensitive to more than one or two of these pollens. All of the trees do not pollinate at the same time, but over a rather long stretch of time, and this is what makes the season seem so long—when you mention the months of pollination.

(2) The summer type (May 15-July 15). This is caused mainly by the pollen of grasses such as:

Timothy
June Grass
Orchard Grass
Bermuda Grass
Sweet Vernal
Rye
Plantain—a weed

Timothy and plantain are the most important plants during this season. They are more common in regions where hay-fever is found. This early hay-fever season is longer than the spring type. The symptoms of these patients are not so severe. In many instances they respond better to the treatment than the late or autumnal type.

(3) The fall type (August 15-frost). This type of hay-fever, also called the late hay-fever, is caused by the pollen from the low ragweed and high ragweed. These weeds grow in most areas of the United States in great abundance. The majority of hay-fever patients are massed in this group. If you claim that "Misery loves company," then these people certainly have company.

Contrary to the general opinion, the pollen of goldenrod is not a frequent offender. Its pollen is toxic to susceptible individuals, but probably only by direct inhalation. Its pollen granules are relatively few in number and viscid, and insect fertilization is common, as is true of some other conspicuous members of this group, such as the daisy and the asters.

The Inheritance Factor: Cooke and Vander Veer,¹ in a study of 504 nonclinic cases of hay-fever and asthma found the family history positive for some form of clinical hypersensitiveness in forty-eight per cent; Spain and Cooke,² in a similar study of nonclinic cases, but with findings in the family history restricted to the presence of hay-fever or asthma, demonstrated a positive family history in 270, or fifty-eight per cent. Adkinson³ and Balyeat⁴ have reported like results. The above studies lead them to believe that "the

sensitization is not directly inherited, although the tendency to spontaneous sensitization is inherited as a dominant character" in the Mendelian sense. Approximately one to two per cent of the inhabitants of any locality, all of whom inhale the pollen, are sensitized. This one fact is essentially positive and conclusive evidence against the theory of a true "pollen toxin" in the Ehrlich sense of the word.

It is generally agreed that in the blood of the spontaneously sensitive individual such as a patient suffering from hay-fever, there are present skin sensitizing "antibodies" or "reagins" which possess the ability to sensitize the skin of the normal individual upon local transfer. However in the hay-fever patient they have not been shown "muscle sensitizing antibodies" in the skin comparable to the "anaphylactic antibodies" as produced in the laboratory animal after antigen stimulation.

Testing and Classification: After a complete history is taken, and a physical examination is made, each patient is tested with extracts of the pollens of timothy, ragweed and plantain irrespective of whether or not the patient gives a history of early hay-fever or late hay-fever or both. In this manner, we detect the possible potential cases of either one, even though there are no positive seasonal symptoms.

Before going into the classifications of these patients, it is of great importance to discuss the methods of testing and the advantages and disadvantages of each method. In the Clinic, at the New York Post-Graduate Hospital, the intracutaneous method is used exclusively.

Skin Tests: Two methods of making skin tests are employed at the present time: the cutaneous or scratch method advocated particularly by Walker,⁵ and the intracutaneous method, advocated by Schloss,⁶ Cooke, Vander Veer, Spain and others. Both have a sphere of usefulness. The intracutaneous, the more delicate method, gives a greater number of positive reactions than the cutaneous, but has the disadvantage of giving a greater number of false positive reactions. This is no handicap, if the results are taken for what they are worth and what they actually indicate and are used only in conjunction with information gained by history, physical examination and special tests. In this manner they are useful and need not lead to serious error. The cutaneous reactions (scratch tests) have their greater sphere of usefulness in testing children (who react better than adults), and of patients sensitive to air carried substances. Scratch tests are also used for testing patients sensitive to agents such as turpentine, benzol, and other substances which might prove irritating or harmful if injected intracutaneously. Cutaneous tests often fail utterly in elderly individuals and in patients whose symptoms occur as a result of a general reaction (as

in food cases). In these, intracutaneous tests often give more marked and convincing reactions. In connection with the testing of drugs and all other toxic substances like rhus-toxicodendron (poison ivy), I might as well mention two other methods of testing, i.e., the ophthalmic test and the Patch test.

Method of Performing the Ophthalmic Test: This test although sensitive, is not necessary for the routine diagnosis. It is employed only in vague and unusual cases, to further confirm the degree of sensitiveness. A little of the 0.001 solution of pollen extract is dropped in the eye, and, if positive, will cause reddening and itching of the caruncle and conjunctiva, with irritation of the nose on that side, and sneezing. The reaction should be terminated by a drop of epinephrine. It requires a stronger solution to elicit a reaction in the eye than in the skin.

There are men that use the pure pollen in performing this test, that is, they place a little in the eye instead of the solution. The writer feels that it is not such a good procedure because the pollen is too potent and may act as a foreign substance.

Method of Performing the Patch Test: A very small piece of blotting paper is saturated with the substance to be tested, which is usually in solution form. This is applied over the volar aspect of the forearm and covered with a piece of adhesive plaster. After an interval of twenty-four hours, this area is examined for any reaction that may develop, and it is read as marked, moderate, slight or negative, according to the amount of erythema and the size of the wheal produced. In some instances the reaction is delayed and the site should be examined again two or three days later.

The writer feels that both the cutaneous and the intracutaneous methods are useful and neither should be used to the exclusion of the other.

It is very important to remember this: skin tests in the hands of physicians unacquainted with their interpretation usually lead them to gross error. For them, common sense, clinical tests and history are much more dependable.

Method of Performing the Cutaneous Tests: The foreign materials in dry powdered form are applied to the scarified areas on the skin, and to this is added a drop of tenth normal sodium hydroxide solution. The appearance of a hive (wheal), within 20 to 30 minutes, with pseudopods surrounded by an irregular area of erythema indicates a positive reaction. Button reactions (hives) without pseudopods are called negative.

Method of Performing the Intracutaneous Tests: Cooke,⁷ Spain and Vander Veer⁸ advocated the use of standardized solutions in varying strengths and injected intracutaneously 0.01 cc. The appearance at the site of the test within 10 minutes of a hive with pseudopods and erythema indicates a positive reaction. A reaction is slight

or moderate or marked depending upon the size and outline of the wheal and the amount of erythema.

A *negative reaction* is one which shows no increase in size of the original wheal with slight or no erythema.

A *slight reaction* is one which shows a slight increase in the size of the original wheal with moderate erythema.

A *moderate reaction* is one which shows an increase in size of the original wheal two or three times, with a definite area of erythema.

(These reactions are all round wheals with no irregularity.)

A *marked reaction* is one which shows a large wheal, irregular in outline, with pseudopods, and an area of erythema of varying size.

A *marked plus reaction* is at least one and one-half inches in diameter with the characteristics of a marked reaction.

The intracutaneous method is very useful especially in patients whose skin does not respond readily to cutaneous tests. This method necessitates the making of stock solutions at yearly intervals, or oftener, and the repeated making of serial dilutions, some several hundred in number.

In the Clinic the following method is used and the reactions are read at the end of ten minutes. The tests are made on the outer surface of the arm with the usual sterile precautions. Approximately one one-hundredth cubic centimeter of the 0.0001 and 0.001 dilutions are injected intracutaneously, and after ten minutes, a similar amount of the 0.01 dilution is injected, if the previous tests are negative or only mildly positive. No blood should ever follow the withdrawal of the needle, and there should be a raised, dead-white wheal a quarter of an inch in diameter. To get a satisfactory wheal, it is advisable to grip the arm at the site of the injection very firmly and exert considerable tension on the skin, when the insertion of the needle is not felt at all and even a small child will remain quiescent. The reactions are read negative, slight, moderate, marked and marked plus, depending on the size of the wheal and the irregularity, and the amount of erythema surrounding it. Itching of the site is usually a frequent early sign of a positive reaction. If negative to 0.01 dilution, a test with 0.05 dilution is tried on the following clinic day, but is usually unnecessary to test with any stronger dilution than this, as reactions to this are often marked and difficult to control. Patients failing to give a reaction to this strength cannot be considered to be ragweed, timothy, or plantain sensitive, providing they have no definite positive clinical symptoms.

Patients are then classified according to Vander Veer, Cooke and Spain⁹ (Table I), as to the degree of the reactions of the various dilutions of the extracts into classes, AA, A, B or C.

TABLE 1 (Slightly Modified)

AA	A	B	C
0.00001 = marked	0.0001 = marked	0.0001 = moderate	0.0001 = slight
0.0001 = marked plus	0.001 = marked plus	0.001 = marked	0.001 = moderate
		0.01 = marked plus	0.01 = marked

Classes AA and A are very sensitive; B and C are less sensitive. Since the degree of the skin sensitivity is not always an indication of the degree of general sensitivity, the above classification cannot be followed blindly; but variations are necessary in individual cases depending upon their response to treatment from week to week. Just as much care must be exercised in the treatment of B and C cases as of the A cases. When in doubt as to the right classification it is always best to treat a Class C as B, a Class B as A, and a Class A as AA, for the first year at least. In doing so, marked local and constitutional reactions are avoided. There were 426 cases treated at the Clinic from March to October 2nd, 1931, by this method with constitutional reactions occurring in only a small percentage as discussed later.

Prophylactic Treatment: Having determined the class of sensitivity of the patient, the initial dose and the subsequent doses for each class are outlined in the table below.

TABLE 2

Prophylactic Treatment, Average Dosage for Various Classes		Various Classes			
		AA	A	B	C
		0.00001 marked 0.0001 marked plus	0.0001 marked 0.001 marked plus	0.001 marked 0.01 marked plus	0.001 mod. 0.01 marked
Injections					
Day of test . .	0.	0.	0.	0.	0.0001
Injection 1..	0.00005	0.0001	0.0001	0.0002	0.0002
" 2..	0.0001	0.0002	0.0002	0.0002	0.0004
" 3..	0.0002	0.0003	0.0004	0.0007	0.0007
" 4..	0.0003	0.0005	0.0007	0.001	0.001
" 5..	0.0005	0.0007	0.001	0.002	0.002
" 6..	0.0007	0.001	0.002	0.004	0.004
" 7..	0.001*	0.0015	0.004	0.007	0.007
" 8..	.....	0.002	0.007	0.01	0.01
" 9..	.....	0.003	0.01	0.015	0.015
" 10..	.....	0.004	0.0125	0.02	0.02
" 11..	.....	0.006	0.015	0.03	0.03
" 12..	.....	0.008	0.02	0.04	0.04
" 13..	.....	0.01*	0.025	0.05	0.05
" 14..	.....	.....	0.03	0.06	0.06
" 15..	.....	.....	0.04	0.08	0.08
" 16..	.....	.....	0.05*	0.1*	0.1*

*This dose continued at four to seven-day intervals during the season.

The prophylactic treatment of the hay-fever should begin at least three months before the on-

set of the season. Injections in the Clinic are given every seven days and, in this vicinity, are so regulated that serial increases are given before the onset of the season; the top dose thus reached should be continued weekly throughout the season. If the top dose of the class is reached early and is well tolerated by the patient, higher doses should be given up to the beginning of the season. Care should be taken to question the patient at each time before receiving the treatments as to any general symptoms. If a marked local reaction is produced with some sneezing, coryza, etc., repeat the dose at the time of the next injection or revert to the preceding dose.

The aim in any hay-fever season should be the attainment of the highest possible dosage with safety.

In 1931 the patients who received the highest possible dose throughout the hay-fever season responded much better to the treatment. Many class C patients reached the 0.1 dose, while others reached 0.05 only, but the average was kept down, because of the delay in starting the treatment.

One should bear in mind, though, there is no definite rule to follow in treating these hay-fever patients. Each dose is a law unto itself.

If treatments are missed for a period of two weeks or over, the dose should be reduced. For instance, if the patient's last dose was .01, give 0.004 as the dose.

The Results of the Treatment: There is no doubt the patients that start the treatment early and receive regularly the respective dose, get a great deal of benefit. No one but a sufferer can truly appreciate what this really means.

Due to the unusually excessive amount of pollen in the air last season the results were less successful than the average year. The very hot summer we had, was the cause of this excessive pollination.

Studies of the results of treatment of hay-fever at the Clinic,¹⁰ during previous years show the following results:

In 1929 out of 104 cases of hay-fever studied at the Clinic, 80 patients could be considered successfully treated. Of the unsuccessful cases, one reported sixteen severe days, but was 50 per cent improved the year before; another had ten severe days, but the top dose was only 0.006, because of two constitutional reactions; others had insufficient treatment. These reports were checked up by the patient's own expression of results in percentage at the end of the season and the figures are as follows:

38 per cent reported 80 to 100 per cent improvement.

50 per cent reported 50 to 80 per cent improvement.

12 per cent reported an improvement of less than 50 per cent.

A number of points of importance are worth mentioning, though, in connection with the results of treatment.

(1) In general, cases of ragweed hay-fever are more resistant than those of the vernal or early type.

(2) Patients showing the highest grade of sensitization give the most satisfactory therapeutic results and seem to require less treatments to control their symptoms.

(3) In any case better results may be confidently expected with each successive year.

(4) The question as to permanent cure is, of course, a pertinent one. Probably the so-called immunity which is manifested by the clinical alleviation or absence of symptoms, is slowly lost during the winter, the patient gradually returning to the sensitive state. This point, however, is not settled. There are undoubted instances of spontaneous cure. So far no permanent desensitization has been obtained, but each year's treatment has effected a definite and permanent lowering of the patient's original reactivity.

(5) In cases of hay-fever complicated by asthma, the results are not so encouraging especially where not only pollen, but other excitants must be considered. These patients should be given great consideration and their asthma should also be treated. They should receive medicinal treatment as well, namely, ephedrine sulphate and iodides internally. They should also be tested for other possible offending substances namely, the inhalants, the protein foods, the vegetables and the fruits. All nose and throat infections should receive symptomatic treatment, deferring any operative measures until the end of the season.

Constitutional Reaction: This condition is still a puzzle to the allergist. The exact cause is not yet known. It develops in the more sensitive hay-fever patient as well as in the less sensitive one. It is found to occur in class A patients as well as in class C patients. It may be a slight reaction or a very severe one. This many times keeps the allergist in great moments of anxiety. In certain cases the reaction is so severe that it takes all the good out of the practitioner's zeal to undertake this form of treatment. Few fatalities have been on record following this form of treatment, although the symptoms are often times alarming.

The causes of this constitutional reaction have been divided into four groups according to Vander Veer, Cooke and Spain.⁹

(1) Too rapid increase of the dose.

(2) Injection directly into the vein.

(3) The substitution of a fresh extract for an old during the course of the injections.

(4) Too brief an interval between doses.

The constitutional reaction following the too-rapid increase of the dose, could be avoided often times by carefully questioning every patient as to the amount of local and the late constitutional reaction if any. Every constitutional reaction should be followed by the same or a diminished dose, never by an increased dose.

The injection into a vein is a thing which no one can definitely avoid. With all due care, this sometimes happens. It is a good policy to withdraw the plunger from the syringe each time before that injection is given. If blood enters the syringe then withdraw the needle and inject into some other place. This type of reaction comes immediately, and the doctor should be on the guard to give adrenaline at once.

Regarding the substitution of a fresh extract for an old one, the writer feels that this is sometimes responsible for the constitutional reaction which follows such procedure. It is always best when getting a fresh extract to give a smaller dose than the previous one. For instance, if the dose of the old extract was 5/10 of a c.c., the dose of the new extract should be 3/10 of a c.c., or smaller.

Regarding the too brief an interval between doses, it is evident, of course, like any other form of treatment, that there is the danger of a cumulative effect following such procedure. It has been the experience of the allergists that with all due care, reactions occur even though the dose has been properly estimated before giving it. It has been shown by Levine and Coca¹¹ that an interval of seven days is necessary for the complete elimination from the system of the pollen administered by injection.

With all the soundness of the above reasons, the writer feels that there must be other causes which we have not been able to perceive yet with the present method of treatment.

What Is a Constitutional Reaction? It is a reaction following the injection of a foreign substance in this case being a pollen absorbed too rapidly in the circulation of hypersensitive individuals. It usually begins with a dry, hacking cough, frequently repeated cough, together with a rapidly increasing size of wheal at the site of the injection. The latter does not always happen, of course. There may be an itching of the palm, ear or soft palate, an early congestion of the face followed by a pallor, congestion of the eyes, wheezing, and rapid, difficult respiration similar to that of an attack of asthma. At the height of the reaction, syncope may develop. The pulse is fast and small, the breathing heavy and noisy, and the appearance of the patient may become alarming. At times the local reaction spreads to involve the

entire arm, and often the sites of the previous injections on either arm light up with wheals. There may be intense itching, followed by an outbreak of urticaria involving the entire body.

What to Do with These Cases? The first reasonable thought is to inject $\frac{1}{2}$ c.c. of adrenaline solution 1-1000 subcutaneously in the arm and then place a tourniquet above the site of the prophylactic dose. The adrenaline should be given as soon as the first sign of the hacking cough is observed on the patient. In most of the cases the patient himself calls this symptom and others to the attention of the doctor in the Clinic and asks for adrenaline if he has had experience with a previous reaction.

Unless improvement is obtained within five minutes a second injection of adrenaline is given. In severe cases the adrenaline may be administered intravenously. As a rule most of the cases get immediate relief following the administration of adrenaline subcutaneously.

The experience of the writer has been that when constitutional did occur, the patient had reached or approached the top dose for the Class to which he belongs. If a constitutional reaction recurs when the dose of the first reaction is reached, the top dose for that patient should be considered to be about $\frac{2}{3}$ the potency of the dose causing repeated constitutional reactions. At times it is possible to go beyond the dose of a previous constitutional reaction, especially when due to an intravenous injection or to a too rapid increase of the dose.

The rate of a constitutional reaction as a rule is not high if all the precautionary measures are taken. In the Clinic it is found to be around 10 per cent in all patients treated or in less than 1 per cent of all injections. In private practice it is also about the same.

The Perennial Treatment of Hay-Fever: This type of treatment is not employed at present at the Clinic, but several men are adopting it now because they feel that certain patients do better under this method of treatment. In 1920, Cooke, Vander Veer and Spain⁸ advocated this method. They selected ten to twelve patients with hay-fever, who had done well under the seasonal treatment, and instead of stopping their injections at the end of the season, the maximum dose was repeated at intervals of three or four weeks during the winter. The results were in the main satisfactory. In 1925, with the introduction of Coca's solution for the extraction of pollen they again resumed the monthly treatments. This time they selected 70 cases, and the results were distinctly encouraging. All of these patients were treated in their office and carefully observed.

The method of treatment is very simple. In-

stead of discontinuing at the end of the season, the patient is instructed to return once a month throughout the year, and each time receives the maximum dose attained during the season.

During the season it may be necessary to give injections oftener than once a month, and the interval between them is determined by clinical symptoms. The average total dose is larger under the monthly system, being 0.13 mg. nitrogen at the beginning and in mid-season as compared with 0.07 and 0.09 mg. nitrogen in the same cases during the previous season under weekly injections.

Summary: My contention is that there are many problems yet to be solved in connection with the subject of protein sensitization in general. The present method of treatment of hay-fever is generally satisfactorily successful. Despite the incompleteness of our knowledge, we need not condemn the victim of hay-fever to six weeks of untold misery—in many times to the entire summer season. Each sufferer of hay-fever should receive the prophylactic treatment nevertheless with the object of minimizing the distressing symptoms caused by this malady. In addition to this, the patient's general health should be carefully watched, and any infection of the nose and throat and the sinuses should receive adequate treatment. Last by no means the least, to my mind, the best method of prophylactic treatment is to exterminate all the ragweeds. This seems a very great problem, but by the enactment and enforcement of laws in each state much could be accomplished to alleviate or rather eliminate this dreadful disease. No one knows the value of good health until he has lost it or has been the victim of hay-fever or some other form of malady.

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SOME DRIED FOODS USED IN INFANT FEEDING

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THE use of dried foods is a subject that is becoming more and more an important factor in infant feeding, because of the great scientific strides made in the preparation of the dried foods, and also because of the degree to which cow's milk has been modified so that it more closely resembles the best infant food, breast milk, besides combining in some cases, with this modification, the addition of one or more of the extremely important vitamins. I realize that the dry foods are so numerous that it would be an impossible task to present the subject in full, so that I am going to present only some of these foods, which it has been my privilege to give a fair clinical trial either at the N. Y. Post-Graduate Pediatric Clinic or in my own practice.

Methods of Drying Milk—There are at present two methods of drying milk; the first and the older of the two, the Just-Hatmaker roller dry method in which milk is passed over the surface of a hot roller in the absence of oxygen, thereby evaporating the water in the milk but preventing the deterioration of the sensitive vitamins A, C and D as conclusively proven by Hess,¹ Cavanaugh² and numerous other workers, who have shown that the vitamins are not destroyed in the absence of oxidation. After the water is evaporated the milk is scraped from the roller as a flaky, dry powder which is quite readily soluble in water. During this process there is a partial coagulation of the protein and a failure to break up the large fat globules, which, however, does not render the protein less valuable nutritionally nor seem to interfere with the digestibility of the fat.

The other method, which is now more extensively employed, is the Merrell-Gere spray process. In this method the milk is forced as a fine spray into an oxygen free chamber through which currents of warm air are passed, thereby evaporating the water and throwing the solid portions of the milk to the bottom of the chambers as a dry powder. During this process the protein is not even partially coagulated and when redissolved is present as a fine flocculent precipitate; the large fat globules are broken up and are, therefore, more readily assimilated and metabolized than in their raw state. There is no change in the vitamin elements due to the absence of oxidation.

Effects of Drying Milk—Let us see if there are any advantages or disadvantages in the use of dried foods.

It has been definitely proven that the sugars are not changed in the drying of foods, therefore,

they are as readily digestible as in the raw product.

Secondly, the fat is rendered more easily digestible because the globules are more finely broken up; and, furthermore, it has been found that there is no chemical or nutritional change in the fat during the drying process, therefore the fat is more readily handled by the infant if given in the dry state than in the raw state.

Thirdly, the protein seems to be more readily digestible if dried, because it has been found that the casein albumin is broken up during the drying process so that in the stomach it is precipitated as a fine flocculent curd similar to the lacto-albumin curd, instead of the large tough curd as is the case with raw unmodified cow's milk casein. Chemically and nutritionally there is no evidence of any change in the protein element during drying; therefore, there would seem to be an advantage in favor of feeding dried foods from the protein standpoint.

The calcium, potassium and phosphorous salts are rendered less soluble by the drying process, but inasmuch as there is an excess of from one to three times in these salts over breast milk, this would seem to be an advantage rather than a disadvantage. There is no evidence that the nutrition is impaired because of this lack of solubility.

From the vitamin standpoint, we know that there may be insufficient vitamin A, B, C, D, E and G, especially B, C and D vitamins, in either breast milk or cow's milk. It has been conclusively proven that there is no loss of vitamin during the drying process; but because of the insufficiency in these factors, it is necessary that we overcome this by supplying more of these in the use of dried, raw, or even breast milk.

Bacterial Content—Aside from the advantages in regard to the digestibility and assimilability of the elements in the dried state over that in the raw, there are other more important advantages in that dried milk products are made from milk which is produced and handled under supervision, which renders it to all intents and purposes up to the standards of certified milk; furthermore, it is sterilized during the process so that the bacterial count is reduced to a minimum and all pathogenic and other bacteria are destroyed except certain of the spore-bearing and certain other non-pathogenic organisms. In an analysis of one of the products used in our experiment by Dr. J. M. Sherman,³ Professor of Bacteriology, Cornell University, there were 16,200 bacteria per c.c. of the reconstructed milk, none of which were pathogenic for humans.

Another advantage of dried foods is that they

keep well because of the low bacterial count, and because they are hermetically sealed in the presence of carbon dioxide which prevents oxidation.

Advantages—Other advantages of dried milk are the simplicity of preparing; freedom from climatic influences, spoiling in warm weather or freezing in cold weather; also they seem to be more readily handled where there is either a partial or marked allergy to milk as such; and they lend themselves more readily than raw milk to concentrated feedings, which are becoming more and more favored in infant feeding. A further advantage is that in some of these foods sufficient vitamin is added to prevent rickets, tetany and scurvy, and we believe in time vitamin B and E will be included as well, thereby putting us another step forward in preventive medicine.

It would seem, therefore, that there are distinct advantages in the feeding of dried foods, and so let us now turn to an analysis of some of these products we have used. Allow me also to state that at our clinic we have a great percentage of so-called difficult feeding cases and our clientele comes chiefly from the poorer and least intelligent sections of the city, and, therefore, our results must be viewed accordingly.

S. M. A.—First, let us consider the dried milk known by the trade name "S. M. A.," put out by the S. M. A. Corporation, Cleveland, Ohio, by permission of the Babies and Children's Hospital of Cleveland, through the courtesy of its originator, Dr. H. J. Gerstenberger. The theories upon which S. M. A. were created, and the marked successes which have been obtained by its use, justify its careful survey. S. M. A. is described by the Committee on Foods of the American Medical Association as follows:

"S. M. A. is a food for infants—derived from tuberculin tested cows' milk, the fat of which is replaced by animal and vegetable fats including biologically tested cod liver oil; with the addition of milk sugar, potassium chloride and salts; altogether forming an anti-rachitic food. When diluted according to directions, it is essentially similar to human milk in percentages of protein, fat, carbohydrates and ash, in chemical constants of the fat and in physical properties."

It has been shown by Langstein,⁴ Edelstein,⁴ Osborn,⁵ Mendel,⁵ etc., that lacto-albumin contains a higher amino acid content, which is essential to growth, than has casein. It is known that cow's milk contains approximately four-fifths casein and one-fifth lacto-albumin, therefore, there is a deficiency in amino acids, when compared with breast milk containing approximately one-half lactoalbumin and one-half casein. In S. M. A. a part of the casein is removed and additional lactoalbumin added, and the proportion of protein in the food is reduced to that of breast milk, 1.3 to 1.5, thereby enhancing normal gastric, duodenal and intestinal di-

gestion, as an excess of protein causes the hydrochloric acid to unite with it, and it is not, therefore, free to act as an activator of secretion and as an anti-bacterial agent.⁶ Proper amount of protein is necessary also to allow rather than to inhibit normal fermentative bacterial flora in the intestinal tract. In order also to obtain this normal intestinal flora sufficient and the proper kind of carbohydrate must be present. As we know cow's milk is low in carbohydrate and in S. M. A., this is corrected by the addition of lactose. Lactose is used because as shown by Sittler,⁷ the normal intestinal flora is best preserved by this sugar, also because the fats seem to be more readily and completely burned in its flame, and also because it helps to supply sufficient galactose⁸ for the development of the central nervous system. S. M. A. contains 7.3 to 7.5 lactose, whereas, the average sugar content of breast milk, according to the late Dr. L. E. Holt,⁹ was 7.57.

Fat—The largest modification in S. M. A., however, is in the fat content and in the character of fat used. Proper quantity of fat is necessary, according to McCollum,¹⁰ Holt,¹¹ Czerny,¹² Gerstenberger¹³ and Marriott⁶ to supply vitamin A and D; to allow for growth; to enhance calcium absorption; to promote immunity; save nitrogenous waste and allow proper nerve and bone growth. Proper quantity and kind, if we are to follow nature, is that found in breast milk. S. M. A. fat is present in the percentage of 3.5 to 3.6 and is composed of cocoa butter, coconut oil, cod liver oil, beef fats, which gives the same saponification number, same iodine number, same Polenske number, same melting point and same Reichert-Meissl number. (This is very important, as it has been shown,^{14, 15, 16} that the difficulty in handling the fat in cow's milk is chiefly due to the difference in volatile fatty acid content which is measured in this way. Breast milk contains 1.6% volatile fatty acids, whereas cow's milk contains 10%. Also the fat of S. M. A. is anti-rachitic and antispasmodic because of its 10% cod liver oil content.

Minerals—The mineral salts are also modified in quantity, character and relation one to the other in S. M. A., which has been shown by Freidenthal¹⁷ and McCollum¹⁸ to be very important for proper bone, cell and nerve growth as well as for proper secretion, absorption and excretion. The salt content of S. M. A. is .25 to .30 contrasted with breast milk, .215 to .226.

Vitamins—Vitamin A and D is supplied in sufficient amount in S. M. A. to prevent rickets and spasmodophilia. Vitamin B must be supplied by added cereal; and vitamin C must be supplied with orange juice except in Protein S. M. A., which has sufficient—20 c.c. of lemon juice to the quart—to be antiscorbutic.

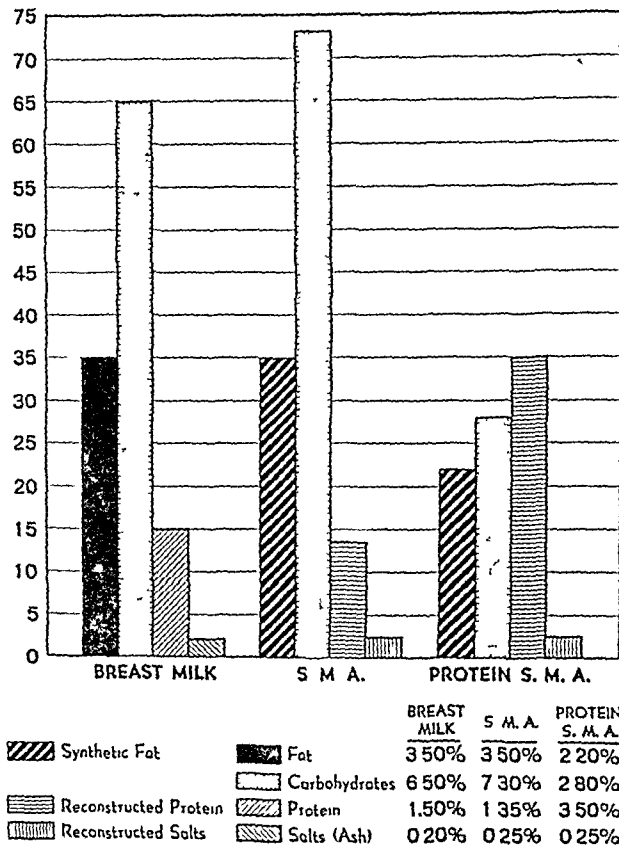


FIGURE 1

Comparative analysis of Breast Milk, S. M. A. and Protein S. M. A. when diluted properly.

Protein S. M. A. is similar, elementally and chemically, to plain S. M. A., but is modified to simulate both protein and lactic acid milk by being changed percentage and physically. Protein S. M. A. has a protein content of 3.5 (higher than protein milk and lower than acid milk), fat 2.2, lactose 2.8 (higher than protein and lower than acid milk), salt .6, Ph. 4.6. (See figure 1.)

Clinical Results—In our work with S. M. A. 72 cases were started, of which 11 were dropped because they failed to return, 4 were dropped because of nonco-operation and 3 were taken off because of illness, which prevented leaving the cases on over four weeks. This left in our series 54 cases which were carried four weeks or longer. The average period these cases were on the product was twenty weeks. Our findings in this series were as follows:

The average birth weight of babies reported, $7\frac{3}{4}$ lbs.

Average age at which babies were started, $3\frac{3}{4}$ mos.

Average gain per week of babies under 6 mos. (39 babies reported on), $5\frac{3}{4}$ oz.

Average gain per week of babies over 6 mos. (36 babies reported on), 4 oz.

Average gain per week of all babies (54 babies reported on), 5 oz. (See figure 2.)

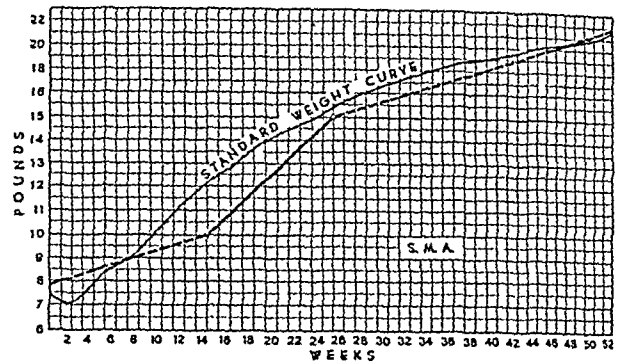


FIGURE 2

Composite weight chart of Cases on S. M. A.

The conclusions we came to from an analysis of the feeding, development and physical findings on these cases were as follows:

1. S. M. A. is not a panacea.
2. The younger the age of the baby when starting the use of S. M. A. the more satisfactory the results.
3. The stools of S. M. A. resemble more the stools of the breast-fed baby than the bottle-fed baby, in that they are occasionally green and occasionally show fat curds and mucus.
4. Plain S. M. A. or Protein S. M. A. is difficult to feed to the child with anorexia and is surely not a cure for anorexia.
5. There is sufficient cod liver oil present to protect against rickets. Six of our cases showed craniotabes without other signs of rickets and when x-rayed no rachitic changes were noted.
6. It can be fed to the sick child in higher proportions than other foods without causing a parenteral gastroenteritis.
7. Vomiting and spitting up are no more marked than on other foods.
8. Protein S. M. A. did not check diarrhoeas in the few cases in which it was tried. A fair clinical trial, however, was not made, as the cases were too few in number.

9. The cases which were on Protein S. M. A. showed no evidence of scurvy, therefore, there would seem to be sufficient vitamin C present.

10. Indications for use of S. M. A.

- (a) Well babies, who do not do well on other foods.
- (b) Mild cases of malnutrition.
- (c) Prematures.
- (d) Selected cases of eczema.
- (e) Complemental and supplemental feeding.
- (f) Mild infections with failure to gain.
- (g) Babies deprived of breast milk soon after birth.

Our results with S. M. A. were not as good as reported by Gerstenberger¹⁹ and others; but, I believe, this can be explained by the fact that most of our cases put on S. M. A. were difficult feeding cases with unintelligent mothers, and

many of them—nearly half—had rather severe intercurrent infections during the trial.

Recolac—Recolac, a reconstructed milk, is similar to S. M. A. and in our rather limited number of cases, similar results have been obtained, although there would seem to be more difficulty in the handling of the fat than with S. M. A. Similac, which will be referred to later, also resembles S. M. A. in that it is a reconstructed milk.

Klim—Klim was given a rather extensive trial in our clinic in order to find out if a powdered whole milk could be used in place of fresh cow's milk. Klim, as you know, is made from milk which is produced under the supervision of the New York City Health Department, with the co-operation of the Merrell-Soule Co., so as to insure clean, safe milk. It is then pasteurized and dried by the Merrell-Gere spray process. During the entire process it comes in contact with only sterilized, glass-lined pipes and tanks, and, therefore, the finished product has a very low bacterial count, none of the bacteria being pathogenic. Furthermore, to insure the keeping of the product and this low bacterial count, it is sealed in vacuum cans from which the air is displaced by carbon dioxide. During the process of manufacture the large fat globules are broken up, which renders the fat more readily emulsified on reliquefaction, and, also, renders the fat more readily digestible by the infant. There is no evidence of any change in the chemical or nutritional value of the sugar or salts. There is as much vitamin present as in the raw cow's milk. The protein curds are broken up, so that they are as readily digestible as boiled cow's milk protein, and, furthermore, there is no evidence of any coagulation, chemical or nutritional change in the protein element. (See figure 3.)

Clinical Reports—In our work with Klim 134 cases were put on the product, of which 28 cases were dropped because of nonco-operation, and 6 were dropped because of illness, which prevented us keeping these cases on the product for over four weeks. The average length of time the remaining 100 cases were kept on the food was eighteen weeks.

The average weight at which the cases were started was 9 lbs. 9 oz.

The average age of the babies started under 6 mos. of age was 12 weeks.

The average gain per week of babies under 6 mos. was 634 oz. (79 cases reported on).

The average gain per week of babies over 6 mos. was 434 oz. (53 cases reported on, 32 being cases started under 6 mos. and carried beyond 6 mos. and the remaining 21 cases being put on when over 6 mos. in age).

The average gain per week for all cases (100 cases reported on) was 6 oz. (See figure 4.)

The conclusions we came to from an analysis

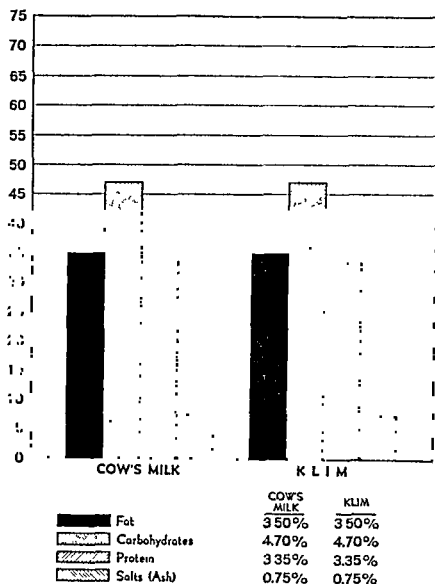


FIGURE 3

Comparative analysis of Cow's Milk and Klim, when diluted properly.

of the feeding, development and physical findings were as follows:

1. Klim was taken as well as fresh whole milk.
2. The stools, 1-3 daily, resemble the stools of milk and water feedings, except that they were as a whole less constipated. The fat appeared to be somewhat better digested than on fresh cow's milk and no protein curds or protein indigestion were found in any of the cases.
3. Sleep was normal except in a few hyper-tonic babies.
4. The incidence to rickets and scurvy was no more prevalent on the dried food than on fresh

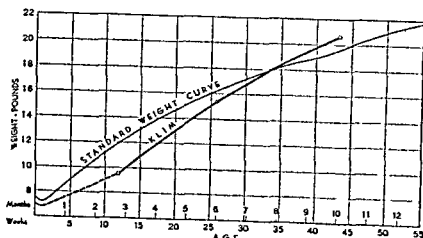


FIGURE 4

Composite weight chart of cases on Klim.

milk. Egg yolk, cod liver oil and orange juice being used to supply vitamins A, C and D.

5. The growth and development was equally as good as on fresh milk.

6. Indications for the use of Klim:

- (a) In place of cow's milk when desired.
- (b) Constipated cases on boiled milk.
- (c) Impaired digestion on fresh or boiled cow's milk.
- (d) Questionable purity of fresh cow's milk.
- (e) Convenient for cases who are traveling.
- (f) In place of cow's milk where this is frozen.
- (g) Convenient food for complemental or supplemental feedings.

In our work with irradiated Klim, published by De Sanctis, Ashton and Stringfield, the following conclusions were reached:

1. In a series of 10 cases tried on 25% irradiated milk, 5 cases, or 50%, showed definite clinical and x-ray evidence of rickets, therefore, these cases were not protected against rickets.

2. In 30 cases on 100% irradiated milk, 24 were protected against rickets clinically; 5 were protected clinically, but x-ray showed evidence of dietary disturbance in the epiphyses of the bones. These changes, however, were not pathognomonic of rickets and, therefore, can be called doubtfully protected, although, for practical purposes they were rickets free. One case developed rickets and was not protected.

3. Milk to be antirachitic, therefore, must be 100% irradiated.

4. Irradiated milk will undoubtedly in the future play a large part in the solution of the prevention of rickets.

Mead's Powdered Whole Milk—Mead's powdered whole milk is similar to Klim in all respects and in the few cases we have used it, it is just as readily digested.

Dryco—Dryco is dried 2% fat milk, prepared by the Just-Hatmaker process and has an advantage over whole dried milks in babies with a lowered fat tolerance, that is, in babies who vomit diluted whole milk or who show fat curds on higher fat mixtures. Dryco, over a number of years' trial, has been a dried food of marked merit. It is now irradiated and according to Supplee and Dow²⁰ is antirachitic.

Lactogen—Lactogen is also a dried whole milk, but is modified by the addition of lactose before drying so that it more closely resembles breast milk in its carbohydrate content. Also the fat is rendered more readily digestible due to the fact that the milk is homogenized before drying, which process breaks up the fat globules and renders them more easily digested on reliquefaction. The protein is rendered more readily digestible due to the fact that it is dried by the spray process. (See figure 5.)

Lactogen would seem to possess certain very definite advantages to recommend it for infant feeding, but we, personally, cannot recommend it because we have not as yet given it a fair trial clinically.

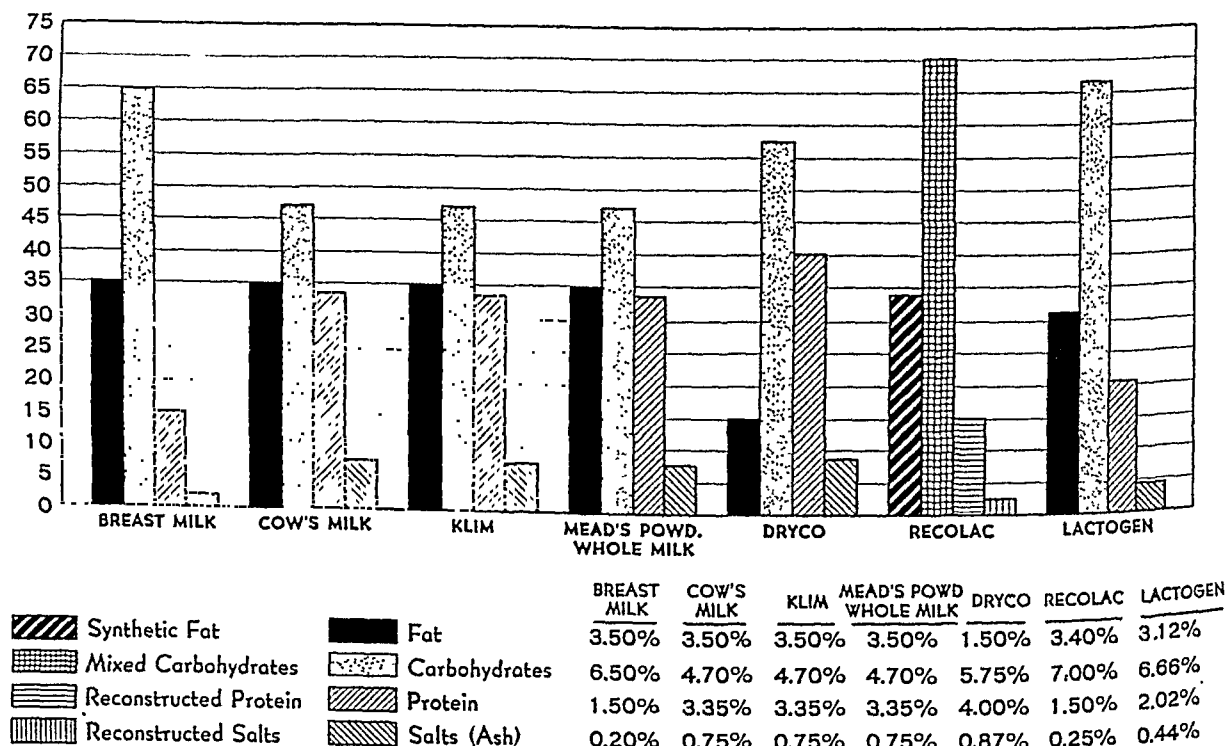


FIGURE 5

Comparative analysis of Breast Milk, Cow's Milk, Klim, Mead's Powdered Whole Milk, Dryco, Recolac, and Lactogen, when diluted properly.

Similac—Similac is a totally reconstructed milk put out by Moores and Ross under the supervision of A. W. Bosworth. It simulates, as its name, Similac, implies, breast milk. Chief importance in the adaptation of Similac to breast milk is in the salt content and their relation one to the other. That this modification is an important one has been shown experimentally and clinically by Bosworth,²¹ Bowditch²² and others. Through this modification not only proper salt absorption is promoted, but also normal fat and protein digestion, absorption, metabolism and excretion are favored. It is known, as previously stated, that there is nearly three times as much salt in cow's milk as in breast milk, but it is not so much the quantitative difference, but the qualitative difference, especially in the calcium, sodium and potassium salts which interfere with the digestion of cow's milk. Let us analyze the difference in salt content between cow's milk and human milk and let us see how Similac is made to correspond to that of breast milk. (See figure 6.)

FIG. 6—COMPARISON OF SALT ANALYSIS OF COW'S MILK, BREAST MILK AND SIMILAC

	<i>Cow's Milk</i>	<i>Breast Milk</i>	<i>Similac</i>
Calcium combined with Protein . . .	.054 gm.	.024 gm.	.030 gm.
Mono - Magnesium Phosphates . . .	.103 gm.	.027 gm.	.027 gm.
Di-Calcium Phosphates . . . . .	.175 gm.	.000	.000
Di-Potassium Phosphates . . . . .	.230 gm.	.000	.000
Mono - Potassium Phosphates . . . . .	.000	.069 gm.	.000
Potassium Citrates . . . . .	.052 gm.	.103 gm.	.103 gm.
Sodium Citrates . . . . .	.222 gm.	.055 gm.	.055 gm.
Calcium Citrates . . . . .	.119 gm.	.059 gm.	.059 gm.
Iron	Trace	Trace	Trace
Sulphur with Protein . . . . .	.022 gm.	.001 gm.	.001 gm.
Phosphorus with Protein . . . . .	.022 gm.	.001 gm.	.001 gm.
Calcium Present, 1 gram per 100 c.c. in Similac			

As can be seen from the chart, there is not only a marked excess of calcium in cow's milk over that in breast milk, but there is a difference in that the greater part of the calcium is present as insoluble calcium phosphate or calcium caseinate, which are not found in breast milk, and so Similac follows nature by eliminating these forms of calcium. The sodium salts are reduced in Similac from .222 as in cow's milk to .055 and the potassium salts are reduced from .282 to .103, thereby favoring better utilization of the protein and fat present.

The protein in Similac is rendered more digestible than the protein of cow's milk due to the

fact that calcium is removed from the milk; and instead of the casein being precipitated as an insoluble calcium caseinate in the presence of the gastric juices, it is held in true solution in the form of sodium and potassium caseinate. This fluidity, according to Klein,²³ hastens the emptying time of the stomach, and also through the fact that the protein is held in solution, protein and fat digestion is favored in the intestinal tract for reasons previously stated.

Because of the marked physico-chemical difference between cow's milk fat and breast milk fat, the fat of Similac has been modified so that it resembles breast milk fat, especially in its volatile fatty acid content and butyric acid content (B.M. 1.4%, C.M. 5.4%). The fat in Similac is composed of 20% butter fat, 1% cod liver oil, 59% coconut oil and 20% olive oil, which from a physical, chemical and metabolic standpoint is similar to breast milk fat. Furthermore, this fat mixture is homogenized before drying and thus it emulsifies readily on reliquefaction. Lactose is added to make up the carbohydrate deficiency of cow's milk in preference to other sugars because it is the sugar found in breast milk; and, furthermore, it has been shown by Bergeim²⁴ that lactose favored calcium and phosphorus absorption, while the other sugars did not. Mathews⁸ has shown that lactose is essential for proper nerve myelinization since galactose is an essential constituent of the galactolipin making up myelin.

There is no destruction of vitamin during the process of manufacturing Similac and it is more antirachitic and antispasmodic than cow's milk or breast milk because of its 1% cod liver oil content, and because calcium and phosphorus absorption are favored as noted previously, and, also, because of the inter-relation of the salt content giving to the body salts in the proportions as dictated by nature in breast milk. (See figure 7.)

In our work with Similac, we did not use altogether the product now on the market, as we had two types of Similac, one with a calcium lower than the calcium content of breast milk and one with a calcium content the same as breast milk. Ten of our cases were changed from one product to the other and it was found that the average gain per week on the low calcium Similac was 5 3/4 oz., whereas the average gain on the higher calcium formula was 6 1/2 oz. It would, therefore, appear that a calcium level similar to breast milk has a decided advantage. Our figures are compiled on 35 cases, 5 of which were discontinued because of lack of cooperation, 1 because of severe intercurrent infection and 4 were put on other formulae without any stated reason, leaving us 25 working cases. The average time these cases were on Similac was seven-weeks.

The average birth weight was 6 lbs.

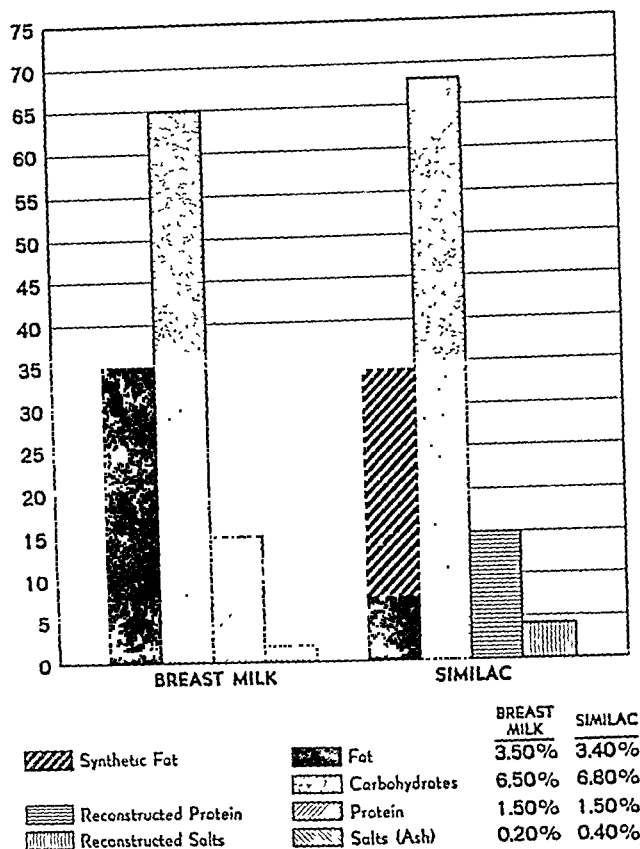


FIGURE 7

Comparative analysis of Breast Milk and Similac, when diluted properly.

The average weight at start, 9 lbs.

The average age at start, 3½ mos.

The average gain per week under 6 mos. (15 cases), 6+ oz.

The average gain per week over 6 mos. (10 cases reported on), 5½+ oz.

The average gain per week of all cases (25 in all), 5¾ oz. (See figure 8.)

An analysis of our feeding histories gave us the following results:

1. Babies took Similac as readily as our formulæ of milk, water and dextrimaltose.
2. The sleep was good except in 4 cases where the children were markedly hypertonic.
3. The stools resembled the stools of milk-fed babies in that they were well digested, pasty and contained no mucus or curds except in the presence of an intercurrent infection whereas with breast milk mucus and curds in moderate amount were found.
4. There was no marked vomiting in any of the cases.
5. There seemed to be very little gaseous fermentation.
6. It was less constipating than our usual boiled milk formulæ, one case only being constipated.

From the developmental and physical examina-

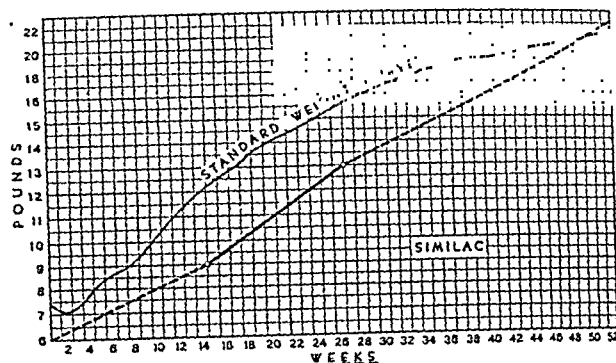


FIGURE 8

Composite weight chart of cases on Similac.

tion standpoint, these babies were normal in all respects. No cases of rickets, tetany or scurvy developed, but egg yolk, cod liver oil and orange juice or tomato juice was given to prevent these. From our standpoint the indications for the use of Similac are as follows:

- (a) Babies who do not do well on other foods.
- (b) Babies deprived of breast milk early in life.
- (c) Premature babies.
- (d) Supplemental and complementary feeding cases.
- (e) Selected cases of eczema.
- (f) Babies in which there is a milk allergy.
- (g) Constipation.

We realize in presenting this analysis that our series of cases was small, but in view of the fact that our results correspond fairly well with other cases reported, we believe it to be of some merit.

In conclusion, it is our belief that dry milks and reconstructed milks are infant foods, which are of real value, because they have certain definite scientific and clinical advantages over modified milks, but we do not consider that they are the long-awaited infant feeding panacea. The contraindications to dried milks are the same as the contraindications to other milk formulæ. Especially they should not be fed unmodified in the presence of a diarrhoea, except possibly in the case of protein S. M. A. The methods of preparation make them safe milks, because of the low bacterial count, and also because they are not influenced by climatic changes. The field for the use of dried food is ever increasing and it behooves us all to see that they are not discarded before they are given a fair clinical trial.

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THE ROLE OF SULFUR IN DERMATOLOGY

By FRANK C COMBES, MD, NEW YORK, N Y

From the Department of Dermatology and Syphilology, University and Bellevue Hospital Medical College Read at the Annual Meeting of the Medical Society of the State of New York held at Buffalo N Y, May 25 1932

ASTOIC of the last century with probably more wit than knowledge once said that there were three classes of skin diseases, the first, sulfur would cure, the second, mercury would cure, and the third, the devil himself could not cure My interest is in sulfur and my purpose is not so much to evaluate its efficacy in dermatology from my own personal experience, but rather to review the opinion of those who have seen fit to record their results After all, in the final analysis it is incumbent upon us to seek to establish a consensus of professional opinion regarding the value of a drug

I have reviewed the observations of many authorities, whose accuracy of clinical observation I have reason to believe was of the highest order Nevertheless, it is noteworthy how many have ascribed the most remarkable curative properties to sulfur both internally and externally which we today are unable to substantiate During the last few years a renewed interest has developed in sulfur both as an internal and external remedy in dermatology This is particularly true in Europe where much attention has been directed toward colloidal preparations

Sulfur is one of the oldest remedies known to man It was held in high esteem by the

ancients The Greeks called it therion (therion), meaning divine, not improbably from its use in religious ceremonies Homer mentions the use of sulfur baths for a skin condition with which Herakles was affected In the 16th book of Iliad we encounter a distinct allusion to its properties as a deodorizing substance Homer in the Odyssey speaking of it as "the relief of evils" mentions its use for a similar purpose, to purge the halls after the slaughter of the suitors of Penelope

Bring sulfur straight, and fire, the monarch cries,
She hears, and at the word obedient flies
With fire and sulfur, cure of noxious fumes,
He purged the walls and blood polluted rooms

There is undisputed testimony that the virtues of sulfur were not unknown to the ancient Jews, as frequent reference is made to it throughout the Old Testament where it has been translated into the Saxon term "brimstone" Because of its inflammable nature the alchemists of remote times regarded it as the principle of all combustion

The Romans appear to be the first to ap-

preciate the value of sulfur as an antiparasitic agent in the treatment of skin diseases. Ovid, Pliny and Virgil speak of sulfur vivum in the treatment of skin diseases in sheep. It appears that greater use was made of the vapor than of any of the many preparations with which we are familiar at the present day. When Galen wanted to treat his patients with sulfur he sent them to Vesuvius. Dioscorides and Pliny testify to its efficacy in bites of venomous animals. Fracastor was the first to mention its use as an adjunct in the treatment of syphilis. Its peculiar physical properties and its extensive affinities for other substances made it a favorable subject of study and experimentation with the alchemist. Many of these preparations still retain the fanciful names applied to them in the middle ages. The traditions of their medical value still linger in the popular mind and are not yet eradicated from that of the medical profession.

Sulfur is a non-metallic element and is distributed generally throughout the mineral kingdom. It is also present in varying amounts in all vegetable and animal matter. In the human body it is not only a constituent of the albuminous, fibrinous and gelatinous tissues, but of the hair, saliva, bile, urine, nails, etc. The two animal substances in which it is most abundant are cystin found in large quantities in keratin of the skin and taurin, a constituent of the bile, in which sulfur forms about a quarter of the entire weight.

It was formerly thought that sulfur had a volcanic origin, but it is now known that it is produced in nature in gypsum after a process of reduction extending over many centuries and also by the process of deposit from sulfur bearing waters. One of the world's largest deposits is located in Utah. It is over 2,000 feet square and of unknown thickness. Shafts have been sunk sixty feet without reaching the bottom.

From a medical viewpoint we are concerned in three general types of preparations, first, elemental sulfur, secondly, sulfur compounds and thirdly, mineral waters containing sulfur and its compounds. There are four preparations of the element, namely, precipitated sulfur or milk of sulfur, sulfur lotum or washed sulfur, sublimed sulfur or flowers of sulfur and colloidal sulfur.

The first and the last of these, namely precipitated sulfur and colloidal sulfur are of the greater interest in dermatology. My remarks will be limited to them. Precipitated sulfur is a fine, amorphous, tasteless, odorless powder, of pale yellow color. It is preferred to the others because of its more highly divided state and smoother texture. Occasionally found pure, it generally contains a variable

quantity of sulfuretted hydrogen and sulfate of lime. Although these impurities are well known to exist and directions are given in the older pharmacopeias for their detection and removal they are never removed and their existence is ignored in practice. Later on I will demonstrate that it is to the existence of these impurities, especially the sulfurous acid, that sulfur owes its position as a therapeutic agent and that pure sulfur is probably inert.

All sulfur is insoluble in water, nearly insoluble in alcohol, and only slightly soluble in ether and olive oil. Because of this property of relative insolubility in the ordinary liquid vehicles, it is impossible of effective application in a fluid medium. To partially overcome this disadvantage it is possible to prepare a colloidal sulfur which in addition is said to be more active than the ordinary crude element. Egg albumen or rabinose utilized in its preparation prevents the aggregation of the sulfur masses. By means of this preparation sulfur may be applied in an aqueous medium.

Its compounds are many and I will mention them on occasion when I consider their therapeutic application. It ranks next to oxygen in its powerful affinity for other elements, with which it unites.

Before we enter into a discussion of the chemo-therapeutic action on the skin we must first assure ourselves that sulfur is absorbed. We must bear in mind that it is an insoluble element and not absorbed as such by the intact epidermis. Unna supported the opinion that its favorable influence was due to the formation of hydrogen sulfide gas. Recent investigations of Heftler, Golodetz et al., have confirmed these findings. Maliva demonstrated that bismuth injected subcutaneously in mice was blackened by a sulfur bath. This conversion of sulfur is generally accepted. We are all familiar with the odor emanating from patients anointed with sulfur and acquainted with the fact that silver articles carried in the pocket are discolored due to the formation of a black sulfide. Kensuke, of Japan claims that the absorption of colloidal sulfur takes place through the epidermis *per se*, and not through the glands as is the generally accepted mode of absorption of sulfur.

According to Kopytowski, applied to the normal skin it produces an increased but incomplete epidermal keratinization with a definite marked dilatation and thickening of the vessels of the papillary layer. There is a very slight leukocytosis principally of the mononuclear cells. It differs in this respect from other chemicals which produce a chemotactic action invoking a polynuclear leukocytosis.

The chemical reactions responsible for this effect of sulfur have been variously explained. Brisson believed that it depended upon the sodium chloride content of the serum, which oxidized the sulfur to sulfuric acid, and that the latter was the active principal. Thus, the greater concentration of sodium chloride in the serum the greater the activity of the sulfur.

Sulfur is one of the most important elements found in the corneous layer of the skin. According to Unna and Golodetz the dried epidermis of the sole of the foot contains 0.53%. It is found combined with the amino-acids, tyrosin, phenylalanin and cystin. Cystin which contains about 14% sulfur is an important factor in the process of cornification. It is the principal carrier of sulfur in keratin. It readily liberates sulfur in the form of hydrogen sulfide. Besides the sulfur combined in keratin as cystin there is a larger part, loosely bound. Unna demonstrated that the loosely bound sulfur exists only in the cells having undergone complete cornification. Thus, sulfur applied to the skin in dermatoses in which there is a deficient or incomplete keratinization as seborrheic dermatitis, psoriasis, pityriasis rosea and other diseases in which parakeratosis is an important factor should act as a corrective agent. This is known as its keratoplastic action and aside from its antiparasitic action is the most important property the element possesses.

Paschkis is of the opinion that its action is enhanced by combining alkalies with it. This may explain the irritating effects of sulfur in acute vesicular dermatitis. The secretion in these cases is alkaline in reaction and sulfur exerting its maximum effect would tend to aggravate the existing inflammation. It might also explain its relative ineffectiveness in psoriasis and parapsoriasis in which the scales have an acid reaction.

The chemistry of this keratoplastic action is a process of reduction or absorption of oxygen. It is dependent upon the ability of hydrogen sulfide to combine again with sulfur, therefore forming poly-hydrogen sulfides. These combine with oxygen producing thio-sulfates. Organic sulfur compounds found in the epidermis also have a tendency to form other sulfur combinations, as for example cystin is formed from cystein by reduction. This favors normal cornification. Unna also assumes that it may be necessary for cell growth and cell division to cease, before cornification can take place, and that cessation of cell life is caused by the withdrawal of oxygen. Since the cystein-cystin reaction is reversible through a process of oxidation, the presence of hydrogen sulfide might possibly

be considered as checking this process by absorbing all the available oxygen to form sulfurous acid, thus enhancing complete keratinization.

The keratoplastic effect of sulfur is evident only in pathologic skins. Golodetz has demonstrated this by applying an ointment containing lead and sulfur to diseased and healthy areas on the same individual. The skin covered with scales and crusts was blackened according to the severity of the lesion. The blackening disappeared on recovery. The healthy skin was not blackened. This proved that the pathologic skin forms sulfuretted hydrogen when treated with sulfur through which the cystein contained in the horny skin is transformed to cystin.

The keratolytic action of sulfur may be dismissed with a few words. It is seldom used for this purpose as we have other agents which are more effective and are less liable to produce irritation. Greater concentrations of the element are necessary to elicit this action. It is due to the deep action of hydrogen sulfide on the young prickle cells, dissolving these and thinning the corneous layer. The antiparasitic nature of sulfur is largely dependent upon the keratolytic action. Its action is enhanced by heat and light, in the presence of an alkaline medium. Sulfur is frequently incorporated in soap. As time is required for the development of poly-hydrogen sulfides, the lather should be left on the skin for several hours.

The effectiveness of sulfur when applied to the skin depends physically on the size of the particles. Colloidal sulfur possesses the highest degree of division and exhibits therefore the largest total surface. I think that experience and time will prove that it is the most satisfactory preparation for application to the skin, since it can be applied in high dilution. This utilizes the favorable therapeutic action of the element and obviates the possibility of a dermatitis.

In a discussion of the therapeutic use of sulfur, we must, for clearness separate the internal from the external use of the remedies considered. Experience teaches us that sulfur is of definite value when applied externally in scabies, acne vulgaris, rosacea, tinea and seborrheic dermatitis. It is also of benefit in the pyodermas, furuncles, carbuncle and impetigo contagiosa. In this latter group it acts by withdrawing oxygen and moisture from the tissue thus rendering it less favorable for bacterial proliferation.

In addition, Paschkis recommends it in ichthyosis and pigmentary diseases, and Stelwagon in lupus erythematosus. Shoemaker

recommends it in psoriasis and pediculosis; Sabouraud, in all effections of the follicles or localized around the hair follicles. Crocker obtained good results in localized hyperidrosis with the internal administration of a drachm of the precipitated sulfur three times daily. Norman Walker recommended it in erythema multiforme, and Hardaway in dystrophies of nails. I can attest to the excellent results obtained by Trimble in sycosis vulgaris with a 1-2% precipitated sulfur ointment.

The effect of sulfur taken internally is primarily laxative, but there is definite evidence of absorption, and its presence has been demonstrated in the skin following ingestion either of the crude element or one of its salts. Bulkley and Garrod speak very highly of its beneficial effect when taken internally in peri-anal eczema. I have never seen any benefit from it in these cases except as a laxative. Pautrier reports striking results in the treatment of alopecia and psoriasis after the intramuscular injections of 1-2 c.c. of a 5% oil solution of sulfur. I have found this a very painful injection. A dextrose solution containing a sulfur compound is now available for intravenous injection.

The question of calcium sulfide has always interested me. It was first brought to the notice of the profession by Sidney Ringer over half a century ago. Since then it has had many ardent advocates and an equal number of sincere defamers. Speaking of the alkaline sulfides generally, Ringer says: "This group of remedies influences the suppurative process in a marked and manifest manner. In boils and carbuncles these remedies yield excellent results. One-tenth grain of sulfide of calcium given hourly or every two or three hours will generally prevent the formation of fresh boils, while it lessens the inflammation and reduces the area of existing boils."

Piffard and Sabouraud support this view and ascribe the failure of many to substantiate it to the fact that the dose has exceeded that suggested and that generally the sulfide is not administered in gelatin coated pills. Calcium sulfide is not a very stable or pure preparation and must be freshly dispensed. Many times the sulfite or sulfate are substituted for the sulfide. Piffard cites several instances where doses of $\frac{1}{2}$ -1 grain had no effect or caused an apparent aggravation of the process. When doses as small as 1/10-1/50 grain were administered, prompt improvement followed. Most dermatologists at the present day agree with Ravitch that the reports of its great therapeutic value are simply myths. I cannot ascribe entirely to this attitude as I have seen many cases of definite improvement following its use in doses of 1/10 grain dispensed in

small gelatin capsules. Piffard claimed excellent results in acute eczema in infants with calcium sulfide in doses of 1/100 grain. Bulkley, G. H. Clark, Hardaway, Grindon, Radcliffe-Crocker and many others also considered it a valuable remedy.

Sulfur baths are of undoubted value in vesicular and pustular dermatoses. Osterberg, Rubenstein and Goeckerman have reported excellent results and consider them a valuable addition to the therapeutic armamentarium. Further they have demonstrated that sulfur administered in this fashion is absorbed both by the skin and inhalation. I have experienced the rather embarrassing experience in having patients with an apparently intractable dermatosis recover completely after a few weeks sojourn at a sulfur spa.

Natural sulfuretted waters are available in New York at Richfield, Sharon and Avon. Duhring reports that the manner in which they act is not always clear, but that cures often take place through bathing cannot be questioned.

In syphilis I think that sulfur baths are also of great value. The conventional disagreeable salts formerly used for this purpose have been replaced by modern compounds both of a colloidal and non-colloidal nature which are non-staining and almost odorless.

Vlemminckx's solution (Liq. calcis sulfuratae) makes a good sulfur bath. From six to eight ounces to the tub of water is sufficient for an adult. It should not come in contact with the nickel fixtures or they will tarnish as the result of the action of the hydrogen sulfide liberated. The *modus operandi* is rather obscure, but there is definite evidence that it increases the tolerance to mercury. McMurtry expressed it as keeping a "stream" of mercury going through the cells. Schlesinger in 1931 claimed that it acted as a catalyzer to the mercury and found it of great value as an adjunct in the treatment of visceral syphilis, particularly aortitis. I have no doubt but that the patients in general are benefited by it and are better able to tolerate the conventional anti-syphilitic drugs. It may be administered by mouth or intravenously. I do not recommend that it be given simultaneously with the arsphenamines as it may act in too rapid elimination of the arsenic.

In 1927 Schroeder of Denmark reported excellent results following the injection of sulfur in the treatment of paresis by hyperpyrexia. The intramuscular injection of 5 c.c. of a 2% suspension of sulfur in olive oil is followed in about six hours by a temperature ranging up to 104°, which is sustained and falls gradually over a period of 18-24 hours. I have had encouraging symptomatic and

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SERVICE OF EX-PRESIDENTS

Doctors are often accused of being failures as business men, diplomats and politicians. They are failures as business men if the yardstick of making money out of their profession is the measure used. The standard of saying and doing what the patients want would find

the doctor deficient as a diplomat. The average doctor does not shine as a politician, advocating public measures for the sake of their notoriety and advertising value. Yet the established custom of the medical profession is advocated by Walter Lippman, former editor

of the New York World, in an article in the September American, entitled "Good Men Wanted." Mr. Lippman suggests that Calvin Coolidge and other ex-presidents set an example of public service by seeking to become members of Congress, or other offices of lower rank.

The established custom of the Medical Society of the State of New York, is that its ex-presidents shall accept appointments as chairmen or members of committees, thus continuing to give their services to the profession and the public unselfishly and for the promotion of public health.

ULTRA-VIOLET LAMPS IN THE HOUSEHOLD

An advertising concern has recently issued a news item "for immediate release," whose opening sentence is "A new electric bulb similar to a lighting bulb, that produces the safe ultra-violet health rays at low cost for domestic use, has just been announced."

Then follows the statement that a public health worker had "discovered a close relationship between the varying amounts of sunlight throughout the year and seasoned increases in illness," and therefore this expert advocates the use of artificial sunlight as a means of reducing illness during winter and spring.

The people have been fed with these half or quarter truths to such an extent that they expose themselves for hours to sunlight on the beaches and on house roofs, and then, a few hours later, suffer with chills, fever, vomiting, and other signs of an acute burn.

Every doctor who gives ultra-violet treatments is aware of the precautions which he must take in order to prevent sunburn. He limits the time of the first exposure of a part to only five minutes, lest he "burn" the patient. Yet the people use ultra-violet lamps supposing that they will do no harm even if they do no good.

The doctor who seeks to instruct the public regarding the nature of ultra-violet light is in a dilemma. He wishes the people to know the curative value of the light, as well as its limitations; and he does not wish to emphasize its dangers to such an extent that the people become panicky and refuse to take the treatments when they are required. Probably the best course for him to follow is to warn his patients privately of the dangers of ultra-violet burns as well as sunburns; and to advise them to take the ultra-violet treatments on the doctor's prescription only.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Typhoid Fever: This Journal of September, 1907, contains an editorial on typhoid fever which assumes that its complete eradication will occur in the near future, when it says:

"Some day typhoid fever will be as obsolete in civilized communities as cholera or small-pox. We possess all of the information that is necessary to make it so now. It is no longer a great and elusive mystery. The average third year medical student knows enough about typhoid fever to be able to stamp it out in any municipality if he might have absolute power.

"Every case of typhoid fever is an evidence of the benighted state of the civilization in which it occurs, and of the inefficiency of the government."

The editor assumed that complete prevention might be impossible because of interstate commerce, and says:

"If a municipality should grant to its health

commissioner all of the authority necessary to this end, he could cut down the typhoid death rate to a minimum, but beyond a certain point he could not go without the aid of the State.

"In Pennsylvania particularly, and in New York State, too, railroad cross the streams from which towns take their drinking water, and every coach on every train of cars crossing these streams has a toilet which is used by typhoid convalescents. We have already referred to the positive knowledge which we possess concerning the railroads as distributors of typhoid, but not enough attention is paid to this important factor. The streams and brooks which supply the ill-fated City of Scranton with drinking water are crossed and recrossed by the railroad which daily carries hundreds of people from Philadelphia, the asylum of typhoid; and still the investigating authorities declared that they could not specify the source of the Scranton epidemic."



MEDICAL PROGRESS



Renal Glycosuria.—In the selection of cases of "typical" renal glycosuria here reported Alexander Marple has chosen the following standards: (1) Glycosuria without hyperglycemia. Sugar should be found in every specimen of urine voided, whether in the fasting state or after a meal. The amount of sugar excreted in twenty-four hours is of little importance. No fasting blood sugar value (venous) may be 0.12 gm. per 100 c.c. or over, and no blood sugar value after a meal may be 0.17 per 100 c.c. or over. (2) Glycosuria should be largely independent of diet, but may fluctuate somewhat, depending upon the amount of carbohydrate ingested. (3) The level of blood sugar should be influenced only slightly by the ingestion of food. The curve obtained after giving 100 gm. of dextrose should be a normal one with no value rising to 0.17 gm. per 100 c.c. and with a return to the control value within two hours. (4) The symptomatology characteristic of diabetes mellitus should be absent. (5) The type of sugar found in the urine should be proved to be dextrose. (6) No progression toward true diabetes mellitus should be evident during an arbitrarily chosen period of at least three years. (7) For complete study it should be shown that the patient is able to store and utilize carbohydrate in a normal manner. A common finding, not necessary for diagnosis, is the history of glycosuria occurring in the relatives of the patient. Only 15 cases in a study of 9,000 cases of glycosuria were found which fulfilled the requirements outlined: In addition 7 cases were found which were considered typical of renal glycosuria except for an occasional sugar-free urine specimen or an exceptional blood sugar value above the limit of set in the Joslin Diabetic Clinic. Two cases of chronic ("essential") pentosuria were discovered among the patients with supposed renal glycosuria. No case in the group had recognizably progressed toward diabetes mellitus, despite the fact that of the 15 typical cases 5 had glycosuria for over ten years and 1 for over thirty-six years. In 13 of the 15 cases glycosuria was first noted before the age of thirty years. In 3 cases the onset was noted before the age of ten years, and in 9 before the age of twenty years. The history of glycosuria in any of the relatives of the patient was obtained in 11 of the 15 cases. No evidence of nephritis was found in any of the patients. Because of its rarity care should be exercised in making the final diagnosis of this type of glycosuria. When the diagnosis is tentatively made the patient should be carefully followed. Tests of the blood and urine should be made every three months for the first year and

every six or twelve months thereafter.—*American Journal of the Medical Sciences*, June, 1932, clxxxiii, 6.

Abstinence Symptoms with Atropine.—Hardly any attention has been given hitherto, says Robert Flinker, to abstinence symptoms following withdrawal of atropine. He has recently had occasion to observe simultaneously the symptoms that developed in 2 patients as the result of the accidental interruption of the administration of large doses of atropine, when through some oversight the atropine solution in his department was used up and a fresh supply could not be provided immediately. Both patients were suffering with parkinsonism; one was receiving 3 times a day 25 drops of a 0.5 per cent solution of atropine sulphate and the other 18 drops of the same solution, likewise 3 times a day. After sudden withdrawal of atropine there appeared in both patients, 8 and 13 hours afterward, respectively, symptoms consisting of malaise, nausea, vomiting, vertigo, profuse perspiration and salivation. These phenomena persisted all the following day, and did not come to an end until, for lack of atropine solution, 0.06 gm. ext. belladonna was administered. They disappeared completely on the second day afterward, shortly after the patients had received their customary doses of atropine. We are therefore driven to regard these symptoms as abstinence symptoms. It is only rather recently (1925) that the medical profession has learned to treat encephalitic patients with large doses of atropine. In the author's clinic a daily administration of 20 mg. (3/100 grain) is not unusual. It can hardly be wondered at that a sudden interruption of this dosage may have a very different effect from that which would follow interruption of the usual small doses. These experiences teach that a warning is necessary not to allow such patients to be suddenly bereft of their medicament upon discharge from hospital care.—*Münchener medizinische Wochenschrift*, April 1, 1932.

Phototherapy in Erysipelas.—J. M. Davidson presents a report of fifty-one cases of erysipelas treated by exposure to an artificial source of ultra-violet light. This treatment, particularly in the early case, appeared to give better results than other methods in use. The method is easily applied, devoid of danger, cleanly, and inexpensive. Before treatment was commenced any preparation previously applied to the part, especially if it were greasy, was carefully removed from the affected area. One and a half times to twice

the erythema dose was employed, the exposure being for five minutes with the arc at a fixed distance of twelve inches. In the case of infants a slightly shorter exposure was employed. In all cases part or all of the inflamed area, according to its extent, was included in the exposure, with a margin of about one and a half inches of healthy skin when this was possible. In facial and head cases, the eyeballs were protected by small pads of cotton wool fixed by adhesive plaster. Following light treatment, the affected part was left uncovered, or at least without dressings, except in two instances in which pain was a prominent feature, and in these lint wrung out in cold water was applied and frequently renewed. By the end of forty-eight hours after exposure there was a critical fall in temperature in 31 of the 39 cases in which the whole edge of the lesion was treated. In 23 of these cases the fall commenced within twenty-four hours. Of the 51 cases 4 terminated fatally; these were all complicated cases. In the remaining 47 cases the average duration of the fever was 7.81 days, while in 47 control cases the fever lasted 9.26 days. The average duration of the fever after treatment was 3.85 days, in the control cases 5.16 days. The sole complication seen in the treated cases was streptococcal abscess, which occurred in two cases. From the results in these cases it would appear that if acute cases of erysipelas come under treatment sufficiently early prompt exposure of the affected part to what is customarily considered an over-dose of ultra-violet light would, in the large proportion of cases, abort the lesion. The technique can be carried out with any ultra-violet lamp of known efficiency.—*British Medical Journal*, May 21, 1932, i, 3724.

The Dangers of Overdosage with Insulin in Treatment of Liver Affections.—Bernhard Kugelmann, writing in the *Deutsche medizinische Wochenschrift* of April 22, 1932, makes a report on some experiments that he has carried out with a view to studying the effect of rather large doses of insulin upon the liver function in healthy individuals. He proved that large doses of either insulin or adrenalin produce demonstrable disturbances of the carbohydrate metabolism of the liver. If, however, small doses (5 units) of insulin were injected, the normal blood sugar curve was found unchanged after a levulose functional test. On the basis of 2 cases Kugelmann shows that if patients suffering with liver affections (icterus simplex, acute yellow atrophy with suppurative cholangitis-cholecystitis) are treated with insulin, the administration of large doses has the opposite result to that intended. Instead of enriching the liver with glycogen, the organ is injured still more. Only with small doses of insulin (5 to 10 units twice a day), administered subcutaneously, never intravenously, and with

simultaneous administration of an abundant carbohydrate diet, with glucose or even cane sugar, can a glycogen fixation be achieved, and with it a support of the liver parenchyma. Under all circumstances the slightest sign of hypoglycemia must be avoided. If these appear after 5 to 10 units of insulin, as does frequently occur in liver patients, it is better to abandon insulin treatment, for it can only injure the patient. Care must also be taken not to give too large doses of sugar (100 gm. or more) to a patient who is receiving insulin, for these may increase the effect of the insulin by causing endogenous insulin production. Endogenous added to exogenous insulin may result in severe hypoglycemic conditions. It is therefore wiser not to give more than 40 to 50 gm. sugar. What is wanted in liver disease is to fill up the glycogen depots in the liver. This is best done by subcutaneous injection of small doses of insulin, and avoidance of too much sugar administration.

The Action of Lecithin and Cholesterin Associated with Insulin upon Carbohydrate Metabolism.—Umberto Polera states that he carried out a series of experiments upon 4 diabetic and 4 nondiabetic subjects, to determine the effect of lecithin and cholesterin upon carbohydrate metabolism, when associated with insulin. He found that in the diabetics the hypoglycemic action of insulin is markedly increased when it is associated with lecithin and with cholesterin. This increase occurred independently of whether the insulin was associated with one alone or with the two together of these substances, except in one case, in which the simultaneous administration of the three substances doubled the hypoglycemic effect. The reduction of blood sugar content began after 30 minutes, and reached its peak as a rule in 90 to 120 minutes. In the nondiabetic subjects an increase of the hypoglycemic action of insulin was similarly observed when insulin was associated with lecithin or cholesterin, but in less degree. Here, however, the increased hypoglycemic effect was more marked when insulin was associated with cholesterin than when it was combined with lecithin. The association of all three at once gave the same result as insulin and cholesterin without lecithin. Beginning after 30 minutes, the action reached its peak nearly always after 90 minutes. The marked lowering of the blood sugar content in these nondiabetic subjects was not accompanied by symptoms of hypoglycemia. Obviously this increase of the property of insulin to reduce blood sugar when administered in association with these substances requires an explanation. In the light of modern research it appears that the syndrome of hypoglycemia is related not to the blood sugar values but to diminished supply of glucose to the cells, or a diminished capacity on the part of the cells to utilize glucose,

which is followed by the formation of intermediate spasmogenic substances. It appears that the lipoids may either favor such utilization by the cells or may act to prevent the formation of these spasmogenic substances. It seems probable that the increased hypoglycemic property of insulin associated with lecithin and cholesterol together is due to a neutralization of the circulating adrenalin by the lecithin, and that the failure of hypoglycemic syndromes to appear is due to a greater utilization of the glucose by the cells, or to a neutralization of spasmogenic substances by the lecithin and the cholesterol. It is certain, however, that we are still in the field of hypothesis here, since in fact we do not even know more than hypothetically what metabolism itself is.—*Riforma medica*, April 23, 1932.

The Management of the Decompensated Cardiac Invalid.—Harold Thomas Hyman and Nathan M. Fenichel, writing in the *American Journal of the Medical Sciences*, June, 1932, clxxxiii, 6, discuss the cardinal principles in the management of the cardiac invalid with respect to the effects of specific medication as observed in a series of 100 cases. They emphasize the importance of institutionalization and dietotherapy in securing physiological rest, together with the liberal use of sedatives and hypnotics. Drug therapy is indicated in the cardiac invalid who remains decompensated despite rest, dietotherapy, and the mechanical evacuation of fluid from the serous cavities. Digitalis is invaluable in patients with auricular fibrillation. The pharmacology of the digitalis group of drugs may be simplified to a great extent by eliminating all of the preparations other than the tincture and the leaf of digitalis, and by administering these only by the oral or rectal route. The dosage cannot be estimated by any *a priori* calculation. This opinion bears out the original writing of Withering who said, "Let the medicine be continued until it acts either on the kidneys, the stomach, the pulse, or the bowels—let it be stopped at the first appearance of any of these effects." Diuretics are of equal importance to digitalis in the management of the decompensated cardiac invalid. Their use is independent of the cardiac rhythm. The problem of diuretics may be simplified by eliminating all but the saline preparations (urea and acid salts) and the mercurials, such as salyrgan. In several instances urea has been administered over a period of years despite the elevation of the blood urea figures to as much as 105 mg. per 100 c.c. There have been no untoward reactions other than an occasional urea rash, which disappeared when the drug was discontinued. The acid salts (ammonium chloride or carbonate and calcium chloride) are given in dosages of 10 grams daily. They are indicated when edema persists, despite digitalization, rest, and the limitation of fluids

and salt in the diet. Second only to digitalis in the management of the decompensated cardiac invalid are the mercurial compounds. The authors prefer salyrgan, which can be administered intramuscularly or intravenously in doses of 1 to 2 c.c. They do not hesitate to employ the drug in the presence of marked albuminuria, even when it is accompanied by casts or an occasional red cell. The dose may be repeated in four or five days, though it is preferable to wait a week if this is possible. The cardiac stimulants, caffeine, strychnine, camphor, and adrenalin are definitely valueless in the management of the decompensated cardiac invalid. Adrenalin is absolutely contraindicated. Liberal doses of morphine and other sedatives are helpful.

The Need of Occupational Therapy for Cardiac Patients.—Paul D. White, writing in the *New England Journal of Medicine*, May 5, 1932, ccvi, 18, holds that there is no doubt at all concerning the need of occupational therapy for cardiac patients, no matter what the kind of heart disease, what the age, and whether the patient is convalescent or acutely ill. In acute cardiac illness, as soon as the necessity for absolute rest has passed, some form and degree of occupational therapy is valuable and much too often neglected. The occupation selected need not be useful from the ordinary utilitarian point of view. For example, reading or being read to, sketching or painting, writing letters, stories or poems, keeping a diary of current events, playing chess or other games, making or solving picture or cross-word puzzles, collecting flowers, minerals, beetles, or stamps, and gaining knowledge of some phase of archeology, history, literature, science, or art. may be more worthwhile than weaving baskets, sewing, or making pottery. The occupation must suit the age, intelligence, and strength of the patient. At first the mind may be allowed more activity than the body, remembering that an over-tired brain and nervous system may react unfavorably on the heart. Gradually, as the patient progresses, physical exercise should be combined with mental activity, for it is the proper mixture of the two that is best. White is a firm believer in the value of physical exercise in cardiac patients whose hearts can stand it—and they make up about 95 per cent of the lot. As examples of combined exercises he suggests strolling in search of various kinds of flowers, trees, rocks, insects, or birds. In selecting forms of occupational therapy it is important to plan for the future, so that there need be no break later on, but a permanent occupation, be it vocation or avocation. Most cardiac patients are not sufficiently crippled to change their present occupations, though they often need reassurance and a little directing here and there. Every case must be managed on its own merits. No rules can be fixed.

The Treatment of Habitual Obstipation.—All therapeutic measures for the cure of constipation, says E. Renold, should have as their aim the achievement of a stool which approaches as nearly as possible a natural emptying of the bowel with reference to frequency, size, and form. Even habitually obstipated individuals can be trained to have a sufficient bowel movement every day at a given time without difficulty, pain, or excessive strain. The choice of diet is of very great importance. In the case of persons who have abused laxatives, and consequently have a refractory intestinal tract, the diet should be bland, non-irritating and free from sediment, even potatoes being omitted at first. For a few days it is advisable not to give per os any remedy exciting peristalsis, but to have recourse every second day to an enema after breakfast, with camomile or flaxseed incorporated when the bowel is very sensitive. After a few days small amounts of filling or lubricating remedies that do not cause fermentation may be cautiously given, among the best being psyllium. Flaxseed drinks and agar-agar preparations are also suitable, provided they do not contain purgatives. It is advantageous to employ a filling substance that acts chiefly through its swelling capacity, together with a lubricant that softens the feces. The latter substance is found in paraffin, provided it is given rationally, in small doses distributed over the day and not too far from meal time. It is impossible to emphasize too much the necessity of educating the bowel to punctual emptying. The patient should go to the toilet every day at the same hour, preferably after breakfast. If, however, the desired result is not obtained after 10 to 15 minutes, it should be made a rule not to make any further attempt on that day—unless of course the urge is overwhelming. Enemas or suppositories should always be given in the morning. Evening use may, however, be made advantageously of small rectal injections of oil or paraffin. In cases of atony, massage is useful. This should be done slowly with the flat of the hand and always with caution and avoidance of rough manipulation. Its use belongs to the expert, and is the proper province of the trained physician. In cases of simple sluggishness, particularly in young persons not slaves to laxatives, cellulose treatment is advisable, with such foods as potatoes, green vegetables, fruit, salads, and bran. The eating of 6-10 dried prunes in the evening on an empty stomach may accomplish results if the case is not an obstinate one. With patience on the part of physician and patient there are few cases that will not attain the correct rhythm in at most a few weeks.—*Schweizerische medizinische Wochenschrift*, May 14, 1932.

A Case of Graves' Disease Treated by Removal of the Inferior Parathyroids.—An unusual case is reported by Gaudier and Minet, in a paper read before the Paris *Académie de Médecine* of April 5, 1932, in which removal of the two lower parathyroid glands in a woman of 38 suffering with exophthalmic goiter caused the spontaneous disappearance of all her symptoms within a month following operation. The thyroid tumor had been growing for about six months, chiefly on the right side, where it had attained the size of an orange; a prolongation about the size of a thumb extended toward the left from the thyroid mass, adherent to the trachea. The usual symptoms of exophthalmia and tachycardia were present; there were diplopia, ready fatigue of the eyes on reading, and persistent headache; the tachycardia appeared in crises, accompanied by dyspnea and insomnia. Tremors, abundant perspiration, and pruritus added to the patient's sufferings. Her state of emaciation and inanition was so excessive that an emergency operation seemed indicated as the dyspnea increased. What operation to perform was, however, a problem, as the patient could not bear a thyroidectomy, and yet her respiratory troubles urgently demanded relief. While examining the inferior thyroid arteries with a view to the feasibility of ligating them, Gaudier observed that the right inferior parathyroid was sensibly increased in size, resembling a small almond, and the left one also somewhat enlarged; both were of hard consistency and of a color resembling ham. He removed both these organs without ligating the principal vascular trunks except those that had been cut during the dissection of the region. He did not touch the goiter, and reconstituted the region in three layers. Improvement of the general condition appeared immediately; the pulse, which had averaged a beat of 140, dropped to 100 and less; the dyspnea so promptly yielded that the patient was able to get up on the third day, and on the fifth to stay up all day. At the end of a month, to the astonishment of both Gaudier and Minet, the exophthalmia had ceased to exist; the goiter and also the tremor had disappeared; there was no dyspnea, and the pulse was between 70 and 90. The authors are inclined to believe with Leriche that there is a connection between parathyroid and vasomotor functioning. It was this consideration that led Gaudier to think that a partial intervention upon the parathyroids would do as much good, or more, than ligation of the vascular pedicles of the inferior thyroid trunks, which had not in the past given him very good results. Histologic examination of the removed parathyroids revealed lesions of sclerosis.



LEGAL



EVIDENCE — IMPROPER QUESTIONS AS TO PHYSICIAN'S WEALTH

By LORENZ J. BROSNAN, ESQ.

Counsel, Medical Society of the State of New York

It has long been one of the well-established principles of law that testimony which has no part in the issues involved in the trial of a lawsuit and serves no purpose in the case other than to "excite the passions, arouse the prejudices, awaken the sympathies or warp or influence the judgment of the jurors" must not be placed before the jury.

The Appellate Courts have in numerous cases ruled such testimony to be grounds for a reversal on appeal. A recent malpractice case tried in a nearby state illustrates well the application of the rule.

A married woman injured the calf of her leg in some manner by a blow from an automobile, and a lump described as being the size of a goose egg appeared on the inside of the tibia where the leg was struck. The lump became badly discolored, and from time to time she was treated at her home by a certain Dr. H. At the end of about four weeks the swelling had become somewhat less and the flesh had turned to a light yellow color. She was advised by Dr. H. to continue to stay in the house. Apparently because she felt that some other physician would allow her more freedom she called in a Dr. C. After his examination he told her that she was suffering from a hematoma, and that in his opinion it should be opened. According to the patient's story he also told her it would require no more than a pin prick incision. She requested that the hematoma be opened and the doctor stated to her that he had no instruments with him, but said he might undertake the treatment with a safety razor blade. He was furnished the blade, which he sterilized by boiling, and after carefully washing his hands, he incised the hematoma and dressed the wound. The doctor was paid his fee and saw no more of the patient. Apparently because the patient was disgruntled that the incision was larger than she had anticipated, she did not call Dr. C. again. The first doctor resumed the care of the case instead of Dr. C. An infection developed and it was necessary for the patient to enter a hospital for further incision and drainage. The injuries were slow in healing, and she was left with a scarred and shrivelled leg.

The patient sued Dr. C. claiming that he had been negligent in his treatment and that as a consequence she attributed to him the bad end result. When the case was tried she testified that she

had been caused mortification by reason of her unsightly limb. She claimed that she had been unable to bathe bare-legged in accordance with the dictates of fashion, but instead had been obliged to wear stockings. She also testified to an incident when she had gone bathing wearing stockings and had been ejected from a pool at the complaint of other bathers who were suspicious of the condition of her leg.

The doctor's defense included testimony that the infection had already started when he treated the patient, and that he had taken every possible precaution to guard against infection and to insure asepsis. In the cross-examination of the doctor he was asked a question as to what he considered his net worth in money to be. His counsel vigorously opposed the question but the court directed him to answer. His testimony was that he was worth over \$100,000. The case went to the jury and a substantial verdict was returned in favor of the plaintiff.

An appeal was taken on behalf of the doctor from the judgment, principally on the ground that the trial court had improperly permitted testimony to be introduced which necessarily had an improper influence upon the minds of the jury. The trial court had made its ruling on the theory that punitive damages had been asked for in the plaintiff's complaint, and therefore in order to be able to assess such damages it was proper to acquaint the jury with the wealth of the defendant. The Appellate Court decided, however, that the ruling of the lower court was improper. The record showed no evidence to sustain the assessment of punitive damages against the defendant, assuming that liability existed, there being no proof of malice or improper motive toward the plaintiff on the part of the defendant.

The Appellate Court distinguished from the case before it the type of case where the wealth of the defendant might be a proper part of the testimony. Such a case would be an action for slander, for it would be clear that the slanderous words would injure the complaining party more if uttered by a man of wealth than if the same words were uttered by the village drunkard. In such a case also malice is closely associated with the wrong charged, as distinguished from the ordinary case of alleged malpractice. As the court said:

"Where malice or a wrongful motive exists, punitive damages may be recovered. Proof of

facts showing the existence of malice lays a foundation for punitive damages. Outside of these exceptional cases where wealth is necessarily involved in determining the damages sustained, evidence of wealth is inadmissible unless there be proof of malice. It is a cardinal principle of our jurisprudence that the rich and poor stand alike in courts of justice. Neither the wealth of the one nor the poverty of the other is permitted to affect the administration of the law."

The law of New York is clearly in accord with this ruling. Some years ago a case was brought against a very wealthy man to recover damages for a death alleged to have been caused by his wrongful act. He was cross examined as to his control of various railroads, the number of banks in which he was a director, his dealings in stocks, the amounts of money loaned by him and the like, and the result was that the Court of Appeals ruled such evidence highly improper and prejudicial.

The courts of this State have decided that the rule cannot be avoided by indirect proof of the wealth of the defendant. A simple illustration of such an attempt to evade the rule and by indirect proof inform the jury as to the wealth of the defendant is found in a case decided in our Appellate Courts a considerable number of years ago.

The action was to recover damages for injuries sustained when the plaintiff was run over in New York City by the defendant's sleigh. In the course of the trial, on cross examination the defendant was asked what the horses he had been driving had cost him. He testified that one of them had cost \$3,000. As a consequence the jury awarded large damages to the plaintiff, probably feeling that any person who could spend \$3,000 in those days for a single horse would not miss the amount of damages assessed against him, regardless of the merits of the plaintiff's cause of action. The Appellate Court in said case ordered a new trial ruling that the effect of such testimony was to materially prejudice the defendant.

The rule enunciated in these cases is still considered sound, for very recently one of the Appellate Divisions of the Supreme Court made a similar ruling, and expressed its disapproval of these tactics in the following language:

"Counsel well knew that this evidence was incompetent, and it is apparent that his only purpose in offering it was to play upon the sympathy of the jury. Such conduct has been repeatedly condemned by the courts. Attorneys who persist in getting before the jury incompetent evidence for ulterior purposes should understand that their conduct will imperil any verdict which they may obtain."

DEATH FOLLOWING TONSILLECTOMY

A young man consulted the defendant in this case, who was an ear, nose and throat specialist. The patient was found to be suffering from large and badly infected tonsils, and the doctor recommended and performed an operation for their removal under a local anesthetic. The operation was successful, and the patient apparently making an excellent recovery was permitted to go home the following morning.

However, the same day that the patient returned to his home, the doctor was called to attend him on three different occasions because of persistent bleeding from the mouth. The doctor finally removed the patient to the hospital a second time, and efforts were made to check the bleeding. The following day the doctor conferred with the patient's family physician, and it was decided that the patient needed a blood transfusion. One of the members of the hospital staff gave the patient a transfusion, but the patient became delirious an hour or two after the transfusion and went into a coma, dying the same day.

No autopsy was performed on the man, but the doctor ascertained that apparently the patient had been suffering from a cardiac trouble of long standing, and that his death resulted from said condition combined with the administration of the blood transfusion.

An action was instituted by the patient's administrator charging that the negligence of the defendant doctor had been the cause of the death of the patient. After the defendant's answer was served, the plaintiff did nothing to press the case for trial and after some years had elapsed a motion was made to dismiss the complaint for lack of prosecution. The judge granted the motion with the proviso that if the plaintiff should serve a notice bringing the case on for trial for the next term of court the case would not be dismissed. However, the plaintiff failed to notice the case for said term of court, and judgment dismissing the plaintiff's case was finally entered in favor of the defendant physician, thus terminating the case.



NEWS NOTES



DISTRICT BRANCH MEETINGS

The tentative schedule of the meetings of the District Branches was printed in this Journal of July first, page 818. Unforeseen contingencies often arise which necessitate changes in the programs. The revised schedule is as follows:

First—Sparkhill—October 14th.

Second—Garden City—November 17th.

Third—Loomis Sanitarium, Liberty—September 21st.

Fourth—Schenectady—October 11th and 12th.

Fifth—Oneida—October 4th.

Sixth—Binghamton—September 27th.

Seventh—Clifton Springs—September 29th.

Eighth—LeRoy—October 6th.

FOUR-COUNTY SOCIETY MEETING

A joint meeting of Livingston, Orleans, Genesee and Wyoming counties medical societies was held at "The Barn" at LeRoy, N. Y., on Wednesday, July 27th.

The afternoon was devoted to bridge for the ladies, golf, and pitching horseshoes for the men. Prizes were given in both auction and contract bridge. The silver cup for golf went to Genesee county.

At seven o'clock a bountiful chicken dinner was served in the banquet room with one hun-

dred and four in attendance. After dinner the principal speaker of the evening, Dr. Charles Brown of Ann Arbor, Michigan, gave a most interesting talk on "Problems of Peptic Ulcers." Discussions were given by Dr. George Eckle of Buffalo, Dr. Thomas Walsh of Buffalo, and Dr. Klostermyer of Warsaw.

The secretary of each society was asked to get the opinion of members of its society in regard to making this joint meeting an annual event.

GEORGE M. DOOLITTLE, M.D., *Secretary*.

ROCKLAND COUNTY

The Rockland County Medical Society holds a summer meeting which combines science and sociability. The meeting this year was held on August 25, in the Summit Park Sanatorium, the Rockland County tuberculosis hospital, at Pomona.

A scientific meeting was held at two o'clock in the Recreation Hall of the Sanatorium. The subject of the relation of the county medical society to public health was presented by three speakers:

1. Dr. Thomas P. Farmer of Syracuse, Chairman of the Committee on Public Health and Medical Education of the Medical Society of the State of New York, set forth the civic responsibility of the county medical society in local public health activities.

2. Dr. O. W. H. Mitchell of Syracuse, member of the Committee on Public Relations of the State Medical Society, told of practical methods by which the County Medical Societies had cooperated with boards of supervisors, school boards, officials of towns and villages, and other public officers, and also with lay health organizations, in carrying on public health work.

3. Dr. Thomas Parran, Jr., of Albany, State Commissioner of Health, emphasized the

friendly relations between the State health officials and the practicing physicians, and complimented the doctors of Rockland County for their active interest in public health movements.

The practice of clinical medicine was represented on the program by a paper on The Therapeutic Use of Suprarenal Extract in Addison's Disease, by Dr. Clayton W. Greene, of Buffalo.

The social program of the meeting consisted of a clambake prepared and served in the grove of the Sanatorium according to the ancient ritual devised by Dr. George A. Leitner.

Dr. W. J. Ryan, Superintendent of the Sanatorium, showed the June issue of the "Summit Park Outlook," a quarterly publication conducted by the patients in the Sanatorium. It consists of eight pages and a cover. Five of the pages are filled with personals about the patients, nurses, and doctors. There is a message of cheer by Bruce Barton, and an abstract of a scientific paper by Dr. Alfred Henry, President of the National Tuberculosis Association. The "Outlook" will make a strong educational and inspirational appeal to the people of Rockland County.

W. J. Ryan, *Secretary*.



THE DAILY PRESS



SIGNS OF BETTER TIMES

The bulbul, or Persian nightingale, is no imaginary creature, but is a real songbird whose return after a long winter's migration is a cheerful omen of Spring. Though prosperity departed two or three years ago with the stealth of the autumnal flight of the summer birds, the first evidence of its return has already been hailed with song and joy, as is depicted by J. N. Ding in the *Herald Tribune* of August 8, 1932. The cheerful twitterings of the Wall Street bull, replacing the grumble of the bear, is peculiarly encouraging to physicians whose collections have often been in inverse ratio to the number of calls they have been compelled to make. They sincerely hope that Ding's picture of the singing bull, and the flock of hogs soaring in price, is no mere nightmare, but is a real harbinger of better times at our door.

The stock market is a thermometer whose readings by financial doctors must be interpreted in their relations to other conditions besides the heat of speculation or the coldness of panic. Physicians are often said to be poor business men; but their local credit is better than that of ninety per cent of their fellow citizens. The law of supply and demand will always operate in favor of the doctor, for pain and sickness are always rampant in every community, and the doctor's services are always in demand. He is sure of having plenty to do—which is more than the merchant or the manufacturer can expect in his business.

BEGINS TO LOOK LIKE A BREAK IN THE SEVERE
WEATHER

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N. Y. Herald Tribune, August 8, 1932.

WHAT IS INTOXICATION?

The *New York Times* of July 31 asks the question: "Is there any basis in science for considering an alcoholic content of more than one-half of one per cent intoxicating?" It comments on the question as follows:

"One may search old and recent records in vain for a definite answer to the first of these questions. So far as can be learned, no scientific study by an unbiased group ever has been conducted to determine what alcoholic content of beverages is intoxicating.

"The standard of one-half of one per cent alcoholic content had been used by the United States Government for revenue purposes since 1902, or for seventeen years longer than prohibition has been effective. According to one authority, the same standard was used by about

thirty of the thirty-three States which had adopted prohibition within their borders prior to the passage of the national prohibition act. There is, however, a broad question as to whether a standard set for revenue purposes is necessarily the one that need be applied to a social law.

"The next session of Congress, especially if new wet accretions are shown in the November elections, probably will see the first sincere step taken to determine actually what may be considered generally as intoxicating, with a view to adapting the law to whatever findings may be revealed.

"If that is done, it will settle in a scientific manner a question that otherwise has been taken for granted without the benefit of research for almost a century."

PRIMITIVE MEN OF MOUNT CARMEL

The discovery of a group of skeletons of primitive men in a cave in the foothills of Mount Carmel recalls the successful contest of the Prophet Elijah with the hundreds of priests of Baal on top of the mountain, as recorded in Chapter 18 of the first book of Kings. Commenting on the discovery the *New York Times* of August 14, says:

"No ancestors of Elijah were these extinct men, but Neanderthals who differed as much from those in Europe as Arabs of our day differ from Germans. They had the thick, beetling brows, the shuffling gait, the stoop of their European contemporaries, but they were set apart by their chins, their higher foreheads, the backs of their heads, their deep, heavy jaws, their modern faces. Because of their distinctiveness Sir Arthur Keith considers them worthy of a special name, *Paleanthropus Palestinus*.

"Despite their groping toward civilization, evidenced by their tools and their familiarity with fire, nature tossed these Galileans aside. Out of such stuff no Shakespeare, Beethoven or Edison could be fashioned. We look at the Java Men, Chinese primitives, Rhodesian Men, Heidelbergers, Chelleans and others that have come and gone, only to realize that there was something genetically unstable in the first anthropoid. No wonder the scientists like Keith ask what man will be like a million years hence. Tossed on the sea of circumstance, carried forward in the past by forces of which he knew nothing, do his cumulative discoveries about himself and his environment show that some day he will learn to direct his own evolution? That the question can even be asked indicates how far the race has progressed since the extinct Galileans were buried on Carmel."

PROFESSIONAL PRIDE

Although doctors are inclined to be a grumpy lot when they talk among themselves, yet in their hearts they give thanks that they are apart from their lay brethren, and fortunate above those not

in their professional fraternity. That self-esteem is a good quality is shown by the following verses in the *New York Herald Tribune* of August fifteenth:

"The locust doubtless thinks that he
Is just as useful as the bee.
Although he does not furnish food
For either man or his own brood.
The grackle in the underbrush
Remarks the singing of the thrush
Perched high upon a maple limb,
And says, 'I sing as well as him.'
The ugly hippopotami
Observe the leopard leaping by,
And whisper, 'How that hideous cuss
Must envy lovely brutes like us!'
The tortoise is inclined to think

That he's more graceful than the mink;
The tall and angular giraffe
At clinker-built gazelles to laugh;
The whale to murmur with a smile,
'I've got that sailfish licked a mile,
And all the creatures in the sea
Both big and little envy me!
A goodly thing is self-conceit;
It makes mundane existence sweet.
We all, at its benign behests,
Throw proudly out our little chests
Without the magic gift of pride
Nobody would be satisfied."

PREVENTION OF PANICS

The extensive stalling of subway trains on August ninth and the creditable self-control of the passengers are the subjects of the following editorial in the *New York Sun* of August 10:

"Panic is an ever-present danger in such accidents as that which filled part of the East Side subway with smoke yesterday; and on several occasions when comparable conditions have existed, grave injuries have been caused to passengers struggling to escape. All the elements conducive to panic were present in the trains stalled in this latest interruption of traffic, but cool heads controlled and calm was maintained. In one train President Hedley of the railroad helped. He

says that other company employees would have done as much as he did, so complete is their training. In another Mr. Tunney, who learned with the Marines and in the ring how to keep his head, assumed leadership. Trainmen, policemen, firemen and others with the gift of enforcing discipline kept order, and the worst possibilities of the affair did not develop.

"The operation of the subways is so dependable and interruptions of service are so few that their patrons have no particular reason to school themselves in how to act in an emergency. This makes more creditable the composure that saved scores from injury in the tieup on Tuesday."



BOOK REVIEWS



THE 'MUNICIPAL DOCTOR' SYSTEM IN RURAL SASKATCHEWAN By C RUFUS ROREN Ph.D., CPA Octavo of 84 pages Chicago, The University of Chicago Press, [c 1931] Paper, \$1.00 (Publications of the Committee on the Costs of Medical Care No 11)

The hardships of transportation over large areas of territory, the inadequate facilities for laboratory exactness in diagnosis, for hospital treatment and study, the difficulties under which some surgical and obstetric procedures must be conducted, the remoteness from medical associates, and the lack of financial living compensation have, with other reasons, diminished the numbers of doctors in certain rural districts and deprives those people of sufficient medical care. Many plans have been suggested for the correction of this situation. The Committee on the Costs of Medical Care has made a study of the 'Municipal Doctor' in Rural Saskatchewan and an abstract of the report of that study is published in this pamphlet. Each of the municipalities in that Canadian Province is about 18 square miles in territory, with an agricultural population of 505 families or about 1800 people, requiring medical service. The head of each family is usually the owner of a farm of about 400 acres in size. Twenty of the municipalities employ full time doctors while others make grants of \$1500 or less as inducement to physicians to remain there and as exchange for public health services.

As a rule the municipal doctor renders free service to all the tax payers and their families. In some districts there is an extra fee for the first visit such as \$2.00 for the first home visit, \$5.00 for reduction of a fracture and \$7.00 for obstetrical service. All office visits are free.

The municipal doctor is also the health officer of the Community, whose duties include sanitary inspection, immunizations and health examinations. In addition, each physician receives from 1000 to 1500 office visits annually, makes 300 to 500 home calls and in making these according to one physician travels 5580 miles by automobile.

The median salary of twenty municipal doctors on a full time basis was said to be \$4000 while medical expenses amounted to \$731.87.

There is no provision for public laboratory facilities unless one includes the services given to those patients in the hospitals.

Most of the towns and municipalities have other physicians who admit that this system of the Rural Municipal Doctor has greatly reduced their practices and their incomes.

How pleased the doctors are with this arrangement how much public health and preventive work is secured for its community, how valuable is the surety to a community of a doctor resident there even though his work must be limited to that of good general practice exclusive of unusual specialist work, how inexpensive (\$425 per person per year) it all is with many more details the reader will find in a well merited perusal of this report.

T A McGoDRICK

A SURVEY OF THE MEDICAL FACILITIES OF THE CITY OF PHILADELPHIA 1929 Being in Part a Digest of the 'Philadelphia Hospital and Health Survey 1929' By NATHAN SINAI DPH and ALDEN B MILLS Octavo of 298 pages Chicago The University of Chi-

cago Press, [c 1931] Paper, \$1.50 (Publications of the Committee on the Costs of Medical Care No 9)

The abstract of this survey, being in part a digest of a previous Philadelphia Hospital and Health Survey of 1929, is presented by the Committee on the costs of Medical Care as an example of the medical facilities of a large American city. It is offered with the limitations that are implied in such surveys. Groups of practitioners are selected by lot and information sought by questionnaire or personal interview. Of the 3813 physicians in the city in 1929, returns were made by 449. In 1928 returns were made by 245 physicians. Dentists, Osteopaths, Chiropractors and other practitioners' reported in similar proportion.

Notwithstanding these limitations, much information was obtained which will find its proper value in the composition of the Committee's final report.

The net income of physicians was 60% of their gross. The median net income of general practitioners was \$3197 for partial specialists \$4428 and complete specialists \$5500. Of the total amount spent by residents of Philadelphia for prevention of illness and care of the sick, physicians received 26%.

Osteopaths in Pennsylvania are permitted to practice minor surgery as a part of osteopathy and after special training and examination may practice major surgery. 42% of them include in their work obstetrics and 38%, the treatment of venereal diseases. The average net in come of the osteopath is given at \$3724.

There is nothing "slow" shown in the numbers treated in the dispensaries of Philadelphia. In the year before the depression a half million people made a grand total of 2,127,000 visits. Over a million dollars was estimated to have been spent for patent medicines.

The amount of total expenditure in the City (1928) for medical care is estimated at \$103,759,700, or a per capita cost of \$53.89.

Much more information is given of hospital facilities for acute and chronic cases preventive measures, the use of drug stores and patent medicines that will interest and repay the reader.

T A McGoDRICK

A SURVEY OF THE MEDICAL FACILITIES OF THE STATE OF VERMONT By ALLON PFEILES, Ph.D. Octavo of 321 pages Chicago, The University of Chicago Press [c 1932] Paper, \$1.50 (Publications of the Committee on the Costs of Medical Care No 13)

This book presents first a study of the geographical and topographical features and the climate of Vermont in relation to the performance of health and medical care. It presents an extended tabulation of physicians, dentists, nurses as well as those who are classed as other practitioners. The institutions for hospital care and an analysis of pharmacy merchandising are included.

A considerable part of the book is devoted to facilities, activities and finances of public health, in which many interesting statements appear.

Following the general state wide survey, appears a more detailed study of Franklin and Orange Counties. In these surveys the general scheme of investigation of the Medical Survey Committee has been followed, with the usual tabulations and comparisons between urban and rural life in relation to medical care.

T F FILLIOTT



OUR NEIGHBORS



REPORTS OF OFFICERS IN WISCONSIN

The August issue of the Wisconsin Medical Journal contains fifteen pages of reports of the officers and committees of the State Society to be presented to the House of Delegates at the annual meeting on September 17. The introduction by the Secretary calls attention to three features in the conduct of the business:

1. Four Reference Committees will be appointed: 1, Credentials; 2, Resolutions; 3, Reports of Officers; and 4, Reports of Standing Committees.

2. Alternates shall have the privilege of the floor except that of voting when the delegate is present.

3. A member not a delegate or alternate may address the House if he arranges with the presiding officer for a time of speaking.

Library Service—The Secretary reports on library service as follows:

"An annual appropriation of \$500 a year from the State Emergency Board which appears to be sufficient, with the generous aid of Dean Bardeen, to tide over the Medical Library Service until further appropriations may be secured from the 1933 legislature. (The Governor vetoed the usual legislative appropriation of \$5,000.) It is to be noted that while a similar department of the American Medical Association filled 2,450 requests throughout the nation during 1931, in Wisconsin this service established at the University at the instance of your Society filled upwards of 4,425 requests in the same year. Letters continue to be received from members in almost every county in the state commending the work, urging its development and stating that it is one of the most valuable contributions of the Society and University in the field of scientific work. The Medical School deserves our hearty commendation for its willingness to assume the very considerable effort and financial burden that alone has made of this department such a valuable service to our membership. Any similar service on a commercial basis would equal the cost of membership dues."

Legal Services—The Secretary comments on legal services as follows:

"Of the foremost importance in this field is the Summary of Poor Relief Laws Affecting Care of the Indigent Sick. This 16 page leaflet was designed to meet a condition that had hampered physicians in every part of the State from securing a proper or speedy relief of the indigent sick to whom they were called to render service.

"For several years it has been the policy of your Society to provide legal information to mem-

bers where the question presented could be said to be of interest and value to all members as relates to the practice of medicine. During the year many of these opinions have been published in the Journal and include many questions relating to poor relief, use of title 'Doctor', fees of an assistant surgeon, liability of third party for costs of medical service, statute of limitations with respect to malpractice action brought by a minor, liability of nurse as assistant to physician, liability for overt acts of a nurse in industry, liability for overdose, fees for expert testimony, practices under Workmen's Compensation Act, expulsion of member, several relating to the corporate practice of medicine and others of like nature. The files on these opinions rendered in past years are becoming exceedingly useful and increasingly of value.

"Under this title may also be mentioned the studies made through this office with respect to collection agencies. A large information file has been accumulated and two warnings were sent each member during the year with respect to the deceptive contracts of many of these agencies. The Society will analyze any contract of this nature and give an immediate report on its nature and, in so far as possible, on the standing of the agency itself. Nearly a hundred members have taken advantage of this service during the year and the warnings have undoubtedly saved other members considerable amounts of money.

"Upon approval of legal counsel, warnings were also issued to the general membership and society officers on the questionable practices of some insurance carriers in their efforts to secure agreements from members to reduce fees for compensation cases to an entirely unwarranted extent by misleading statements."

Letters to Licentiates—"For several years your Secretary has pursued the policy of addressing a personal letter to each new licentiate in this state. This letter contains our welcome, an expression of our desire to have him as a guest at the next meeting of the county society within whose jurisdiction he will reside, an application blank for membership, and our offer to be of every possible service in assisting him to select his location for Wisconsin practice. We have been of the opinion that this was a service not only to the licentiate but to the members as well."

Public Policy—The report of the Committee on Public Policy is confined to legislation, and enumerates a number of bills in which the Society is interested.

(Continued on page 1038—adv. xv)

A Scientific Milk Modification with a Scientific Background!

STUDIES OF INFANT FEEDING. X
THE INVESTIGATION AND ADAPTATION OF INFANT MILK TO THE DIGESTION OF LIVER PATIENTS
A. W. BOSWORTH, M.D.
AND
LOUISE A. GIBLIN, B.S.
Reported from the American Journal of Diseases of Children

STUDIES OF INFANT FEEDING. XX
CRITICAL STUDIES OF CERTAIN MILK PREPARATIONS USED IN INFANT FEEDING
ALFRED W. BOSWORTH, M.D.
The Pennsylvania State Medical Journal

STUDIES OF INFANT FEEDING
WITH PARTS
THE PREPARATION OF A SCIENTIFIC MILK FOR THE INFANT IN FEEDING THAT IS STABLE AND
HENRY I. BOSWORTH, M.D.
AND
A. W. BOSWORTH, M.D.
OF NEW YORK
The American Laboratory of Dietetics

WHEY IN INFANT FEEDING
STUDIES OF INFANT FEEDING. FIFTH PART
A. W. BOSWORTH, M.D.
AND
HENRY I. BOSWORTH, M.D.
AND
R. H. RAGLE, M.D.
Reported from the American Journal of Diseases of Children

STUDIES OF INFANT FEEDING
I. THE CHANGES IN THE MILK AND BLUIN IN THE 18 HOURS TO INFANT FEEDING AND THE ACTION OF BLUIN ON CASEIN
ALFRED W. BOSWORTH, M.D.
Reported from the American Journal of Diseases of Children

STUDIES OF INFANT FEEDING IX
THE ANALYSIS OF LACTIC ACID PREPARATE WITH PARTS IN A CONCENTRATE OF DIETARY FOOD
BY H. I. BOSWORTH, M.D.
AND
A. W. BOSWORTH, M.D.
(From the Boston Floating Hospital Laboratory, Boston)
(Reported from The Boston Medical and Surgical Journal)

STUDIES OF INFANT FEEDING. XI
NEW PROTEIN FEEDING MIXTURE WITH CALCIUM ADAPTED TO THE DIGESTION OF INFANTS IN HIGH TEMPERATURES OF INFANTS
A. W. BOSWORTH, M.D.
AND
H. I. BOSWORTH, M.D.
Reported from the American Journal of Diseases of Children

THE CASE OF HUMAN MILK
BY
A. W. BOSWORTH, M.D.
AND
LOUISE A. GIBLIN, B.S.
(From The Boston Floating Hospital Laboratory, Boston)
Reported from THE JOURNAL OF BIOLOGICAL CHEMISTRY

STUDIES OF INFANT FEEDING. XVII
BACTERIOLOGICAL STUDY OF THE MILK OF A LACTATING WOMAN
ALFRED W. BOSWORTH, M.D.
AND
HENRY I. BOSWORTH, M.D.
AND
R. H. RAGLE, M.D.
Reported from THE JOURNAL OF BIOLOGICAL CHEMISTRY

STUDIES OF INFANT FEEDING. XV
THE CALCIUM OF COW'S MILK IN ITS RELATION TO THE DIGESTION AND ABSORPTION OF CASEIN. PROTEIN CURD IN STOMACH
ALFRED W. BOSWORTH, M.D.
Reported from the American Journal of Diseases of Children

STUDIES OF INFANT FEEDING. XVI
A BACTERIOLOGICAL STUDY OF THE MILK AND THE MILK OF HUMAN MILK IN THE STOMACH
ELISIE W. BROWN, M.D.
AND
ALFRED W. BOSWORTH, M.D.
Reported from the American Journal of Diseases of Children

HUMAN MILK
BY
ALFRED W. BOSWORTH, M.D.
(From the Boston Floating Hospital, Boston, and the Laboratory of the New York Agricultural Experiment Station, Geneva)
Reported from THE JOURNAL OF BIOLOGICAL CHEMISTRY

THE STATE OF PROTEINS IN COW'S MILK
BY
L. L. VAN DYKE, M.D.
AND
A. W. BOSWORTH, M.D.
Reported from THE JOURNAL OF BIOLOGICAL CHEMISTRY

M & R DIETETIC LABORATORIES, INC.
COLUMBUS, OHIO.



THEY ARE PACKAGED IN BOTTLES OF THIRTY FIVE, A CONVENIENT NUMBER FOR THE PHYSICIAN'S PRESCRIPTION, OBVIATING REHANDLING AND EXPOSURE

THE FINISHED PILLS ARE PHYSIOLOGICALLY ASSAYED TO FINALLY CERTIFY THEIR STANDARDIZATION

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A CAREFULLY SELECTED BOTANICALLY IDENTIFIED LEAF, POWDERED IN OUR OWN MILL, GIVING ASSURANCE OF RELIABILITY

THE FOUNDATION UPON WHICH THEY ARE BUILT
AT THE LABORATORIES OF
DAVIES, ROSE & CO., LTD.
BOSTON, MASS.

(Continued from page 1036)

Public Instruction—The Committee on Health and Public Instruction reported on its three major forms of popular medical instruction:

"Under the auspices of the Society, (250) Two hundred and fifty subscriptions to Hygeia each accompanied by a personal letter to the recipient from the Secretary were presented a Christmas time. The recipients included all members of the legislature, state officers including members of the Industrial Commission, Justice of the Supreme Court, and others having to do with questions involving health and the medical profession, libraries of the seven teachers colleges the circuit judges and district attorneys, interested newspaper editors and a selected group of laymen who have long evidenced their interest in public health advance."

"The Society is now broadcasting twice weekly over Station WHA of the University of Wisconsin, and this material is advanced to health officers for rebroadcast over the state station at Stevens Point and the station at Sheboygan. One broadcast each week is of five minutes' duration while the other is a ten minute period."

"The press service of this Society has issued forty-four weekly releases during the nine months since the last annual meeting. These releases are used regularly by a large proportion of the weekly and daily papers of the state and from time to time by almost all of the rest of the press. We are convinced of the worthiness of this effort. It carries to thousands upon thousands of reader articles from authoritative sources advising the public of that which should be common knowledge in the field of the prevention and relief of disease by scientific medicine. For the information of the members, we have printed these releases in each issue of our Medical Journal. Here indeed is an instance of a joint service to public and profession that is worthy of every dollar of the appropriation made available for this purpose."

The list of subjects covered in the broadcasting and press relief services fill over a page of the Journal.

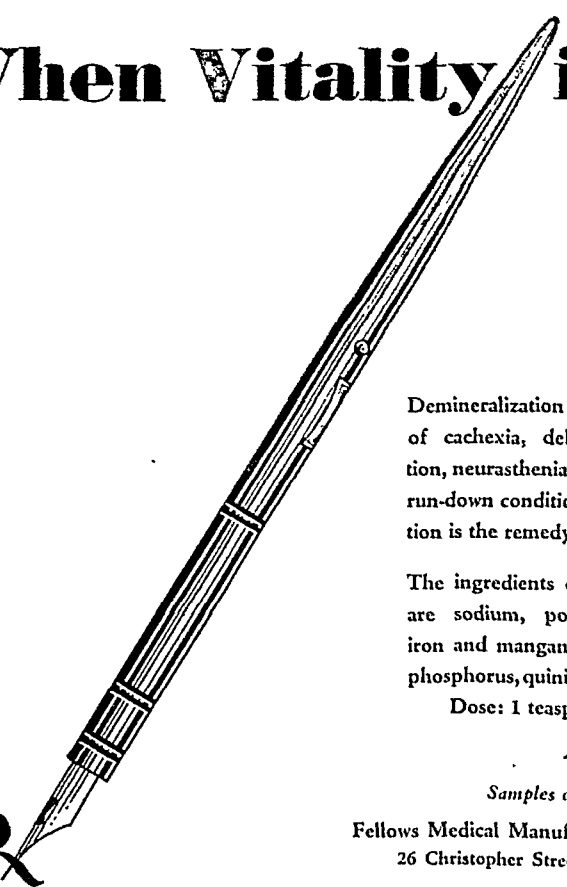
CHARGES IN PUBLIC HOSPITALS OF CALIFORNIA

What patients to treat free in government hospitals is a troublesome problem in every State. The July issue of *California and Western Medicine* tells how the problem was met in San Bernardino County, which has a population of about 150,000 and is located in the center of California east of Los Angeles. The article says:

"The practice of admitting part-pay patients to the County Hospital has been in the past a source of irritation to the medical profession, but

(Continued on page 1040—adv. xviii)

When Vitality is Low



Demineralization causes many cases of cachexia, debility, undernutrition, neurasthenia, anemia and other run-down conditions. Remineralization is the remedy.

The ingredients of Fellows' Syrup are sodium, potassium, calcium, iron and manganese, together with phosphorus, quinine and strychnine.

Dose: 1 teaspoonful t. i. d.

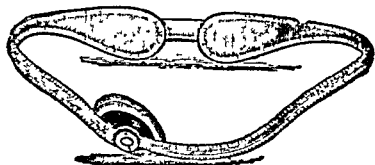
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You are safe in recommending a Pomeroy, for with us the welfare of your patient comes first—and this promise is backed by over sixty years of Pomeroy Service.

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Newark

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Detroit
Wilkes-Barre

(Continued from page 1038—adv. xvi)

due to the political aspects, seemed difficult to correct. When the taxpayers became aroused this winter and began looking about for ways to cut expenditures, it seemed an opportune time to the medical society to attempt a correction of this abuse, particularly as it could easily be shown where considerable money could be saved the taxpayers.

"It was suggested to and accepted by the Board of Supervisors that the medical society should appoint a medical advisory board, one member from each supervisorial district, who should act in conjunction with the board. No patient other than emergency should be admitted to the County Hospital who did not have a letter from his family physician or the member of the Advisory Board from that district recommending admission. In addition, the patient should be interviewed at the County Hospital by a representative of the County Welfare Commission and should sign a statement setting forth in detail his financial status as well as the age and occupation of those dependent upon him. This procedure rather effectually weeds out those not entitled to treatment. An added check is made by having the hospital mail each member of the Medical Advisory Board a daily list and a summarized monthly list of all new admissions, giving name and address of the patient and name of the doctor recommending admission.

"If a patient is found able to pay something toward hospitalization, that patient is referred back to the medical advisor of his district and the advisor endeavors to find some way of having the patient cared for in a private hospital of his district by getting reduced rates at the hospital, or even getting the benefit of some hospital aid fund if the patient seems worthy.

"Since this regime has been in effect, the population of the County Hospital has been very materially reduced, both in in-patients and in the out-patient clinic; and an estimated saving to the taxpayers of about 26 per cent for the coming fiscal year is assured. This is not entirely by reduction of expected number of patients, it is only fair to state, but also by other economies, which have been suggested in good part by the Medical Advisory Board.

"It is our hope that when the present County Hospital reaches its capacity we can induce the supervisors to subsidize the existing private hospitals for the care of the county cases up to the actual cost per day for the patient if he were to be taken to the County Hospital. We believe this plan has many advantages if properly safeguarded.

"Another accomplishment of this board has been the change of name of the San Bernardino

(Continued on page 1042—adv. xx)



COLDS ARE! COMING!

Soon the fading of the year will bring its annual problem of colds, influenza and rheumatic conditions. The physician's best weapon for fighting these is the natural salicylates, now greatly improved by the addition of a balanced alkali in

ALYCIN

Alycin offers a preferred medication for the treatment of the common cold, because not only does it supply the effect of the natural salicylates, but it also assures the associated alkalization which is so strongly recommended in the treatment of colds and similar conditions • The salicylate in Alycin is Merrell's Natural Salicylate, produced by us under direct control from forest to pharmacy • We invite you to make a clinical test of it.

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Gentlemen: Send me a package of ALYCIN for clinical trial.

Dr. _____

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**the taste is chocolate—
the contents is a highly
scientific food adjunct**

Read the Maltcao analysis and judge for your self the reason for the immediate acceptance of Maltcao as a highly scientific food adjunct, containing in organic form added calcium, iron, and phosphates.

"MALTCOA" ANALYSIS:

Moisture	3.03%	The ash contains:	
Cocoa Butter	4.42%	Sodium Chloride	0.84%
Butter Fat	.56%	Iron	0.09%
Milk Solids		Calcium Oxide	0.52%
not fat	10.09%	Phosphates	
Crude Fiber	.89%	as P ₂ O ₅	1.41%
Cane Sugar	45.07%		
Maltose	14.72%		
Total Protein	9.87%	Calories per pound: 1830	
Dextrin & Other		(1 heaping teaspoonful	
Carbohydrates	7.36%	equivalent to 35 calo-	
Mineral Ash	3.99%	ries.)	
	100.00%		

Merckens Chocolate Co., Inc., Buffalo, N. Y.

Maltcao

BUILDS FOR THE YEARS AHEAD

(Continued from page 1040—adv. xviii)

County Hospital to that of the San Bernardino County Charity Hospital. Many citizens felt that inasmuch as this was a County Hospital supported by tax money and the resident medical staff was paid by the taxpayer, he the taxpayer, was entitled to free treatment there. The change of the name brought it rather forcibly to their attention that they are paying for care of the county charity cases only.

"Previously all county employees were entitled to free hospitalization, whether indigent or not. This rule has been rescinded and employees are now on the same basis as all other residents except for industrial accident cases among employees of the county, which are still cared for free.

"The only part-pay patients received at the County Hospital now are those suffering from the contagious diseases which are not accepted by the private hospitals of the county. Some of these are able to pay for their care in whole or in part, and are expected to do so.

"The County Medical Society has been fortunate in having a very conscientious and public-spirited Medical Advisory Board, which has labored long and hard on this problem. The board has the full support of the medical society and the confidence of the Board of Supervisors and the Tax Coordinating Committee, and because of this has been able to accomplish much."

ETHICS OF MAKERS OF ARTIFICIAL LIMBS IN MISSOURI

The August Journal of the Missouri State Medical Association records the action of the House of Delegates in approving a code of ethics adopted by the makers of artificial limbs. The Journal says editorially:

"The Association of Limb Manufacturers was organized in 1917 at the urgent request of the Department of the United States Army and the Department of the United States Navy. Its purposes are wholly educational and ethical. One of its principal purposes is to elevate the industry to the plane of dignity and importance which it deserves and to prevent and punish fraudulent and unbusinesslike conduct on the part of any one claiming to be a limb maker."

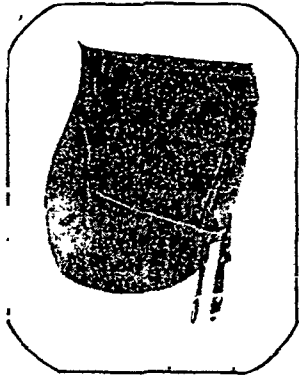
The code of ethics of the limb manufacturers follows:

"CODE OF ETHICS"

"Section 1. I will not make any untruthful statements about a competitor, a competitor's make of artificial limbs, his financial standing, the personality, morality or honesty of competitors or members of a competitor's firm, whether

(Continued on page 1043—adv. xxi)

**"STORM" The New
"Type N"
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One of three distinct types and there are many variations of each. "STORM" belts are being worn in every civilized land. For Ptosis, Hernia, Obesity, Pregnancy, Relaxed Sacroiliac Articula-

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This long renowned naturally alkaline mineral water assists in neutralizing excess acid and in regularizing functions of the digestive tract.

Bottled at the Spring in Vichy, France, under Government supervision, it meets the great need of the physician for constancy of composition.

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503 Fifth Avenue, Rooms 200-212, New York, N. Y.

(Continued from page 1042—adv. xx)

by word of mouth, writing or printing, or by commendatory letters or deceptive pictures, or by exhibiting or causing to be exhibited alleged samples of a competitor's manufacture.

"Sec. 2. I will not accept an order for an artificial limb by agreeing to credit the payment of a deposit already made to another manufacturer or discount the amount of the deposit paid to another manufacturer from the price of a limb. I will not endeavor either directly or indirectly to cause a person who has already placed a bona fide order for an artificial limb with another manufacturer to cancel such order.

"Sec. 3. I will not furnish or agree to furnish an artificial limb complete or incomplete, to anyone without a bona fide order.

"Sec. 4. I will use every effort to furnish my customers satisfactory artificial limbs and will in all cases of dispute protect my customer's interests to the extent of using every honest endeavor to furnish a properly made artificial limb. Should there be any changes needed at time of trial of a new limb, I will make them, and should occasion demand, I will agree to make another fitting to

the end that the customer shall be furnished an artificial limb that is properly constructed and correctly fitted.

"Sec. 5. I will not, directly or indirectly, interfere with or entice an employee to leave the employ of any other member of this Association. I will use every honorable means to help a member of this Association to acquire and maintain the services of expert workmen.

"Sec. 6. I will not use my membership in this Association for the purpose of advertising or advancing my own business interests to the injury or detriment of any other member. I will not solicit orders for artificial limbs by making promises that are impossible of fulfillment.

"In but few cases is the work of the physician or surgeon left to others to complete. The making and fitting of an artificial limb, however, must be delegated to the experts in this industry. It is therefore gratifying to know that the manufacturers of artificial limbs have voluntarily adopted rules of conduct that will go far toward protecting the purchaser and wearer of the limb from fraudulent, dishonest and incompetent limb makers."

(Continued from page 1044—adv. xxii)

in our opinion, one of the finest and most progressive steps any medical society has taken in recent years.

"In the matter of attendance, previous records were broken; the registration figures showing 525 members present.

"The scientific program met our expectations in full, and we shall from that source acquire approximately sixty original articles for publication in the Journal."

FINANCES OF GEORGIA ASSOCIATION

The April number of the Journal of the Medical Association of Georgia contains a chart showing the percentage of income and expenses allotted to their source. The following tables gives the same figures:

"The income of the Association, from all sources, is as follows:

"1. Dues—67.22 per cent.

"(a) Dues for general expenses—38.41 per cent.

"(b) Dues allotted as subscriptions to the Journal—28.81 per cent.

"2. Advertising—28.16 per cent.

"3. Commercial exhibits during annual sessions—4.46 per cent.

"4. Miscellaneous subscriptions—0.16 per cent."

"The disbursements of Association for all purposes are as follows:

"1. Journal—46.59 per cent.

"(a) Printing and mailing—30.21 per cent.

"(b) Salaries—12.11 per cent.

"(c) Postage—1.39 per cent.

"(d) Rent—0.80 per cent.

"(e) Engraving, stationery and reprints—2.08 per cent.

"2. Committees, Council and delegates to A.M.A. 20.48 per cent.

"(a) Medical Defense—10.13 per cent.

"(b) Council—1.03 per cent.

"(c) Public Policy and Legislation—2.03 per cent.

"(d) Presidents—3.56 per cent.

"(e) Delegates to A.M.A.—3.73 per cent.

"3. Annual session—7.09 per cent.

"(a) Reporting—2.91 per cent.

"(b) Invited guests—0.98 per cent.

"(c) Scientific and commercial exhibits—1.86 per cent.

"(d) All other expenses—1.34 per cent.

"4. Salaries—12.11 per cent.

"5. All other expenses—7.43 per cent.

"6. Reserve—6.31 per cent."

LIQUID PEPTONOIDS WITH CREOSOTE

COMBINES the active and known therapeutic qualities of creosote and guaiacol with the nutritive properties of Liquid Peptonoids and is accordingly a thoroughly dependable product of definite quantities and recognized qualities as shown by the formula:

Each tablespoonful represents

ALCOHOL (By Volume)	12%
PURE BEECHWOOD CREOSOTE	2 min.
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PROTEINS (Peptones and Propeptones)	5.25%
LACTOSE AND DEXTROSE	11.3%
CANE SUGAR	2.5%
MINERAL CONSTITUENTS (Ash)	0.95%

It acts as a bronchial sedative and expectorant, exhibiting a peculiar ability to relieve Bronchitis—acute or chronic. It checks as well a persistent winter cough and without harsh or untoward effect. It is agreeable to the palate and acceptable to the stomach—with merit as an intestinal antiseptic. Supplied in 12 oz. bottles.

Samples on request

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HOSPITAL RECEIVES FUNDS

The New York Post-Graduate Medical School and Hospital has been made benefactor of several grants during the month of July, according to Dr. Edward H. Hume, Executive Vice-President of the Institution. They are: a grant of \$1,000.00 from the Josiah Macy, Jr., Foundation, for the study of cholesterol metabolism in relation to arteriosclerosis; an anonymous gift of \$2,000.00 toward current expenses; a gift of \$7,500.00 from Mr. Allen Wardwell toward the current expenses of Reconstruction Unit, which has also received \$2,000.00 from the legacy of Mrs. Roger B. Williams. The final payment of a legacy, totalling \$25,000.00, left by Julia Seligman in 1922, has been made to Post-Graduate. This money has been used for philanthropic and research purposes in the eye clinic.—See page xxix.—*Adv.*

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SYMPTOMLESS HYDRONEPHROSIS REVEALED BY TRAUMA A REPORT OF THREE CASES*

By GEORGE E. SLOTKIN, M.D., BUFFALO, N. Y.

MARKED hydronephrotic degeneration of a kidney may take place, persist for years without creating any untoward symptoms, until an injury aggravates and reveals the existing condition. This important finding was emphasized by three cases recently seen in which the injury in itself was of no great importance, but was sufficient, however, to create symptoms calling for a complete urological examination and, at this time, it was discovered that in each case there was present a pathological kidney with changes which had taken a long time to develop.

One must be impressed by the lack of symptoms in a kidney which has been obstructed to such a degree as to cause its degeneration into a large hydronephrotic sac, and yet remain undiscovered until some unrelated condition arises to reveal the persistence of the symptoms established at the time of the accident.

The importance of thorough investigation of any complaints of the patient following an accident, and the diagnosis of these ailments, is also of paramount importance from a medical-legal standpoint. If it can be established that an injury is not a direct cause of the patient's complaints, or that a pre-existing condition has been aggravated by this injury rather than directly caused by it, then again the importance of establishing these important facts is emphasized. In none of the cases related were there any complaints whatsoever previous to the time the injury was sustained. The patients enjoyed the best of health and had had no cause to seek medical advice for years, and yet the findings and changes in the kidneys are of such magnitude as to warrant their description and report. None of the classic symptoms of a hydronephrosis, to wit: presence of tumor, drag-

ging sensation in the side, pain, or hematuria, had been manifested by the patient at any time up to the day of the injury sustained. Ames and Delord¹ make a report of such a case and 18 similar cases on record.

Case report No. 1. Patient was a white male, age 34, seen July 16, 1930, weighing 240 pounds, who was referred because he complains that three days previously, while working in an ice house lifting cakes of ice on the carrier, slipped on the floor and did a "spread eagle," and immediately developed burning on urination, hematuria and frequency. Patient went home to bed, after 24 hours the hematuria stopped, but the frequency of every half hour and nocturia 3 to 4 times a night has persisted. Patient claims that he has always been in the best of health and, aside from an infection of gonorrhea 15 years ago (which persisted for two months and was apparently cured), has had no illness or complaints.

An examination discloses an unusually developed, white male, not acutely ill. General physical examination is essentially negative. The abdomen was soft, not extremely obese, musculature unusually developed. There were no masses seen or felt. Palpation of both kidneys, by deep pressure, elicited no pain. Palpation over the bladder causes some pain. Examination of the prostate, seminal vesicles and scrotal contents were negative. Wassermann negative. Urinalysis: voided specimen shows it to be cloudy in appearance, specific gravity 1024, one plus albumen, no sugar. Microscopically: no casts, a few epithelial cells and loaded with pus cells, from 50-75 per low power field.

A flat x-ray of the KUB was made. The left kidney shadow was normal in size, shape and position, with no evidence of stone. The

* From Central Park Clin. c.

¹ Ames and Delord. Hydronephrosis revealed by trauma. *J. Urol. & Par.* 1919 vol 285. Abs. *J. Am. M. Ass.* Chicago 1919.

right kidney could not be determined, but there was no evidence of stone.

Cystoscopy July 16, 1930. The cystoscope entered the bladder without any obstruction. The bladder was normal except for the right orifice. There is present a rather large ureterocele, with a bulging and prolapse of the ureter. The left kidney was easily catheterized, but the right cannot be determined. The left kidney urine is perfectly clear, grossly and microscopically. Intravenous indigo carmine was injected to facilitate the finding of the right orifice. The dye returned within normal limits with good intensity through the left catheter, but visualization of the right side showed no excretion of dye after 25 minutes.

As this was a Compensation Case, a report was made of the findings and instruction that further examination would be required to determine the amount of pathology on the right side. Nothing was heard from this patient, or the Company, until October 19, 1930.

The patient was cystoscoped again and the same pathology noted, i.e., prolapsed bulging right ureter, with complete obscuration of the orifice. At this time, intravenous Uroselect-

ceau catheter was inserted through the orifice to the kidney without any obstruction, and it was noted that there was a continuous flow of pale urine. Intravenous indigo carmine was immediately given with the bladder still open, and no dye appeared for 15 minutes from the right side. The bladder was then closed around a Pezzar catheter and the patient returned to his bed in good condition. An uneventful recovery was made.

On the 7th day after the operation, the patient began to complain of pain in the right upper quadrant. On the 17th of December, the right kidney was approached through a right lumbar incision. It was easily identi-



FIGURE 2
Case 1. Cut Section Interior.

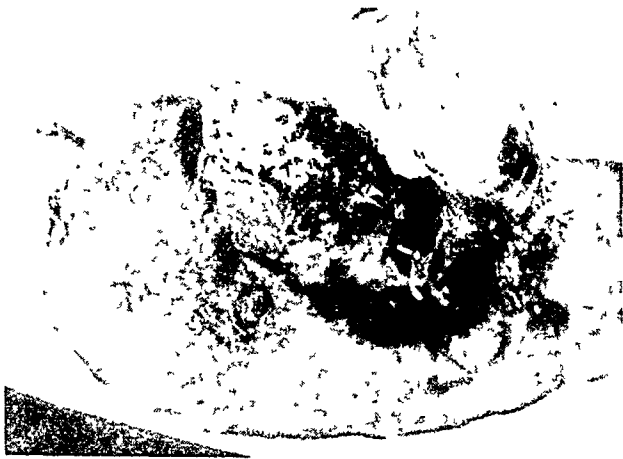


FIGURE 1
Case 1. External Appearance.

tan injection was made and the left kidney pelvis showed normal outline, as did also the ureter. But the dye in the right kidney was rather obscure and faint. It was felt that the right ureterocele was too extensive to attempt to reduce by cystoscopic manipulation. Therefore, a cystotomy was performed on October 20th and the very large ureterocele of the right ureter noted, the orifice found with some difficulty under the folds of the prolapse. This was thoroughly slit up with a scissors in the orifice, resulting in an immediate gush of very pale urine, and complete reduction of the ureterocele. A large Gar-

fied and was found to be about five times the normal size, soft and putty-like, with no semblance of firm renal tissue. There were a great number of adhesions between the fatty capsule and the kidney proper, so that the kidney was not delivered with ease. It was finally stripped free, however, and delivered into the wound.

In looking for the ureter, there suddenly presented itself in the wound, a large twisted mass of tissue which resembled gut. It was about 3 centimeters in width and resembled colon. This was stripped free and followed up to the pelvis where it was noted that it curled in behind the lower pole of the kidney. There were several vessels, rather large and aberrant in character, crossing this loop just at its entrance apparently into the kidney. The entire mass was dissected free, the vessels tied and suddenly another loop, similar to the above, presented itself higher up and attached in a similar way to the pelvis, with fairly large vessels crossing. This loop was the same size as the former. Both were dissected downward but no connection was found between the two. A trocar was inserted into the kidney and a large amount of fluid evacuated. Immediately upon this evacuation, it was noted that the loops collapsed and milking these ureters "as we now discovered them to be," caused an exudate of

more urine through the trocar. Both of these ureters were ligated low and the kidney removed. Pathological report follows.

The material as received, consists of a kidney bisected through the middle. There are two distinct ureters and pelves. These are both markedly thickened, enlarged, and distended into the kidney so as to leave only the rim of renal parenchyma, one part is 1 mm. in thickness, while in other situations it is 3 and 4 mms. thick. In these thicker portions, we find circumscribed areas with destruction of renal parenchyma. The kidney externally measures about $13\frac{1}{2}$ centimeters in long diameter, and 5 centimeters in thickness. On stripping the capsule, we find the external surface exhibiting nodular elevations with intervening scarred contraction (Fig. 1 and 2).

The patient was amply drained and had no post-operative complications. He left the hospital on the 14th day with the wound healed by first intention.

Case report No. 2. Patient was seen on consultation on November 18, 1930, in the hospital, complaining of severe backache, pain in the left upper quadrant and bloody urine. Six days previous, the patient was in an automobile accident, a car colliding with his, and causing sufficient shaking up so that he "wrenched his back." Was taken home and treated by his family physician for two days with no improvement of his symptoms. On the fourth day, noticed that he was passing blood in his urine each time he voided. The pain in the back had become more severe and now extended from around the back over the ribs, down the left side to the iliac region. Patient voids once in four hours and about once a night. He never had any previous symptoms, has always been in excellent health, is a chemical engineer by occupation and was able to stand for hours at a laboratory table without any fatigue.

When the patient was seen at the hospital, November 18th, he did not appear acutely ill, temperature and pulse normal, but was still passing free blood in the urine with each voiding and complained of the constant pain the left upper quadrant.

Physical examination shows a rather slender but well developed adult male, 30 years old, who gives an intelligent history of his complaints and is emphatic in stating that previous to the time of the accident, he had always enjoyed the best of health. All physical examinations are essentially negative. The abdomen is flat, soft, no evidence of injury or masses noted. Palpation shows the entire abdomen to be soft except in the left costo-vertebral angle and left upper quadrant over the kidney, the patient is extremely tender and a definite mass can be felt on deep palpation, which aggravates the pain

which the patient complains of. It was believed that the patient was suffering from a ruptured kidney, or more or less moderate degree. A flat plate of the K.U.B. tract on the 19th, shows both kidneys to be rather large, particularly the left. No x-ray evidence of stone and no evidence of any bony fracture noted. The next day, November 20th, he was cystoscoped.

The bladder urine was definitely bloody. The bladder itself was normal in all respects. Left ureteral orifice was easily entered with a No. 6 catheter full length to the kidney pelvis. There was an immediate gush of bloody urine which appeared as if it had been undergoing some decomposition. Right kidney was easily catheterized, the urine was clear and normal in flow.



FIGURE 3.
Case 2

About four ounces of bloody urine was drained off the left kidney pelvis with immediate relief noted by the patient. Indigo carmine was injected intravenously and appeared in five minutes on the right side with good concentration, 10 minutes on the left with only fair concentration. Sodium iodide was injected into the left kidney pelvis to determine if the renal capsule had been broken in the injury, or to note the displacement of sodium iodide solution into the kidney proper. Ten cc. was injected with no complaint by the patient and a pyelogram was made. The right ureteral catheter slipped down so that in an attempt to make a right pyelogram, no result was obtained. The x-ray findings of the left pyelogram are noted (Fig. 2). The pelvis is not visu-

alized, the media having flowed into two irregularly shaped pockets and there been diluted with resulting loss in contrast and definition. Findings are compatible with ruptured kidney.

The patient was treated expectantly, all symptoms gradually subsided, the hematuria disappearing within three days and, on December 1st, the patient was discharged, feeling well, with no hematuria but a voided specimen shows a rather large amount of pus cells in the urine. On December 3d, patient was cystoscoped in the office because of the persistence of pus cells, and a No. 9 Garceau catheter was inserted into the left kidney without any obstruction. There was a rapid flow of pale urine under tension. Intravenous indigo carmine, at this time, showed no return



FIGURE 4.
Case 3.

after 20 minutes. At this time, it was felt that a permanently damaged kidney was present. On December 12th, under spinal anesthesia, the left kidney was exposed through a left oblique incision and muscle splitting approach. The kidney was found to be large, tense, firmly adherent at its upper pole and rather difficult to deliver. It was about three times the normal size. The fatty capsule was adherent throughout. The ureter was small and separately tied. The pedicle was long and easily disposed of. The patient was drained and, on December 30th, was discharged from the hospital feeling well and the wound healed by first intention. From then on, the patient gained rapidly in weight, the urine

cleared up and he has been improving steadily ever since.

Pathological report: This kidney is about three times its normal size and is surrounded by fat and fibrous tissue which shows evidence of chronic inflammation.

On section, the pelvis is found to be enormously dilated with obliteration of most of the kidney substance, the whole of the kidney forming a multilocular sac with small areas of kidney substance at the periphery.

Sections taken through various portions of this kidney were stained and examined. They showed thickened capsule with some fibrous and a few sclerotic glomeruli in the cortical portions of the kidney. The kidney substance here found seems to be in a very fair condition. Towards the pelvis, there is marked fibrosis and evidence of chronic inflammation with cavity formation, granulation tissue and pigmentation of the cells.

This case shows this kidney also to be that of an old hydronephrotic kidney, symptomless until the time of the accident.

Case report No. 3. Patient is a white male, 35 years old, married and has four children, occupation butcher. He had gonorrhea 15 years ago, which lasted three months but from which he had never had any complications or recurrence. Aside from the above, he has never had any urologic complaints. In July, 1930, he noticed that a mass was forming in the upper right quadrant, over the costal margin. States that this came on directly after lifting a very "heavy side" of beef. Has had no particular discomfort from this mass and has worked every day without any urinary disturbance or other urological complaints until September, 1930. On the 8th day of September, the patient fell 18 feet down an elevator shaft, was sent to the hospital where he was treated for a fractured skull and a fractured little finger of the left hand. Since September, the swelling which he had in the right upper quadrant, has grown steadily worse and, after he recovered from his fractures, he noticed that upon walking there would be a dragging sensation in the right side. At no time did the patient have any urinary disturbance. The patient was examined at the hospital and, because of the peculiar attachment and shape of the mass, it was originally diagnosed as a hematoma of the liver or liver cyst.

Physical examination of the upper body is negative. Abdomen is scaphoid, seems full in upper right quadrant which has an irregular surface and moves with respiration, so that the hand can be inserted between it and the costal margin. This is likely a combination between kidney and liver.

Blood chemistry and function tests are all normal. In order to determine the condition present, by exclusion, a series of x-rays were made which

showed the ill defined mass filling the entire right side of the abdomen, a G I series disclosing the ascending colon displaced toward the midline by the mass. To exclude the possibility of a kidney involvement, it was then suggested that a cystoscopic examination be made, which was performed on May 28, 1931.

Cystoscopic Findings The cystoscope readily entered the bladder, the capacity and interior of which were normal. The orifices were clean, and a No. 6 catheter easily entered the left kidney without obstruction. A No. 6 catheter passed up the right ureter for 20 centimeters when it became impeded. The flow of urine from the left kidney was normal and regular and clear in appearance. The flow from the right kidney was immediately rapid, the urine gushing from the catheter in a steady stream, denoting fluid under pressure. Six ounces was obtained and then 750 cc was removed by suction syringe. An intravenous injection of indigo carmine appeared from the left kidney in $4\frac{1}{2}$ minutes with good intensity. No dye was excreted from the right kidney for 20 minutes. At this point, the patient remarked that the pressure and pain which he had been complaining of in his right side, was relieved "as if a weight had been taken off his abdomen," and upon palpation, the mass which had previously been felt, was considerably smaller. An x-ray was made and 90 cc sodium iodide was injected into the right kidney and a series of pyelograms made.

These pictures show a distinct hydronephrotic sac of extreme size, with complete destruction of the kidney, which can be seen at the back of the hydronephrotic sac with a few dilated calices

(Fig. 3). The catheter was allowed to remain in situ for an hour to drain off the fluid.

In view of the above findings, a definite diagnosis of a large hydronephrosis of the pelvis of the kidney was made, which was non-infected as subsequent cultures determined.

On June 11th, under spinal anesthesia, I operated this patient through a right lumbar incision. The kidney was exposed and it was found to be attached to the under surface of the peritoneum and the diaphragm above. The excision of the sac was made somewhat difficult by this adherence. Finally, a trocar was inserted into the large hydronephrotic mass and 3,300 cc of fluid evacuated, which facilitated shelling out of the mass to a great degree. The patient made an uneventful and uncomplicated convalescence and, on July 11th, was discharged from the hospital in splendid condition with the wound healed and gaining weight. When last seen, on September 17th, the patient was in splendid condition and had gained 13 pounds.

CONCLUSIONS

1 Three cases of unusual hydronephrosis are presented, which pathologically proved to be of long standing.

2 No symptoms were manifested by any of the patients until aggravated by an injury.

3 The injury was not sufficient to cause the amount of damage manifested in the kidneys.

4 Persistence of urinary symptoms after any injury, no matter how trivial, warrants a complete urological examination.

5 A large hydronephrosis may persist for years, symptomless and unrecognized.

CELIAC DISEASE

By A. CLEMENT SILVERMAN, M.D., SYRACUSE, N. Y.

From the Department of Pediatrics, Syracuse University College of Medicine. Read before the Section on Pediatrics at the Annual Meeting of the Medical Society of the State of New York in Syracuse, June 3, 1931.

Introduction

CELIAC disease is treated in pediatric literature as a disease entity. A few American authors include it under the heading of chronic intestinal indigestion. Since it is probably brought on by improper feeding during the second year of life, or rather improper feeding in an infant with some disturbed tolerance, this condition should be better known by general practitioners of Medicine, because its successful treatment is within the province of the family physician.

The name Celiac Disease is derived from the Greek word meaning belly, and was first applied by Samuel Gee in 1888.¹ In his description, Gee pointed out that it is an affection that is particularly apt to occur in children between one and five

years of age. He described it as a diarrhea alba in which emaciation and cachexia occur. The stools are loose, not formed but not watery, more bulky than the food taken would seem to account for, pale in color, frothy and with a stench suggesting putrefaction. He compared the pale loose stool to oatmeal gruel in appearance.

The first American work on this disease was a small monograph in 1908 by Herter² who called the disease Intestinal Infantilism. He makes no reference to previous work. The most recent monographs came out in 1927 by Leindorf and Mautner³ of Vienna, and in 1928 by Fancom⁴ from Feer's clinic in Zurich.

Celiac disease is comparatively rare and occurs more frequently in private than in ward practice. Most of the cases have been reported from Eng-

land, the United States, Switzerland and Germany. The Latin countries seem to be free from this disease. It usually makes its appearance in infants between nine and eighteen months and seems never to occur during the period of breast feeding.

Clinical Picture of the Disease

Celiac disease develops insidiously. The well-developed case shows the following cardinal symptoms:

1. Arrested growth and development.
2. Large abdomen.
3. Large, characteristic stools.
4. Hydrolability and fluctuation of weight.
5. Anemia.
6. Nervous manifestations and personality changes.

1. *Arrested Growth.* The arrested development has led to the characterization of celiac disease as a form of infantilism. A well developed case is invariably very much underweight and usually undersized. There may be a marked lack of subcutaneous fat. The muscles of the buttocks may be almost completely wasted. As a result of the muscle weakness the child may be unable to walk or may tire very easily. The development of the long bones is retarded and x-ray of the bones shows porosis but rarely any rickets.⁵ (Fig. 1)

2. *Large Abdomen.* The large abdomen stands in contrast to the thin chest and spindly arms and legs. The child walks like a woman in late preg-

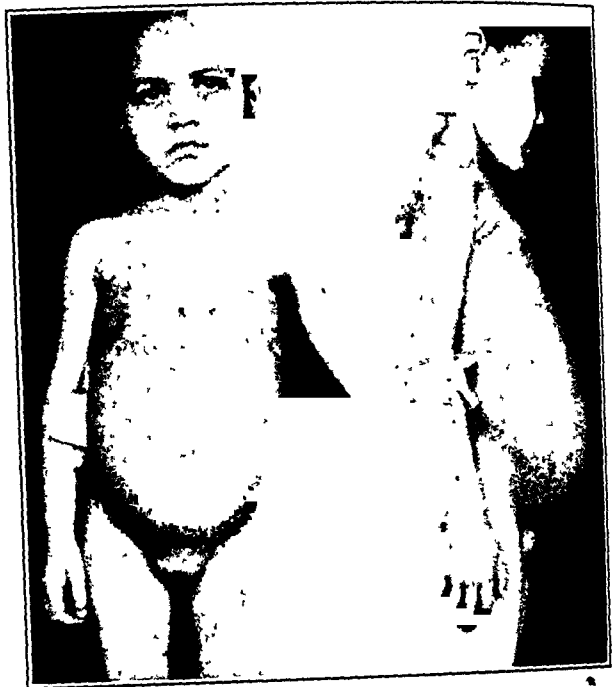


FIGURE 2

Front and side view of a child with Celiac Disease to show large abdomen.

nancy. The large abdomen is probably due to lack of tone of the abdominal wall and to distention of the intestines with gas. X-ray does not show much dilation of the colon. There is no free fluid in the abdomen and no masses or glands can be felt. (Fig. 2)

3. *Large, Characteristic Stools.* The stools are always very large, light-colored, usually foul smelling. Fermentation and putrefaction may be present at the same time. They usually number two to four a day and are almost always acid in reaction. The stool may be larger than the food intake, and in some instances the stools of the celiac patient have been found to be ten to twenty times as large as the average stool of the normal child. As much as ninety per cent of the ingested fat may be found in the stool in the form of fatty acids, soaps and neutral fats. Frequently undigested starch is found.

4. *Hydrolability and Fluctuation of Weight.* Edema is very common in this disease and may affect almost the whole body. At other times water may be lost so very quickly that loose skin folds are present in the thighs, arms and buttocks. One-tenth of the weight may be lost in 24 hours. Obviously water and salt metabolism is severely disturbed. This condition is probably of the nature of hunger edema.

5. *Anemia.* This is present practically in every case. Usually the anemia is of the secondary type. Rarely, however, it may resemble the primary type.

6. *Nervous Manifestations and Personality Changes.* The child with celiac disease is rest-



FIGURE 1

Photograph from German case records. Patient 2½ yrs. old. Left photograph during illness. Right photograph 2 months later.

less, whining, irritable, morose, never smiling. The child's disposition and personality are changed. When the first improvement comes, the improvement in disposition is the most striking thing. The child begins to smile again and develops a voracious appetite. The mental development is not retarded as a rule. The child may not talk because he does not wish to talk; he will whine continually and point to what he wants rather than ask for it.

Case Histories

The five case histories which follow were observed in my private practice from 1918 to 1929. One of these children is of American Jewish parentage, the others are of Anglo-Saxon derivation. In all of them there were more or less psychoneurotic family tendencies. For each case a chart has been prepared showing actual observations of height and weight in comparison with the expected averages for the age. The narrative for each case has been sketched to tell very briefly what was happening and is to be read in conjunction with the charts. For only two cases are before-and-after pictures available.

Case 1—A.P. Female, birth weight, 6½ pounds; weaned at five months because of vomiting. Early history otherwise negative. First seen by Dr. Philip Potter at age of 16 months, in January, 1917, for swelling of hands and feet, and for pallor and weakness. Weight at that time, 20 pounds in clothes. Stools were clay col-

ored and pasty; abdomen large. Diet contained considerable cereal and crackers.

When first seen by me patient was 2 years and 4 months old and weighed 17 pounds. She was very short, had a large protruding abdomen and was markedly peevish and fretful. A week later edema was again present. There was no starch in the stool but considerable fat was present. Urine was negative.

In March, 1919, at the age of 42 months, she weighed about 20 pounds and showed symptoms of tetany. Personality changes were very pronounced.

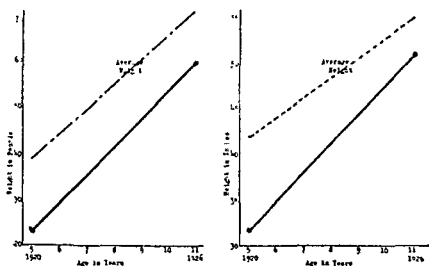


CHART 2.
Case 1—A. P.

At four years of age, in September, 1920, after doing well all summer, stools became foamy. The child became less active and she began to show loss of weight and at times edema. At the office she weighed 19½ lbs. A neighbor volunteered the information that she was given crackers and sugar cookies. From this time on she was kept on protein milk and starchy food was eliminated for a time, and she began to improve. (Chart 1).

She was not seen again until six years later and showed considerable improvement in weight and height. She was much shorter than her younger sister but otherwise seemed to be in good health. (Chart 2.)

This case, the first in my series, came under treatment late and an indulgent grandmother did not always cooperate. For a considerable time there was uncertainty about the diagnosis and treatment. This child shows more marked arrest in growth than any of the subsequent patients.

Case 2—V.R. Female. Birth weight 7 pounds. Breast fed nine months and when weaned she weighed 18¼ lbs. First tooth at five months. When put on modified milk, she did not get on well, failed to gain at first and later began to lose weight. Came under care of Dr. Philip Potter who tried her on protein milk but baby refused it. Weight at 2 years dropped to 14¼ lbs. Dr. Potter then used sweetened protein milk which she took and began to gain weight. At 2½ she rose to 21½ lbs. When cow's milk was again

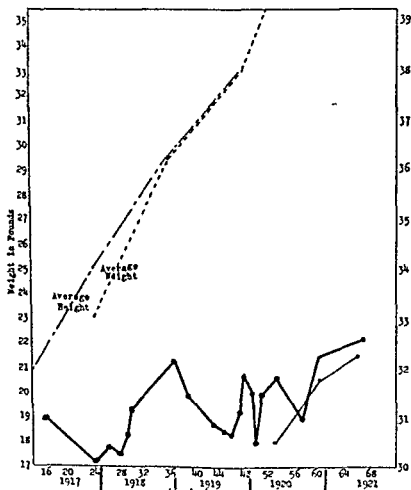


CHART 1.
Case 1—A. P.

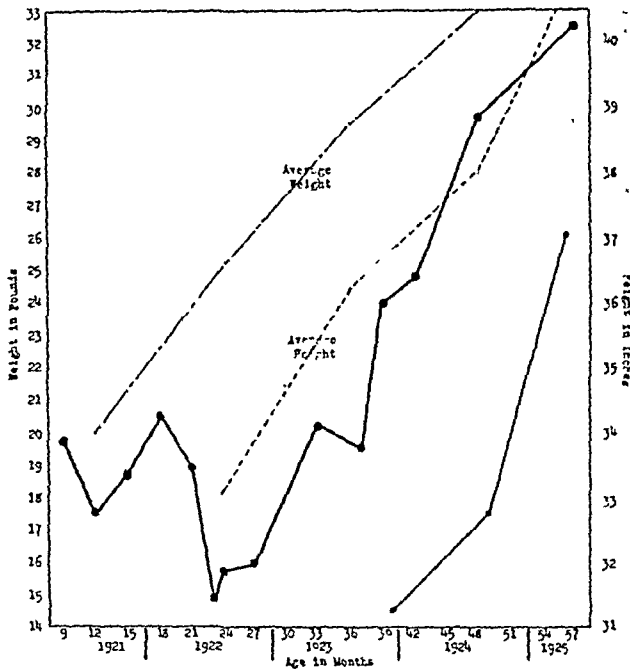


CHART 3.
Case 2.—V. R.

given at this time, she lost weight and had to return to the protein milk with other protein foods.

First came under my care in May, 1923, at the age of 33 months. (Chart 3.) She was small, pale, fretful and peevish. She had a large abdomen and some edema. Her stools were large, soft and acid. She was given protein milk, Karo syrup, chicken, scraped beef and within four months gained 4 lbs. From then on she made un-

eventful progress and at the present time she is normally developed.

Case 3—H.A. Male, birth weight 9 pounds. Breast fed for one year. When first seen at 13 months of age he weighed nearly 23 lbs., but had some slight evidence of rickets and slight eczema.

Three months later, at 16 months, he had begun to show pallor, weakness and loss of weight. The stools were large, pale, acid and showed an excess of fat. The abdomen was large and he was markedly irritable. He had been getting large amounts of starchy and sweet foods. Weight was down to 20 lbs. Was put on skimmed milk.

Six weeks later was down to 19½ lbs., loose folds of skin showed on the arms and legs. Another pediatrician who saw the child suspected tuberculosis and advised high fat feedings. On this he lost weight, looked worse and became more irritable. When put on protein milk at 20 months he began to gain, his disposition improved and the stools improved.

At 2½ years he developed some edema and the stool became acid. For nearly 3 months he failed to gain. Again when he was nearly three years old he began to lose weight and it was found that he had been getting ice cream cones, cereals and some plain milk. When his diet was again restricted to protein milk and a high protein intake, he began to improve and went on to past normal weight for his age before his 4th birthday; his height, however, remained below the average (Chart 4). At the present time he is up to average weight and height for his age.



FIGURE 3 (a).

Snapshots of Case 3, H.A., whose weight record is shown in Chart 4. (1) Patient as he appeared at about 1 year of age, before the illness commenced and weighing about 23 pounds.

Fig. 3 shows home-made snapshots of him before he became ill, during the illness and 5 yrs. after recovering.

Case 4—S.E. Female, birth weight 7 lbs.

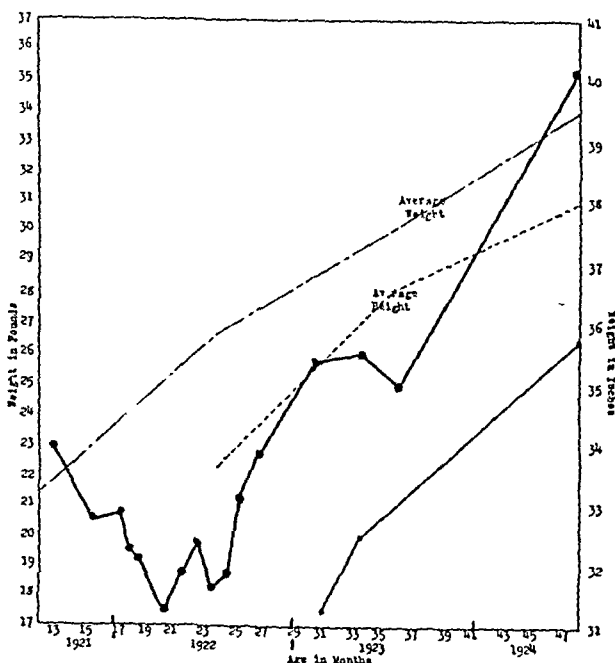


CHART 4.
Case 3.—H. A.



FIGURE 3 (b)

(2) Same patient at 20 months of age, after illness was well marked and the weight down to about 17½ pounds.



FIGURE 3 (c)

(3) Picture on left at 21 months of age, general condition being about the same as preceding snapshot. Picture on right at 26 months of age, just as the weight curve is beginning to rise. Note expression.



FIGURE 3 (d).

(4) Same patient in March, 1923, about a year after improvement began, and again in the summer of 1924. Notice the prominent abdomen still present in both pictures.

Breast fed 3 mos. and then weaned. First tooth at 10 mos. At 13 mos. weighed 20½ lbs. Diet consisted of 1 qt. of milk, cereal twice daily, egg and vegetable.

At 15 mos. there was noticed marked irritability, enlargement of the abdomen and diarrhea. She passed 7 stools a day which were large, soft, pale and acid. Weight at this time



FIGURE 3 (e).

(5) Same patient in July, 1929, showing normal height and weight and the disappearance of the large abdomen.

19 pounds. Started on protein milk and began to gain rapidly, reaching 22 lbs. by the time she was 18 mos. old. At this time she was getting cottage cheese, buttered toast, coddled egg, scraped beef and gelatine. Somewhat later she again became cranky and irritable without showing loss of weight, although gain rate was slowed considerably. Reduction of starch and fat in her diet resulted in further rapid increases in weight. (Chart 5.)

This case represents a mild course of short duration. It was diagnosed promptly and treated energetically. No stunting of growth resulted.

Case 5—R.C. Male, birth weight 7 lbs. and 2 oz. Breast fed for 11 mos. First tooth at 4 mos. Walked at 14 mos. Said to have had 16 teeth at 20 mos., and to have weighed 26 lbs. This was in October, 1928; 4 mos. later in Feb., 1929, he weighed 22 lbs., 15 oz.

First seen by me on April 22, 1929, at the age of 27 mos., with the history that during fall he had begun to have whitish stools and later diarrhea. His appetite good but "food seemed to pass through him undigested." He began to lose weight and became cranky and irritable. He had been getting bread, crackers, cereal and some meat. Some 2 or 3 months before a pediatrician



FIGURE 4

Picture of case 5, R.C. at the age of 2 years and 2 months, and 5 months later.

had seen him and advised protein milk but the child would not take it. One physician thought he had rickets and gave him a long course of ultra violet treatments. For some time he had been too weak to walk, and when he sat up his spine was curved. He cried a great deal and was very difficult to manage because he was so insistent as to food he would take or refuse to take. For the past week or two he had been very much "bloated" especially in legs and feet.

Examination showed a thin, emaciated baby with cold extremities. He showed marked irritability and was whining constantly. Rectal temperature 97. Head large, face triangular and drawn; anterior fontanel closed; hair light, moderately abundant but rather dry and lifeless. Circumference of head 50.5 cm. Eyes, ears, nose, throat negative. Chest circumference 47.5 cm. Expansion 1 cm. Ribs not beaded. Heart negative, lungs clear. Abdomen distended; liver and spleen not palpable. Highest level of abdomen (lying) 3 cm. cephalad from umbilicus; at this point, abdominal circumference 51 cm. Arms spindly. Marked pitting over tibiae; dorsum of feet markedly swollen and bluish. Skin generally dry and extremely loose. No fat or muscles felt on buttocks. Face and body show considerable tanning and some desquamation. Spine shows kyphosis in lower dorsal region. Lymph nodes are shot-like in groins, axillae and suboccipitally.

Laboratory findings: Urine negative for albumin, sugar and indican. Reaction alkaline.

Stools large, liquid or soft, grayish white, extremely acid. Lugol test positive.

Blood (May 10, 1929) haemoglobin 60; red cells 4,000,000, white count 9,200; polys 44%, lymphocytes 54 per cent, mononuclears 2%. Some variation in size and shape of red cells, large and small forms present but large predominating.

Progress notes:

4-23-29, started on Mead's boilable protein, full

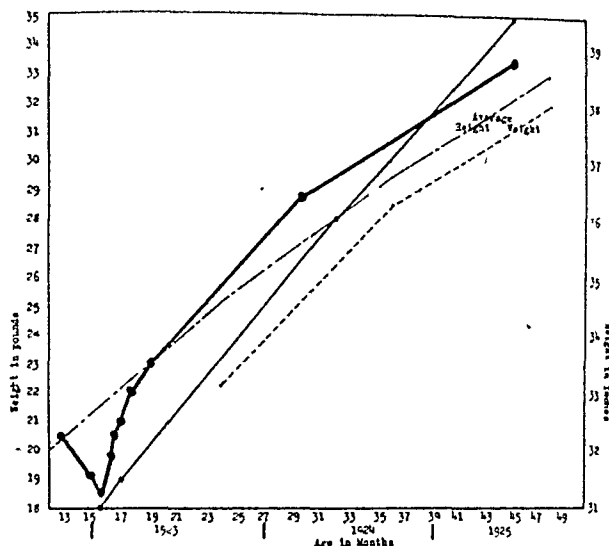


CHART 5.

Case 4.—S. E.

strength, with saccharin added for sweetening. Phenobarbital given for irritability.

4-26-29, much improvement in number and appearance of stools. Edema decreasing.

5-3-29, weight this morning 18 lbs. 10 oz. Skin hangs in folds, legs extremely spindly. Edema appears to be completely gone. Body temperature 96.8 rectal.

5-10-29, weight 16 lbs., 1 oz. Transfusion of 180 cc. of mother's blood.

5-12-29, color and general appearance better. Has slept well last two nights. Apparently improved. Takes 15 oz. protein milk at one feeding.

5-26-29, disposition better. Put on double strength protein milk with addition of cheese, gelatin, meat, mashed and strained carrots and spinach, orange juice, cod liver oil, iron citrate.

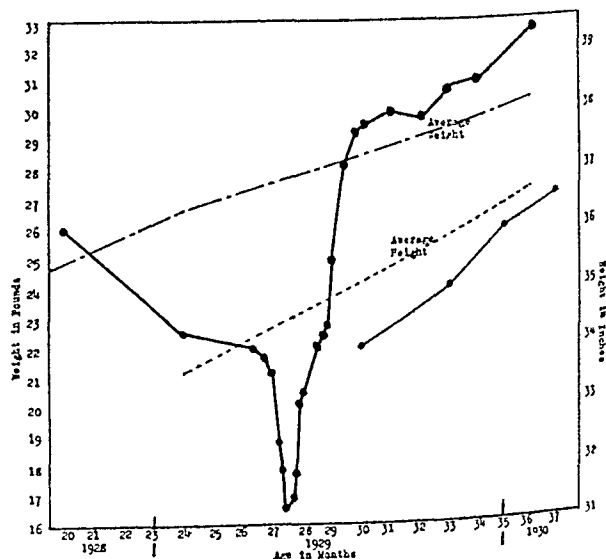


CHART 6.

Case 5.—P. C.

At 3 yrs he has continued to do well. Stools are firm, of smooth consistency and number 1 or 2 daily. He takes double strength protein milk and cheese, gelatin and meat. Height and weight records are shown in Chart 6. His appearance at about 2 yrs and again 6 mos later is shown in Figure 4.

Early in 1930 he was able to return to a normal diet and ordinary milk with only an occasional slight digestive upset.

It would be extremely interesting to go into the details of the metabolism of celiac cases and to discuss the probable factors concerned in the pathogenesis of the disease. This, however, would take too much time and it is thoroughly discussed in the recent monographs.^{2,4} It will have to suffice to say merely that the disease is characterized by an inability to utilize fats, starches and more complex sugars. A large proportion of the food eaten is lost through the feces, and therefore metabolic deficiencies result. We get thus, the varying picture of chronic partial inanition.⁶

It has been found that the tolerance for fat in these cases is regained before the tolerance for starches. Even after several months of satisfactory diet control the taking of starch may produce a period of typical celiac diarrhea. It seems, therefore, advisable to start with a low fat, low cellulose and low buffer content, such as is found in skimmed protein milk or skimmed lactic acid milk. With this sort of diet to start with, less fat and calcium is lost in the stool. To this, cottage cheese, egg, scraped beef, sieved liver, gelatin, mashed vegetables and fruit, can be added later.

Of late much has been written of the use of bananas in this disease. Haas⁷ introduced it when he found that a child with anorexia nervosa who refused all food accepted a banana and from

then on began to improve. He postulated that some valuable enzyme must be present in the banana. More recent work by Nelson⁸ shows that whatever benefit there may be from banana is probably due to the softness of its cellulose. In the cases cited in this paper, the principles discussed above were followed out with excellent results.⁹

Before concluding, a word might be said about prophylaxis of this condition. It seems to me that there has been altogether too great a tendency to overdo the starches in the diet of the infant toward the end of the first year and during the second year. Quite commonly a baby is given cereal twice daily, a quart of milk and some bread and crackers and perhaps only sparingly of fruit and vegetables. On the basis of my experience in the cases cited and in other milder conditions of digestive disturbances in the second year of life, it has seemed far better to replace a considerable amount of the starchy foods with mashed vegetables and fruits and to give a larger proportion of protein foods. It should be added, however, that the recent introduction of cereal with added mineral and vitamin elements¹⁰ ought to aid in the prophylaxis of celiac disease.

Summary

The clinical symptomatology of celiac disease is described, in view of the rarity of this condition and the relative unfamiliarity with it on the part of many physicians. Six cardinal symptoms are emphasized. Five illustrative cases are presented together with brief accounts of the dietetic treatment. Then, the rationale or the dietary management is taken up, in the light of the available knowledge on the pathogenesis of celiac disease. Lastly, its possible prophylaxis is considered and is related to principles of nutrition and to present American diets for infants.

DERMATOLOGY AND ITS RELATION TO GENERAL MEDICINE

By MARION B. SULZBERGER, M.D., NEW YORK, N. Y.

Read in part before the Oswego and Madison County Medical Societies on April 14, 1932, as one of a series of lectures arranged by the Medical Society of the State of New York, Committee on Public Health and Medical Education. Thomas F. Farmer, M.D., Chairman. Lectures delivered by the Post Graduate Medical School of Columbia University.

IT is an obvious fact that no organ of the body can have an independent life of its own. The more we learn, the more closely knit the interrelationship of organ to organ and of the part to the whole appears to be.

It is certain that the relationship of the skin to other organs is no exception to this rule. Lengthy treatises and innumerable articles have been devoted to this subject and none has succeeded in presenting more than a segment of the entire

field. Were I to try to point out more than a small part of what is known, I should require much more time than is at my disposal this evening.

I shall, therefore, be forced to confine myself to a few specific points. I have chosen these points because of several factors: first, because of their practical importance to the general physician; second, because the knowledge on some is of recent acquisition; and third, on account of

my personal experience and observations in several of the conditions I shall describe.

Furthermore, I shall deal only with skin symptoms and manifestations which are caused by general or systemic functional disorders or by changes in one or more other organs, and not with those which are merely accompanying lesions of the same type as the internal and general affections, and probably due to the same etiological agents.

I therefore omit the infectious exanthems, the true leucemias and Hodgkin's disease of the skin and many other conditions of this order.

Nor shall I speak of skin or mucous membrane lesions which appear in certain localities, but which we have learned to interpret as signs that other skin or mucous membrane areas are also affected. I believe this group would form interesting material and that their clear-cut exposition would be of aid in calling attention to facts of practical value which are not now sufficiently universal property. In such a résumé one could speak of much which I must here omit, for instance of the necessity of examination of the axillae, groins and especially the feet for tinea in all bullous, scaly and vesicular eruptions of the hands; of how certain types of stippling of the nails or a small scaly patch on the scalp must make the physician think of psoriasis and impel him to take exact family and personal history, and to examination of the areas of predilection and of many similar guides in dermatologic and general examination.

Many skin disorders seem at first glance and, if regarded from the purely morphological and descriptive viewpoint, to be merely local changes in the outermost layers of the body's envelope. They seem superficial, both in actual depth of the pathological process and in fundamental significance.

The older dermatology was content to contemplate skin lesions in this manner. It is my object to show as clearly as possible within the limits of a short paper that the newer dermatology has learned to be aware of the deeper meaning of many seemingly only dermatologic manifestations.

We have gained a broader viewpoint and one which necessitates a more intimate collaboration between dermatology and general medicine. Dermatology has been benefited by the newer concept; so also has general medicine. The accessibility and the visibility of the skin, the facility with which repeated histological and bacteriological examinations may be made, have enriched our knowledge of many processes of general biological and pathological importance. Because the skin offers external, clearly apparent signs of the earliest beginning of many diseases, it has been of incalculable aid in the study of the early and previously ignored stages of various general

processes. For example, we owe almost our entire knowledge of the beginnings of cancer to investigations of the precanceroses of the skin.

Furthermore, skin diseases are frequently the earliest and most apparent danger signals of internal conditions. They are visible, often ugly and uncomfortable, as a rule disturbing, not to say terrifying to the patient. Many who will disregard a slight internal malaise or nondescript, vague general complaint will come to the doctor at the first appearance of a definite skin manifestation. I shall endeavor to show that the knowledge of the art of reading and interpreting these signs will often enable the physician to suspect underlying diseases of the utmost importance, and will sometimes lead to early diagnosis of otherwise unsuspected and often dangerous conditions. This will often permit the urgently required early therapy and may spare many a patient a serious illness, long suffering; and may even save a life.

The skin manifestation which looms in the foreground from the point of view of actual practice is itching. Dermatologists probably owe much of their bread and butter to this symptom, and I believe that both dermatologists and other physicians are likely to render it less consideration and study than is due. The first type of itching which I shall discuss is more or less generalized pruritus, without visible cause; that is, without manifest skin lesions. This itching is frequently caused by some internal disturbing factor, although I have seen a few cases in which an external agent was at fault and many cases in which no internal or external cause could be discovered. These last cases pass under the name of "essential pruritus." The better our investigations, the fewer such diagnoses will there be. The internal causes of pruritus are innumerable and it often requires a lengthy general and laboratory examination to find them. It is necessary, however, to attempt this in all persistent cases. The most important general causes are diabetes and uremic conditions, icteric and other biliary disturbances, internal cancers, leucemias and blood dyscrasias, and endocrine dysfunctions. A practiced dermatologist is frequently in a position to blaze the trail to the diagnosis of these general maladies, and at least those I have mentioned should automatically spring to the mind of all physicians when confronted by a persistent general itch without apparent cause.

What I have said holds in nondescript eczematous eruptions for which no cause can be discovered and which persist or recur in spite of adequate therapy. These are sometimes caused in the same manner or are the direct result of scratching. The importance of this thorough etiologic search is self-evident and although investigations may prove fruitless in many cases, the occasional discovery of a still operable carci-

noma of the prostate or colon, of an incipient diabetes or kidney disease, of beginning gall-bladder or liver trouble is sufficient reward for all the pains taken. Itching is often premonitory and the first sign of sickness in such patients. Many lives have been saved by the physician's recognition of this fact.

As illustrations of cases in which we have recently been fortunate enough to discover the underlying causes of pruritus, I shall cite three examples: a woman of 45, with severe pruritus of the right side of the abdomen and right breast, was found to have a tumor of the gall bladder, a man aged 40 had generalized pruritus discovered to be due to thyrotoxicosis. The third case does not belong strictly to the groups mentioned, as it was due to a medicament. A pregnant woman of 26 received a jar of butesin picrate ointment to relieve a slight itching of the vulva. Its use was followed by maddening general pruritus which lasted over four weeks after discontinuing the use of the offending salve. Patch tests proved that this patient's skin was hypersensitive to butesin picrate and caused a reaction of many weeks' duration.

In addition to generalized pruritus, certain forms of localized itching must be mentioned. Although one might be tempted to consider this symptom to be a local manifestation, pure and simple, this is by no means the case. Itching around the mouth, nose and anus is a well-known symptom of helminthiasis, and itching of the vulva must make one consider, in addition to local causes, the possibility of diabetes or sexual disturbances (sexual neuroses or unsatisfactory sexual relationships).

It would be possible to continue at length concerning this symptom and to mention such conditions as vaso motor instability, other neurological conditions, neurasthenias, circulatory disturbances, hay fevers, asthmas and food or drug idiosyncrasies and discuss their relationship to pruritus, but I shall have to limit myself to their bare enumeration.

The endocrine glands and their influence upon other organs have been the subject of intensive research in recent years, and in the last decade our knowledge of skin eruptions of endocrine origin has been materially increased. Unfortunately, while our knowledge of the relationship of endocrine dysfunction to certain dermatoses has been enlarged, our therapy has not been aided as much as one might have hoped. However, with the discovery of new hormones (sex hormone of Asheim-Zondek and the cortical hormone, for instance) and the improvement in the preparation of the older hormonal substances, there is every prospect of great progress in this field.

Although it is perhaps not, at first glance, an endocrine disease, I believe that we can today

state that acne vulgaris, the ordinary common or garden juvenile acne, is intimately connected with the endocrine sexual glands.

The same holds equally true in the case of alopecia of the ordinary seborrheic type. Thus, as well as acne, appears practically always during the years of sexual maturity and here the relationship to sex seems even more intimate, for in the vast majority of cases the patients are males and furthermore no eunuch becomes bald, provided he has been castrated before the age of puberty, as Sabouraud was able to ascertain in statistics gathered throughout the Mohammedan countries.

Recent investigations have shown that acne regularly appears at puberty, and that it must be considered almost physiological around the age of 12-20. Nearly one hundred per cent of youths of 18 have acne in some degree and the consideration of the condition as a morbid entity is only a question of its severity. In the light of the profound changes which are concomitant with or dependent upon the development of the sexual glands, we need not be astonished at these findings, and especially as the follicular apparatus, the seat of the disease in both acne and alopecia, is strikingly affected by sexual development. The hair of the scalp undergoes a change from childhood to adult life, the beard, the pubic and axillary hairs appear, the terminal hairs and the other secondary sexual hairs develop, and under the direct or indirect impulses of the hormones, these changed follicular activities give rise to new susceptibilities which manifest themselves in acne and alopecia. The susceptibilities may be such that the follicular and perifollicular tissues lose their normal resistance to one or more of the multitudinous varieties of germs which usually pullulate in a more or less saprophytic fashion on the skin and hair or in the follicular orifices. The possibility of the direct hormonal action on the follicle becomes probable when we consider the anatomy of the follicles and their rich vascular supply. This probability becomes even greater when we observe the strong affinity of the follicle for all manner of circulating substances, the many hematogenous and follicular dermatoses such as trichophytids and tuberculids, the follicular hematogenous drug eruptions such as certain arsenical dermatoses, and above all the often exquisitely follicular bromide and iodide eruptions.

I believe that prophecy is even more risky in medicine than elsewhere. Were this not the case I should hazard the opinion that we are not far from the discovery of a rational therapy of acne and that an endocrinologic means will come to our aid. This will be a great step in advance, in spite of the fact that in a vast majority of acne cases our present local and general methods (x-ray, etc.) lead to good results.

It is well known that our therapy of alopecia seborrheica leaves much to be desired. Our experience with the anterior pituitary hormone is still too limited and not yet ripe for discussion. It is difficult to leave these fascinating and important problems and to pass over the many other possibilities which present themselves here. For instance, the connection between acne and menstruation; between acne and gastrointestinal disturbances; between acne and focal infections; between acne and food allergy; and particularly between acne and tuberculosis. Before leaving the purely endocrinologic aspect of acne, I must mention one thing; all of the new hormonal preparations should now be given a trial in acne refractory to other treatment and in alopecias, so that we may become oriented as to their possible effects. Notably the sex and the pituitary hormones would seem to have logical possibilities.

In leaving acne and seborrheic alopecia, we must turn to rarer and therefore, in practice less important, dermatoses connected with endocrine disturbances. In some of these the connection between the endocrine disease and the skin eruption is much clearer than that in conditions already discussed. You are all aware of this in Addison's disease, and of the connection between tuberculosis of, and tumors of the adrenal glands and the pigmentary changes of the skin and other organs. You all also know of the probable chemical relationship between adrenalin, dioxyphenylalanin and melanin. All of us have recently been thrilled by the discovery of the cortical hormone and its apparently almost miraculous therapeutic power in Addison's disease.

In addition to Addison's disease, pigmentary disturbances of other kinds are directly attributable to influences of the endocrine glands. The most frequently encountered is doubtless the chloasma of pregnancy, as well as the frequent practically physiological hyperpigmentation of the mamillae, linea alba and mucous membranes. But chloasma is not a condition found only in pregnancy, for males are occasionally affected. It also not infrequently appears in non-pregnant women after at approximately the time of menopause, and here again its endocrine basis is probable.

In many other skin conditions the rôle of endocrinologic changes has been either surmised or more or less definitely proven. It is impossible to leave the group of endocrine diseases without at least mentioning such conditions as myxedema and xerosis of the skin and their definite underlying thyroid disturbance, or scleroderma and the possibly causative thyroid and parathyroid malfunction. In this latter condition I wish to mention a case which I recently had the opportunity to study in detail. Scleroderma-like changes of the skin were accompanied by distinct evidences of a disturbed calcium metabolism, with calcification of muscles and soft tissues and rarefaction

of the bones. The twelve year old girl thus affected had a greatly enlarged thyroid and a variable basal metabolic rate which fluctuated between -4 and -25 . Her general condition and skin lesions improved rapidly under iodine therapy. In consultation with many experts, it was decided that the disturbances of calcification were probably due to hyperparathyroidism. I mention this case because it is quite typical of what can be found in many cases of scleroderma.

Lack of time forces me to do no more than mention such interesting and possibly hormonal skin changes as acrodermatitis chronica atrophicans, idiopathic macular atrophies, cutis laxa, poikilodermas, dysmenorrheic dermatoses and the common striae distensae.

It has often been difficult for me to decide under what heading certain diseases should be discussed in this recapitulation. Under the heading of skin lesions due to neurological changes I have decided to mention trophic ulcers, and burns, injuries and so forth, due to the paresthesias and anesthetics. These are frequently caused by nerve changes due to infections such as leprosy and syphilis or to syringomyelia, tumors and other disturbances of the sensory or trophic nerves. In some of these anesthetics I have seen patients burn themselves deeply and extensively on the back by accidentally leaning against a stove or a hot pipe. Although such burns often covered large areas and penetrated to the bone, the patients did not notice the injurious contact until the smell of burning clothes or charred flesh made them aware of it.

In certain patients seen by the dermatologist, the manifestations are not as clearly connected with the nervous system as in the preceding examples. In alopecia areata and in canities, which both frequently follow excitement and sudden shock, the theories of focal infection and toxic or neurogenic trophic disturbance vie for supremacy, without either being absolutely established. (Sudden shocks sometimes even cause a falling-out of the nails.)

There are also many skin lesions which are due to central nervous system disease. The most notable and frequent among these are the artefacts, self-inflicted injuries, often of incredible nature, which are found in hysterics, neuroses and psychoses (and also in malingerers).

Another disease which is not to be absolutely identified with the above, but is related to them through the common basis of psychic and nervous origin, is the peculiarly typical condition known as neurotic excoriations. The patients who present this picture are the "pickers," and often unconsciously or subconsciously themselves produce lesions resembling acnes, prurigos and other dermatoses. Many forms of "tic" are the diseases known as trichotillomania and trichokryptomania belong in this group.

From these diseases it is but a step to a curious condition not infrequently seen by dermatologists. In this, the patients believe that their skin is infested with parasites, which they try to dig out. They are continually bringing to the physician's notice small bits of wool, lint, scales, hair and detritus which they believe to be alive and the infecting agent. This is certainly a neurotic or psychogenic condition, and should be referred to the psychiatrist. There are many other ways in which neurogenic and psychic causes affect the skin and we are but beginning to suspect their multiplicity and extent.

I have had the opportunity to study more closely three types of manifestations which may serve as specific instances of such influences. First, the itching and exacerbation of eruption in generalized neurodermatitis. These disagreeable and often therapeutically intractable skin eruptions are in my opinion as surely sensitization phenomena as are hay-fever or asthma and the attacks are usually due to substances to which the patient's skin is hypersensitive. I have repeatedly seen such attacks follow the ingestion of certain foods, for instance, and in almost all typical cases I have been able to demonstrate skin sensitiveness to these foods by intradermal tests. In this disease the skin reactions and systemic reactions are frequently very pronounced, often even stronger than in asthma or even in hay-fever. Furthermore I have been able to demonstrate sensitizing specific antibodies in the sera of these patients. Nevertheless I have also seen attacks precipitated in these patients without discoverable contact with the offending substances and exacerbations of itching following and seemingly caused by emotional upsets. (This phenomenon is of course also observed and is well known in asthmatic attacks.) The patients with neurodermatitis often show signs both of emotional and of visco motor instability. It is difficult to say whether the skin manifestations and neurogenic and emotional factors are simply coupled phenomena, due to the same underlying cause, or whether they are related to each other as cause and effect. If the latter is true, we cannot say which is cause and which effect. Moreover nothing is known of the basic origin of these constitutional anomalies, nor of the mechanism of the formation of antibodies and of sensitization. It might be conceivable that under the influence of the pathological nerve impulses, cells become sensitized and form antibodies to certain not otherwise harmful substances. However I know of no established proof for this concept.

I wish only to mention the two other examples promised. Common and juvenile warts, which are inoculable infections as well as acanthotic tumors, can be cured (in a definite percentage of cases) by means of purely psychic suggestion therapy.

Furthermore, I have often seen dermatophytids of the hands and body break out after emotional stress. The older school, which called these hand eruptions cheirpompopholyx, dysidrosis, exfoliatio areata manuum and eczema of the hands, was accustomed to regard this condition as a nervous phenomenon and to treat it accordingly. I believe that the newer conception that these are eczematous eruptions usually due to hematogenous dissemination of the fungi and their products from infected foci on the feet and the older neurogenic concept must be reconciled. Perhaps the explanation is as follows: the nervous upset, accompanied by hyperidrosis of the feet, maceration and lowered resistance to the fungi, brings about penetration of fungi and toxins into the blood stream and their dissemination. The same factors perhaps favor the frequent localization on the hands with their larger quantities of dead horny tissue, and tendency to hyperidrosis. I have particularly noted hyperidrosis and slight tremor of the hands as, I believe, a more than fortuitous accompaniment of severe and long lasting dermatophytids. This explanation would also account for the breaking out of dermatophytids and dermatophytosis in sportsmen and the epidemics in locker rooms, gymnasium, swimming pools, etc. The theory that the infection is picked up in these places and that the disease is spread in this manner seems to me to lack logic, when we realize that in our country almost 100 per cent of adults are constantly infected and carry foci of infection about with them continually. It seems more probable that these foci remain hidden (a soft corn, a slight fissure, a scarcely noticeable scaling, a small friable discolored area of a toe nail) and are quiescent until the addition of maceration and lowered resistance causes a flareup and spread.

While I realize that I have touched but a few salient points in the skin manifestations due to psychogenic and neurogenic factors, I must refer to the special treatises for more detailed consideration of these points.

I now wish to call attention to certain diseases which represent another group, namely, that of the nevus anomalies. As representatives of this type, von Recklinghausen's disease and adenoma sebaceum deserve attention. Both are often familial in occurrence and both are often associated with psychic changes the latter more frequently than the former. In von Recklinghausen's disease one also frequently finds malformations of the spine, and in adenoma sebaceum the association with tuberous sclerosis is not uncommon.

The familial factor observed in the nevus diseases is also to be found in conditions in all probability not related to the nevus. These are, for instance, the photo-dermatoses, such as hydroa vacciniforme and xeroderma pigmentosum. These

are both processes of the skin in which the lesions are apparently caused or their appearance precipitated by exposure to light; and as evidence of their relation to general disturbance, we have the extremely interesting finding of light-sensitizing substances (hematoporphyrin) in increased amounts in the body fluids. These conditions are sometimes fatal. They often appear in families in which intermarriage has taken place.

A much more frequently encountered type of skin disease is that which comprises those in which pathological metabolism is a factor. In this group diabetes is perhaps the most important. I believe that this disease should be discussed here, although it might have been placed with perhaps equal right in one or another of the preceding categories. In all cases of persistent pyodermas and particularly in furunculosis, in cases of monilia and thrush infections of the skin, in intertriginous, pruriginous and infected eczemas, and in skin gangrene, diabetes must be suspected and it is the duty of the physician to make the proper tests, including those for sugar tolerance. Such tests may reveal otherwise undreamed-of diabetic states in time for early and effective treatment.

Because of their relative frequency and importance, as well as on account of the new light which recent study has brought to play upon them, the xanthomas must be mentioned. It has long been considered as an obvious fact that these fatty tumors were caused by a disturbance in lipid metabolism, notably by a cholesterinemia, and that they represented nothing more than deposits (intra- and extracellular) of cholesterol in the subepidermal tissues. This theory seemed to have received its death blow when newer chemical methods and more careful investigation of numerous cases brought the following facts to light: (1) there are many cases of xanthoma and xanthelasma without increase of blood cholesterol. This substance may be either normal or even decreased in such cases; (2) many patients with increased cholesterol in the blood have no xanthomas; (3) the actual amount of cholesterol in the tumors is not necessarily above normal in quantity. In spite of these seeming discrepancies, the most recent research in this field seems to have proven that the formation of xanthoma is based upon a disturbance of fat metabolism. Regardless of whether blood cholesterol and tissue cholesterol be actually high or low, there is always a disproportion or relative abnormality in the ratio of cholesterol to other fats or lipoids in xanthoma cases. If one reproduces in the test tube the normal quantitative ratios of cholesterol to other fat substances, and emulsifies this in an aqueous medium, a finely dispersed and, what is more important, a stable emulsion will result. If one reproduces the abnormal ratios, such as found in the blood in xanthomas, an unstable

emulsion will result. This demonstrates that whatever the actual quantity of cholesterol in these cases may be, whether it be normal, high or low, its ratio to other fatty substances is such as to pathologically favor a falling-out of fatty substances from the blood and their deposition in the tissues. Knowledge of these facts makes the physician realize the necessity for examination of xanthoma cases for possible diabetes ("the fats are burned in the fire of the sugar") and liver and gall-bladder disease.

I am omitting a detailed discussion of diseases which may, in some measure, be due to disturbed calcium metabolism; such as, for instance, urticaria and angioneurotic edema, or those in which general digestive disturbances, acid-base imbalance or faulty protein-metabolism have often been held to blame. It seems to me that in spite of the vast amount of painstaking work which has been devoted to these problems, there is very little proof that any of these factors can be held definitely responsible in the majority of cases of urticarias, angioneurotic edemas, or of such diseases as eczema, seborrheic dermatitis, or psoriasis.

If one may be permitted to include the avitaminoses among the metabolic disturbances, it must be stated here that with the exception of the older pictures recognized in scurvy, very little is known and much will still be learned. In pellagra, which has such definite and typical skin lesions, and such marked accompanying disturbance in internal organs and psyche, the rôle of avitaminosis and of toxic substances and infection is still a subject of controversy. I take this opportunity of mentioning only one of the cardinal symptoms in scurvy, and that is the tendency to hemorrhage and purpuric lesions, both in the skin and mucous membranes.

This brings me to an extremely important group of skin diseases, not necessarily those metabolic, but those in which the extravasation of blood is the essential feature, namely the purpuras. I must dismiss with brief mention the purpuras due to blood dyscrasias, such as purpuras in leucemias and anemias and those of the thrombocytopenic type, and merely call attention to the necessity of bearing these diseases in mind and investigating in this direction when confronted by purpuric skin lesions of unknown origin. Of even greater importance than these are the purpuras associated with the infections for instance those so frequently seen in sepsis. It seems necessary, however, to again recall the fact that any generalized infection or bacteremia as well as many drug-eruptions may manifest themselves in extravasations of blood under or into the skin, varying in size from pin-point petechiae to large areas of ecchymosis and suggestion often resembling large bruises at first glance. Among the forms of purpura which may be due

either to bacteria or their toxins, I must mention rheumatic purpura, or Schoenlein's disease, and Henoch's purpura, which is associated with gastro-intestinal crises. (Almost everything I have said concerning the purpuras due to bacterial or toxic agents, or to drugs can, *mutatis mutandis*, be applied to the erythema nodosum and erythema multiforme types of eruptions. These, together with the purpuras, typify the purely symptomatic skin eruptions and are almost always indicative of underlying general disease and bacteremia and/or toxemia in the widest sense of the word. They are all symptoms which may be caused by a multitude of different circulating, noxious agents including, for instance, tubercle bacilli, trichophyton fungi, lepra bacilli and many other micro-organisms.)

As I have already indicated, I am leaving entirely out of consideration conditions in which the skin manifestations and manifestations in other organs are caused by the same etiological factor, are part of the same general pathological process as the internal disease, and have the same, or similar, histological findings. For this reason I here omit the actual leucemias of the skin, Hodgkin's disease of the skin, tuberculosis of the skin, the skin metastases of internal cancer, all of the acute infectious exanthems, and the typical skin manifestations of syphilis and leprosy, as well as many other perhaps equally important diseases.

In the points I have outlined, I hope that it has been possible for me to make clear that the skin acts as a sort of mirror of internal conditions; often not as a true mirror in which the disease is reflected in its actual form and color, but rather as one which gives a distorted picture which we can interpret only if we have been taught to read the signs.

An excellent example of the usefulness of the skin as a means for judging the condition of the general organism is offered by its rôle as an immunological testing-ground. Two factors contribute towards giving the skin its important place in this regard. First, as I have stressed elsewhere, its accessibility and visibility; and second, the fact that changes in resistance and susceptibility of many distant organs and many general conditions are frequently coupled with a synchronous change in skin reactivity. A few examples of this are found, for instance, in the Schick test, in the Dick test, in the tuberculin and trichophyton tests, whether applied according to the methods of Mendel-Mantoux, of von Pirquet, of Moro, or of Poincarré, or by the patch-test method. To these older examples, recent years have added many more important skin tests, such as the highly specific Frei test in lymphopathia venereum (lymphogranuloma inguinale) and its many manifestations, such as high rectal strictures, especially in women, and

chronic ulcerative and elephantastic processes of the vulva and anus.

The tests of Dmelcos and Ita-Reeinstierna are a valuable aid in the diagnosis of soft chancre and its differentiation from other conditions. Although, even today, I could lengthen this list considerably, I believe that the future will prove that skin tests will be of help in many other diseases in which they are now not used, such as in malaria, spinal meningitis, poliomyelitis, and in innumerable other infectious and non-infectious pathological processes.

The almost universal participation of the skin in the changed reaction of other parts points to this organ as one of particular immunological significance. Many observers have, therefore, come to consider the skin not only as an envelope for the purpose of physical protection, and not only as an organ of excretion but also as a protective organ in a wider sense, namely as perhaps the main site for the elaboration of protecting anti-bodies. My own experience and experiments point emphatically in this direction. For this reason I believe that many immunological procedures would create a more favorable antibody protective response were they administered by methods favoring an intimate contact with the superficial skin-layers (for instance, by intradermal injection, by inunction, or by scarification and the application of antigen) rather than by the now more frequently practiced subcutaneous, intramuscular or intravenous injection.

It does not seem necessary to speak at length concerning the value of skin tests in such conditions as asthma, hay-fever and vaso-motor rhinitis. American medicine has done pioneer work in this field and we are all well acquainted with the relief many sufferers have obtained through the information derived from such tests. I wish to emphasize only two points: first, that it seems possible that we may achieve more efficient desensitization in these diseases by adopting the intradermal methods which I have mentioned; and second, that all skin tests in order to be properly executed and evaluated must be carried out and observed by physicians not only possessed of logic and judgment, but also of wide experience in this highly specialized field. Innumerable errors are continually being made in this particular branch of medicine and their results reflect undeserved discredit upon the method.

In closing, I should like to add that what I have said regarding skin tests applies equally well to the judgment and experience necessary not only in the diagnosis of all the skin diseases which I have mentioned, but also in the consideration and the tracing of their possible connection with other and general pathological conditions. I hope that I have succeeded in showing that dermatology can today be of assistance to

the general physician and to specialists in other branches, and that dermatologists have gained a wider viewpoint and left behind a system of purely morphologic diagnosis and empiric local therapy. In this wider field the necessary collab-

oration of dermatologist and general practitioner, dermatologist and other specialists, and dermatologist and laboratory becomes evident, both for the study and treatment of the individual case and for the progress of medicine as a whole.

GENERAL PRACTICE BEFORE SPECIALISM OF PRACTICE*

By WM. B. D. VAN AUKEN, M.D., TROY, N. Y.

THE term General Practice here used means that type of practice which treats and cares for all medical conditions, most minor surgery work, obstetrics, and the more common affections of the eye, ear, nose and throat. I do not believe that a physician should regard himself as capable of properly treating all medical and surgical conditions and diseases which come to his attention. The recent additions to medical knowledge have made it utterly impossible for any individual to absorb more than a portion of it.¹ Apropos of this, to say that specialism in medicine is not necessary is absurd.² Further it is reasonable to say that all physicians limit their work. The family doctor may even so restrict his work as to classify himself as a specialist.³

The term Specialism of Practice here used means such limitation of a physician's practice that causes him to restrict all of his medical work to one of the well recognized specialties or allied specialties such as Ophthalmology, Public Health, Otology and Laryngology, General Surgery, Tocology and Gynecology, or Gastro Enterology, etc.

In this article an effort will be made to set forth some of the advantages and disadvantages of a general private practice preceding a specialty practice.

It is generally admitted that the man who succeeds best in a vocation is usually the man who is happy with his work—one who has found the occupation of his natural choice.

Many have failed because they did not follow the walk in life best suited to their inclinations and aptitudes.⁴ A proper selection of a specialty I believe, may only rarely be made without acquainting oneself with the various fields of general practice. We are far better able to pick a candy of our choice by first tasting each morsel.

One or more years of general hospital internship cannot give one the obligations, responsibilities, hours and types of service that a few years in private general practice can give. Without these years of general training

the specialist fails to understand the problems that vex the family physician.⁵ He lacks breadth of vision and often operative correction of supposedly serious yet trivial defects are undertaken not only unscientifically but at times innocuously.

Likewise specialists in public health, lacking the experience of a private general practitioner, at times try to promote activities doomed to failure from the start because of their obnoxious nature to the back-bone of public health—the general practicing physicians.

General practitioners have the unique experience of being the first to recognize the condition which the specialist later treats. He watches the remote as well as immediate results of the work done by, not one, but many specialists as the patients whom he refers to the specialist, returns to him for later care and observation. Such observations often develop conservatism rather than radicalism particularly as regards surgical intervention.

By indulging in general practice before a specialty, a physician can test the application of his college and hospital education. He can mould his education into knowledge by assuming and continuing with the full charge of a great variety of private patients. Such physicians may later see their specialty in its proper relation to the general whole and not to one particular part of it.⁶

The more thorough that general knowledge is, the better one can care for a local condition and obviously the reverse is true. If the specialist is not trained in general medicine he all the more should seek the help of the family physician.

I believe it is safe to state that most doctors cannot establish much of a private practice in any branch of medicine including the so-called general practice till they have continued at least three years in that branch. Each year after that will greatly add to their fund of knowledge and assist in ripening their faculties and judgment.

The ability to handle patients tactfully does not come without contact with a large prac-

* Read before the Medical Society of the County of Rensselaer, April 12, 1932.

tice. A gross error of tact or technic is much easier to recover from while in general practice than when practicing a specialty. A patient may say, "Dr. S. is no good when it comes to fractures, but he certainly is fine with babies." It is much better to fail in one thing and succeed in others, than to fail in the only one with no others with which to surpass.

When a patient seeks the advice or care of a specialist, that patient has a right to expect maturity of judgment and experience as well as technic or ability. I believe most patients are somewhat disappointed when consulting a highly reputed specialist for the first time, they note a man of the twenties or early thirties who by his very actions and words as well as appearance bespeaks youthful adventure, enthusiasm and daring courage. In exceptional cases a doctor may spend the most of his early medical career doing institutional work and at the age of 35 he may start out for the first time on his own initiative. Such men are rare and though more mature in judgment and experience they have yet the lessons to learn about the art of the practice of medicine.

In these days of speed and economic pressure, a patient who is under the care of a specialist for a local condition and who coincidentally acquires another disease or disorder not related to but associated with her primary condition and who is post haste sent to one or more other doctors, may believe that she is pan-handled too much and may rebel.

If a good foundation of general practice makes it possible for that physician to recognize the psychic or economic problems of such a patient and to successfully treat or care for the associate disorder, he makes himself very valuable to her in a manner that the specialist without general practice cannot.

When a doctor who has practiced general medicine five or more years, decides to qualify for a specialty and obtains an appointment in a specialty hospital the work he sees and does I believe, is a greater source of information and help to him than it would be if he had not been confronted with similar problems in his former general practice. I do not believe that a general hospital born specialist will absorb as much from his specialty training as will a general practitioner born specialist. The first never has been compelled to solve any intricate diagnosis or procedures by himself while the second may have already met such problems perhaps in a more crude way, and hence appreciates the artful technic of an expert.

The average type of a county medical meeting as well as general hospital staff meetings

appeal but little to a hospital born specialist unless he has had more than the usual general hospital experience. By having a wide experience in general practice before specializing, a physician will enjoy such meetings. He will know of the problems of his associates and will not be hypercritical or megaloccephalic. Not having been raised in the forest he will be able to see the lakes, the gardens and the vast open countryside.

While it may seem that the ideal has already been put before us we must not forget that there are disadvantages.

The first one is financial. It is somewhat against human nature to give up a bird in the hand for one in the bush. When a physician has been engaged in general medical practice for more than five years, if he is any good at all he will have a valuable practice from a financial point of view. If he has not such a practice I believe he might as well withdraw and run a subway train or find some other vocation that is better fitted to his nature. To qualify for his specialty he is obliged to let all that valuable patronage that has cost him so much, go to the other fellow and to begin at a later date at the bottom of the ladder, oftentimes heavily in debt. Furthermore we must not forget that when starting the practice of a specialty it will probably take three or more years before the practice will keep one reasonably busy or satisfactorily compensated. It is a sacrifice that not many care to make.

The second disadvantage is the marked tendency which most specialty hospitals show toward excluding resident appointments to general practitioners on the basis of their minds being more or less closed to new ideas. This is particularly true of the Tocological and Gynecological hospitals. I have personally experienced such difficulties and have met with others who have also been confronted with like obstacles to the attainment of a hospital appointment in Tocology and Gynecology. They prefer to appoint a man to their resident staff who is fresh from another hospital; one whose brain is plastic. It has been written⁷ that it seems wiser now for a young man to enter a specialty after a good hospital training than later in life; as it is not only easier to assimilate ideas, but the development of technical skill is easier and it is probably almost impossible to develop it later in life. This may be true but it does not seem to accord with the opinions of Nicoll,⁸ an editorial,⁹ Phippen,⁶ and Morgan,¹⁰ all of whom are strongly in favor of a preliminary five years or more general practice experience before specializing.

I believe that with Specialism as well as

with all other lines of activity there is no short road to success. Those who truly will succeed must give considerable time and ef-

fort to their task and pay the price, no matter what the cost to themselves in time, effort and money.

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MECKEL'S DIVERTICULITIS IN AN INFANT

By RALPH R. MOOLTEN, M.D., NEW YORK, N. Y.

The case reported was from the surgical service of Dr. Charles Gordon Heyd, New York Post-Graduate Hospital, Dr. John F. Erdmann, Director.

THE occurrence of an acute surgical abdomen in infancy and childhood is not common. Next to the appendix, a Meckel's diverticulum is the most frequent cause. When this later condition does produce disease, the symptoms are often so varied and obscure that diagnosis is difficult. I feel justified, therefore, in reporting a case that may contribute a little to a scanty literature.

Quoting from Dr. W. Ray Shannon, in the *Archives of Pediatrics* for December, 1928: "Meckel's diverticulum is a remains of the intestinal end of the omphalomesenteric duct. According to Johnson, it exists in about two per cent of all persons. According to Fitz, in the new-born it lies about 12 inches above the ileocecal valve, while in the adult this is increased to about three feet. The diverticulum may be long or short, may or may not have a separate mesentery or may be contained within the mesentery of the small bowel. It may be fixed at its distal extreme to the umbilicus or to any structure within the abdominal cavity. It is often conical in shape with the base large, even approaching in size the diameter of the small bowel at this point. According to Christopher, it usually has the same coats as the intestine, the mucous coat containing Lieberkuhn's glands and Peyer's patches. This same writer quotes Aschoff as saying that it may contain gastric glands, ciliated epithelium and even pancreas anlage. A certain number of Meckel's diverticuli are associated with deformities at the umbilicus, and marked deformity or abnormality of the navel should therefore always bring to mind this possibility."

Meckel's diverticulum can produce disease in several ways:

1. *Mechanical*—By virtue of the fixation of the tip of the diverticulum to the umbilicus or another viscus strangulation or torsion of the adjacent small intestine can occur and produce intestinal obstruction.

Intussusception can result from the invagination of a diverticulum.

2. *Ulcerative Condition*—Ulcerations of a diverticulum have produced hemorrhage and even perforation.

3. *Inflammatory Conditions*—

(a) *Acute*—Here the situation resembles acute appendicitis and the sequelae are also similar.

(b) *Chronic*—This usually occurs at the base of a diverticulum and the resulting fibrosis may produce partial or complete occlusion of the bowel.

The case I have to report is one of acute diverticulitis with perforation. A peridiverticular abscess was formed. It was well walled off, so that a general peritonitis did not follow:

CASE REPORT

Louis Preziosi: Chart No. 72765. Age: 7 months (born July 20, 1931). Birth Weight: 6 pounds, 5 ounces. Normal delivery at term.

Past History: At four months of age, the child was first treated in the out-patient clinic as a feeding case. At that time physical examination was essentially negative. After a protracted treatment, the complaint of vomiting was checked and the child made normal progress.

Present Illness: Twenty-four hours preceding admission, patient began to cry persistently and seemed very irritable. The abdomen was tense and somewhat tender, and the temperature rose to 103.2.

Examination: On admission, revealed a plump, well-developed child who did not look ill. The child did not cry until disturbed and took its food well. Complete examination revealed the following positive findings:

(a) Ear drums, congested, absent light reflexes, but no definite bulging.

(b) Breath sounds over right upper lobe, louder and slightly harsher than on the left side. Examiner made a note of questionable significance.

(c) The abdomen was markedly distended, very tense, and palpation caused crying. There were no palpable masses or viscera. Rectal examination was negative and was followed by the expulsion of considerable flatus and a fairly large normal stool.

Diagnosis at this time was:

1. Early pneumonia.
2. Bilateral otitis media, chronic.
3. Possible acute abdomen.

During the next several days, various examinations and consultations were made and the conclusion was to rule out all findings, except those of the abdomen. During this time the child did not vomit, took his food well, and passed normal and sufficient stools. The only significant factors were an elevated temperature and a distended abdomen.

On February 14, 1932, I was called to see the case in consultation. Although I was extremely dubious about the presence of a surgical abdomen, at the insistence of Dr. De Sanctis, whose opinion was of an acute appendicitis with abscess, I performed a laparotomy.

Operation: The abdomen was entered through a right rectus incision. About twelve inches proximal to the ilio-cecal valve there was a

Meckel's diverticulum with abscess which was definitely localized and adherent to the lateral abdominal wall on the right side. The abscess cavity was drained. No perforation was discernible in the diverticulum. It was believed that a pin point perforation had previously occurred, thus causing the formation of an abscess which fortunately became walled off and that perforation subsequently sealed itself. The base of the diverticulum was as broad as the lumen of the intestine. To remove it would have involved intestinal resection, which was not deemed advisable because of the patient's general condition. However, a prophylactic appendectomy was performed.

Post-Operative Course: During the four days following the operation the child seemed to be doing very nicely. His temperature was returning to normal and the surgical wound was in good condition and remained so during the remainder of his time in the hospital.

On the fifth day following the operation after the child seemed to be doing so well, he began to develop complications directly associated with involvement of both middle ears. Bilateral myringotomy was performed, but was not followed by favorable response. A gastro-intestinal upset intervened and, finally, a broncho-pneumonia.

In spite of four blood transfusions, at no time during this period did the child's general condition seem to indicate that he would survive the numerous intercurrent infections, and he died on March 12, 1932.

Autopsy Findings:

1. The abdomen showed adherence of small intestine to anterior abdominal wall. No obstruction, no purulent material, no injection of peritoneum.

2. Chest showed small amount of mucopurulent fluid throughout the bronchi. Both lungs collapsed.

3. **Head:** Both mastoids contained thick purulent material.

A REVIEW OF THE PROBLEM OF ACUTE FOOD INTOXICATION*

By G. HENRY KNOLL, M.D., LE ROY, N. Y.

FOOD poisoning is a topic in which my interest was first aroused by a major tragedy occurring in the city of my birth during the course of my Junior year at college. I was, at the time, just in the throes of my introduction to bacteriology and the occurrence left an indelible impression on my mind.

To add interest to the consideration of the topic, a brief recounting of this terrific catastrophe may be justifiable. C. C. W. was a man of prominence and wealth in our community and in addition one whose friends were legion. He had always had military connections and in the summer of 1917 went overseas as a Colonel in (if my memory serves me rightly) the Rainbow Division. In the late

* Read before the staff of St. Jerome Hospital, Batavia, N. Y., March 14, 1932.

summer of 1919 he returned from overseas with the remnants of his command and on August 23, a banquet was held in his honor at one of the nearby country clubs. Seated at the hostess table were eighteen people. Within twenty-four hours after the serving of the dinner, fourteen people were acutely ill and in a period of a week eight of them had died—among them being Colonel W. and the hostess who gave the dinner in his honor. Dr. Charles Armstrong, assistant surgeon of the United States Public Health Service, was immediately sent to investigate the outbreak and careful epidemiological and serological investigation proved that the victims died from botulism—the toxin of the bacillus botulinus being present in ripe olives bought especially by the hostess for the occasion. So much then for the grim tragedy and drama of a certain type of food poisoning when it like lightning does strike in the most unexpected spot. There are, of course, almost innumerable forms of human intoxication by food. Many of them it is not our purpose to include in this paper. Such considerations as rather rare foods themselves chemically poisonous such as certain strains of mushrooms; metallic poisons finding entrance to foods either through homicidal effort or from the composition of containers; and certain specific diseases transmitted by food, such as typhoid fever, tuberculosis and septic sore throat we shall omit. Were one to try to encompass all types of disease and intoxication finding entry to the body through the digestive tract, the field would obviously be much too broad for a single paper. I shall confine this paper to certain little known poisonous effects of some of the common food substances and to that large group of acute illnesses caused by bacterial agents of which a physician usually thinks under the head of food poisoning.

There are certain commonly used foods which are in themselves in certain species or at certain times inherently poisonous. Most common among these are the sea foods. Although poisonous fish are rare in our waters, in tropical waters of certain locations they abound and to eat them is fatal. These practically all belong to the group of puffers or the balloon variety. Clams and mussels at certain times of the year are very poisonous—a type of poisoning not yet well understood. The toxin which they contain has been isolated but its cause has not been determined. It is known to be entirely independent of the spawning season of the mollusc, to have no relation to the flora and fauna on which they live and to be independent of conditions of pollution of the water in which they grow. It resembles in its action cyanide poisoning

and the Public Health Service combats it by testing specimens from the mussel beds continuously. Whenever toxic forms are found the beds are quarantined and kept so until the crustaceans are once more free from toxicity. One seldom thinks of potatoes as being poisonous and yet they are markedly so under certain conditions and outbreaks of potato poisoning are not uncommon. The potato is a solanaceous plant belonging to the same family as deadly nightshade, the source of belladonna. It contains in small amounts a poisonous alkaloid called solanin. This is normally present in such slight amounts as to be negligible but in potatoes that grow partly out of the ground or in ones that have begun to sprout it is greatly increased and may cause toxic symptoms. The alkaloid is unaffected by cooking. Poisoning occurs more frequently on shipboard or in locations where potatoes are not carefully pared. Care to pare deeply and remove all the eyes reduces the likelihood of poisoning. Death is rare yet the condition may cause extreme prostration. Rhubarb contains oxalic acid—one of the favorite homicidal drugs—and the leaves contain it in sufficient amounts to cause fatal poisoning. Cherry stones, peach kernels and bitter almonds, although not classed as foods, contain prussic acid in fairly large quantities and children have died from eating them.

So much for various common foods containing chemical poisons. But the ordinary acute gastro intestinal upset with definite evidence of intoxication following the ingestion of food is a very different affair and is of bacterial origin. Before we can go on and classify these conditions both chemically and etiologically, it is necessary to clear the decks of some very misleading nomenclature in order to avoid being led entirely astray. In 1850 an investigator named Selmi coined the word ptomaine and thus gave rise to a misconception regarding food poisoning which is not yet entirely wiped out. The conception at that time was that putrefying flesh gave rise to chemical substances which were poisonous. The word ptomaine means corpse and gives graphic illustration of the clinical results of food poisoning in those days. Later it was proven that decaying meat does give rise to various poisonous alkaloids and the ones isolated were called cadaverine, putrescine, etc.; names indicating graphically the state of decomposition of the food product from which they were isolated. But from proving the presence of such products to assuming their responsibility for food poisoning is quite a chasm and not so easily bridged. In the first place they do not start to form until putrefaction has been in progress for a week and

secondly they are then only very slightly toxic. Food then to contain ptomaines of any toxicity must be in a very advanced stage of disintegration. To quote Savage: "No one would be stupid enough to vend such food, no one would be rash enough to eat it." Ptomaine poisoning is a myth and the term a misnomer. It has done much to circumvent true progress for it has served as a cloak for professional ignorance and an excuse from active investigation of many outbreaks of food poisoning which have occurred.

These cases which we have in the past diagnosed as ptomaine poisoning were instead due to poisoning by the products of bacterial growth in contaminated food and the organisms responsible are in the order of their importance as follows:

- 1 Bacteria of the Salmonella or hog cholera group
- 2 Bacillus botulinus
- 3 Staphylococcus
- 4 Bacillus proteus

Up until recently the first group was considered to be responsible for all cases aside from true botulism but Robinson & Taylor have recently reported the development of a definite toxic substance in pork infected with Bacillus proteus (the hay bacillus) and Ilsey has reported an outbreak at Colgate University due to Bacillus proteus. L. O. Jordan on December 5, of last year reported six cases definitely proved to be due to Staphylococcus aureus and albus and believes that many of our cases in this country are of that origin. In some of these cases the symptoms were very violent and the prostration severe although no deaths were reported. They differ clinically from cases of the Salmonella group in that they develop within two to four hours after the ingestion of food instead of from six to twelve and in that the mortality is zero as compared with one to two percent.

The Salmonella, hog cholera or paratyphoid group of organisms, are the ones responsible for more outbreaks of food poisoning than any others. They are of the same family as the typhoid bacillus and occupy a position midway between it and the colon bacillus. The more important are Gartner's Bacillus (Bacillus enteritidis) the hog cholera bacillus (Bacillus supestrifer) and Bacillus terrestris. They live in the intestinal canals of animals as well as in the soil so that food infection may be due to fecal contamination, soil contamination or to the food itself being the flesh of an infected animal. Outbreaks have recently been proven to be due to duck eggs the duck being very lax in her selection of a place to lay, and the egg lying in moist manure

until well infected with Bacillus enteritidis. The symptoms are due not to ingestion of the organism into the body but to ingestion of a toxin which it produces while growing in the food. This toxin is not killed by heat and therefore once formed cannot be gotten rid of. The more food is handled and the longer it stands around after cooking the more chance is there for it to be contaminated and for the germs to grow. Meat and milk products are the most frequent offenders.

The symptoms are nausea, vomiting, abdominal pain and diarrhea coming on suddenly six to twelve hours after the ingestion of the food responsible. The degree of prostration is usually proportional to the severity of the diarrhea. In fulminating cases death may ensue within twenty-four hours, but as a rule the infection is not severe and recovery takes place in a day or two. The severe type may resemble cholera and was formerly called cholera morbus. Treatment is entirely symptomatic and consists chiefly of measures to promote vomiting and purging. Pain may be controlled by hot applications to the abdomen or morphine. There is no specific treatment.

Now, what foods should we suspect and guard against to prevent acquiring this infection? The infection usually takes place in the food itself before, during or after its preparation and through faulty handling or incomplete cooking or both the food becomes toxic. Frozen foods, cold storage foods, improperly handled meat, fish and shell fish are especially susceptible. Cream soups and cream sauces also especially when made in quantities and kept warm for some time are frequent offenders. Cream fillings and gelatine desserts furnish excellent media for the growth of germs. The advice of LaWall is good: "Don't fear sound fruits—fresh or canned. In a dirty place or where you suspect the sanitation of the kitchen, stick to roast beef, potatoes, bread and butter, fruit and coffee or tea, for these foods are the least hazardous. Shun cream soups and sauces, cream filled desserts and prepared foods containing gelatine, for these are splendid culture media for invading bacteria."

We have discussed the most common causes of food poisoning. There remains for discussion the most fatal type—botulism. Botulism has been known clinically by German physicians since 1735 but the organism responsible was not discovered until 1895. In that year Van Ermengen discovered it and named it the Bacillus botulinus from the Latin botulus for sausage. This was because at that time meat products alone were supposed to cause the disease. The Bacillus botulinus

is an obligate anaerobe, that is it grows, reproduces and forms its toxin only in the absence of oxygen. There is but one exception to this rule. When implanted in a medium together with certain other organisms such as *Staphylococcus* or *Bacillus subtilis* it will sometimes grow under aerobic conditions—a fact which probably explains its being occasionally found on the surface of some articles of food. The presence of oxygen in its environment, however, cannot be relied upon to kill the organism. Under such conditions it surrounds itself with a thick impermeable spore which protects it from damage and in which it remains protected until anaerobic conditions are again established. It is this spore form which permits it to survive the heat of ordinary canning processes. *Bacillus botulinus* lives in the soil and is widely distributed throughout the western United States, France, Germany and southern Italy. It has also been found in the intestinal tracts of animals—especially hogs—so that it may gain entrance to fruits and vegetables either by soil contamination or fecal contamination. So far as meat is concerned the bacterium may and often does grow in the tissues of the animal.

Now botulism is not caused by infection of the human body with *Bacillus botulinus* but is caused by poisoning of the human body with a very powerful toxin or poison which the *Bacillus botulinus* gives off in the course of its growth. This is a true exotoxin—that is it is given off by the bacterium without the necessity of destruction of the organism itself. Since the bacillus can grow only in the absence of oxygen and since it gives off its toxin only in the growing form (not in the spore form) it follows that the only foods which may contain botulinus poison are those from which oxygen has been excluded long enough to permit growth and elaboration of toxin—namely, canned foods—meats, fruits or vegetables. This toxin is so powerful that it is not necessary for one to swallow any of it to obtain a fatal dose. Even tasting food which contains it may prove fatal. Fortunately, however, the toxin is very thermolabile so that if the food is boiled for a short time it is destroyed and is absolutely harmless. Therefore although the spores resist boiling temperature for from five to six hours and are thus sometimes unharmed by the heat of canning, their product the toxin is readily rendered innocuous by heat.

The *Bacillus botulinus* is responsible, in addition to human botulism, for a disease called limberneck in fowls and forage poisoning in animals. The latter get it usually from silage.

Now from what canned foods are we likely to contract this disease? The number is almost legion. But there is always one prerequisite—faulty canning. The commercial canners now are well aware of the danger and autoclave their foods with steam under pressure—killing the spores. For that reason practically all outbreaks in the past ten years have been due to home canned foods. The cold pack method is especially pernicious. This is even more true in high altitudes where the boiling point is low. In the past thirty years there have been one hundred ninety-two outbreaks of which seventy-two percent have been due to plant products and eighteen percent due to canned meats. The *Bacillus botulinus* is readily killed by an acid medium and for that reason non-acid vegetables such as string beans are especially susceptible. String beans head the list not only for this reason but also because spoilage in beans is slight and difficult to detect and in addition because they are often used cold for salads and the odor is masked by mayonnaise. Corn is second probably for the same reason. Olives are third but most of the olive outbreaks were prior to the one reported at the beginning of this paper. Spinach stands fourth. If no home canned foods were eaten without heating it is probable botulism would be almost entirely unknown. In contrast to *Salmonella* poisoning where the character of the food is usually not changed at all—*botulinus* infected food usually shows definite though mild evidence of spoilage. The cans may bulge or contain gas and the food is usually somewhat soft and has a queer taste and odor. If no questionable can was ever even tasted the incidence again would be reduced. We can appreciate the wisdom of this when we reflect that so far as can be determined the death rate among those who have tasted *botulinus* infected food in the past thirty years runs between sixty and sixty-five percent.

The symptoms are most unusual. There are two clinical types depending on whether or not there is gastric disturbance. The toxin is, like that of diphtheria and tetanus, a true neuro toxin and achieves its effect by uniting with nerve tissue. In the approximately one-third of the cases therefore which have their onset with nausea, diarrhea and vomiting coming on early, lasting twelve to thirty-six hours and disappearing with the onset of the nervous symptoms, the gastroenteritis is apparently the result of local irritation from the ingestion of spoiled food. In the other two-thirds the nervous symptoms are the first to appear; usually eighteen to thirty-six hours after the food has been taken. The first symp-

toms may be an obstinate constipation although the earliest ones are often great lassitude and fatigue with sometimes dizziness and headache. Visual disturbances which are almost routine appear early. These consist of scintillation and dimness of vision with early involvement of the third nerve, ptosis, mydriasis, loss of light reflex and practically always diplopia. Loss of accommodation follows and nystagmus and vertigo are common. Soon the patient develops difficulty in swallowing and talking and a sense of constriction in the throat. The general muscular weakness is very striking as the patient is often unable to raise even his head or arms from the bed. As a rule they suffer no pain and mentality usually remains clear until shortly before death. A great apprehension of death is frequently a horrible part of the picture however. Inhibition of secretions comes on fairly early and the victims complain bitterly of intolerable dryness in the throat. There is no characteristic change in the blood pressure and the temperature is usually subnormal. This coupled with the very rapid pulse of the later stages presents a striking picture. The patient usually dies a respiratory death and the heart action often continues for several hours after respirations have ceased. Cases which recover have a long slow convalescence. The strangling and dysphagia disappear first and the muscular weakness and visual disturbances clear gradually over a period of months. Recovery when it occurs is complete and leaves no disability.

Treatment rests on early diagnosis and prompt action. The only treatment of the slightest avail is the early intravenous administration of anti toxin which in this community is obtained from the State Department of Health at Albany. As is true with

diphtheria and tetanus, anti toxin, if it is to be of any avail, must be given before the poison has sought out and united with the tissues of the central nervous system. After the nervous symptoms appear no treatment is of any avail.

Now what is to be learned from this rather gloomy picture? First there is increased care in our methods of home canning. All home canned foods should be absolutely sterilized. If this is impossible non-acid foods should be acidified with citric acid to a pH of 4.5 and heated to one hundred degrees for a short period afterwards or put up in a ten percent brine. Secondly, home canned products should never be eaten unless thoroughly heated after removal from the can. Thirdly, canned foods showing the slightest evidence of spoilage should be discarded without even tasting.

What may we as physicians do to aid in the solution of this problem? First we should discard the ancient and misleading diagnosis of ptomaine poisoning and make an honest effort for an accurate bacteriological diagnosis on every case of food poisoning seen. Much is still to be learned and when suspicion centers on some article of food, prompt sending of any of the food left over together with specimens of stool and urine from the patient to a reliable laboratory may lead to an accurate diagnosis. Cases are on record where spoiled beans have been fed to chickens and the whole flock promptly died. Intelligent investigation of such an occurrence leading to discovery of the food responsible and the destruction of any infected food remaining on the shelves may save lives.

We may never see a major botulinus outbreak. It is to be hoped we never do. But should we see one, lives will depend on our prompt recognition and action.

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For list of officers of County Medical Societies, see this issue, advertising page xxii.

Whenever a medical society or one of its committees discusses a new problem, questions of principles, standards, and policies arise. Physicians are bound by the *ancient landmarks* or established policies of their profession; but *modern progress* in science and sociology often compel radical changes in the older standards and the adoption of new methods.

Written principles and policies may be used for two purposes, diametrically opposed to each other:

1. A refuge from action.
2. An incentive to action.

The subject of medical publicity affords an illustration of the changed conditions of these modern days. It has always been a fundamental principle of the medical profession that a doctor shall not lend his support to any form of advertisement of himself. But during the last quarter of a century group action in medical and health affairs has developed along two lines.

1. Medical Societies have expressed the standards and policies of the medical profession in the practice of medicine and public health by individual doctors.

2. Governmental officials and lay health organizations have inspired the people with a civic consciousness regarding their duties in public health lines.

The medical society has become the *doctor*, and the municipality is the *patient* in everything pertaining to public health. It therefore follows that the medical society must instruct the people regarding public health affairs, just as a doctor in private practice must instruct his patient and family regarding the nature of the illness and the means of its cure and prevention. But when a doctor delivers a public health lecture or gives a radio talk, or writes a press release, he must "advertise" himself. Many doctors therefore are tempted to invoke the ban on self advertising as a refuge from taking part in popular medical education. But others invoke the equally ancient and binding principle that physicians shall use every possible means for curing

their patients and preventing disease, including public health education by individual doctors in the name of the medical society.

The principle is that, since the medical society is an impersonal body, it must assign one of its members to act for it in matters of publicity and education. While that doctor will necessarily receive public notice and "advertising," yet he also calls attention to all the other doctors, and their ideals and aspirations.

The principle of advertising the group, or medical society, instead of the person, or individual physician, applies equally well to the doctors' relations to governmental officials and leaders in lay health organizations. Doctors and medical societies are tempted to praise those persons who agree with them, and to condemn their opponents. Personalities, either of praise or of blame, lead to jealousies and factions which impede progress. For example, it is not usually wise for a medical society to publish an article praising an official by name, but the society can accomplish the same end by praising the work which has been accomplished and the agreements which have been evolved. The particular government official or board that did a piece of work stands in the same relation to the activity that the individual doctor stands to his medical work.

Physicians are opposed to *personal* publicity as strongly as ever, but they favor publicity regarding the activities of medical societies and of lay groups promoting public health.

LOOKING BACKWARD

This Journal Twenty-Five Years Ago

Eye-strain among school children The following editorial in this Journal of September, 1907, will apply to the year 1932 also.

"Cornell calls attention to the responsibility for these conditions (eye strain), and places it upon the medical profession, the teachers, and the parents. The former has not sufficiently sounded the alarm and insisted upon correction of eye defects. The teachers do not know about them. He says there is a certain amount of humor in the contemplation of a teacher, drilling into her class the baneful effects of alcohol on the 'lining of the stomach' and its production of 'hob nail liver' while she is unconscious of the squinting of the heavy eyed, round-shouldered child before her. Parents are often culpable in their indifference. Sometimes they say 'Kindly leave this matter to me, it is none of your business', or, after repeated advice to have the child provided with proper glasses, they announce that a break-

fast of toast and oatmeal is the best remedy for the headache. From 22 to 34 per cent have the necessary remedy applied to correct the visual defect.

'The effects of defective vision upon the general health has been studied and written upon by Gould to a degree never before attempted, and it is to him as much as to any single man that this crusade is due. The relation of poor vision to poor scholarship is shown by Cornell. He grouped the children whom he examined into three classes, and always found the highest percentage of good scholarship with the lowest percentage of poor vision, and in the classes with the lowest percentage of scholarship there was always the highest percentage visual defects.

"This subject is now receiving much attention at the hands of boards of health, boards of education, pedagogs and parents, but even yet not as much as its importance merits."



MEDICAL PROGRESS



A Century's Progress.—At the centenary meeting of the British Medical Association held in London in July, Lord Dawson of Penn delivered the President's address, entitled "One Hundred Years and After," in which he compared the condition of medicine and the sanitary problems existing in 1832 with those of the present year and noted the astonishing progress made in the closing decades of the nineteenth century and the first three of the present one. Before cataloguing these discoveries he commented upon the strange scepticism which has always retarded the acceptance of new truths. The discovery of the spirillum of relapsing fever in 1873 and that of the malarial parasite in 1880 were made many years before their significance was appreciated by the medical world. Again the history of anesthesia affords a striking example of how long truth may remain unheeded. The anesthetic properties of nitrous oxide, the speaker said, were discovered by Humphry Davy in 1800 and those of ether by Faraday in 1818, yet it was not until 1844 that surgical anesthesia was—not discovered but — accepted by the medical world. A generation of disciples bred in its methods was needed to bring Lister's teaching to fruition. The reaction at last to this discovery exemplified the other tendency of medicine to rush ahead once it has grasped the significance of any advance. Surgical craft bounded ahead with an exuberance which was at times forgetful of physiology and wider clinical considerations. Surgery's possibilities are not yet exhausted and it still has large fields in the domain of the thorax, the arteries, the nervous system, and the ductless glands. In the present century physics and chemistry linked with physiology have taken pride of place in their services to medical knowledge. Biochemistry gives us the means of quantitative assessment, and organic chemistry has given us the active principles of crude drugs and thereby aided us in therapeutic precision and has also given us various anodynes, sedatives, and hypnotics, as well as truly specific remedies and powerful antiseptics. Other discoveries of vast importance to medicine and the welfare of the human race are those of the ultraviolet rays (artificial sunlight), vitamins, hormones, the virus diseases, etc. The pathogens of this latter class of diseases, filtrable and invisible under the most powerful microscope, have now been photographed and measured by means of ultraviolet rays and the use of quartz instead of glass in our instruments. In concluding his address the speaker exclaimed on the greatness of the panorama which has presented itself during the life of the British Medical Association, and said that never before had there

been greater promise that the advancing front of knowledge would "make one music as before, but vaster."—*British Medical Journal*, July 30, 1932.

Cancerous Degeneration of Gastric Ulcers.—L. Bouchut and M. Levrat discuss this question in the *Journal de Médecine de Lyon*, August 5, 1932. It has been studied for a long period without any definite result, the reason for the divergence of views being the difficulty of diagnosis—whether it is a case of carcinomatous degeneration of an ulcer or one of cancer of slow evolution of ulcerative type. The arguments based on histology, gastric chemism, and symptomatology are, for the reason mentioned, of only relative value. The authors think that the criterion least subject to criticism exists in the duration of the evolution of the ulcerative syndrome. A cancer of ulcerative type reaches its term in five or six years at the maximum, whereas the carcinomatous ulcer progresses more slowly, and the authors believe that when the ulcer-cancer syndrome has lasted more than ten years the conclusion may be reached that the case is one of cancer grafted on an ulcer. From a study of 144 cases of cancer of the stomach and 106 cases of gastric ulcer the writers conclude that carcinomatous ulcer is quite rare while slowly progressive cancer of ulcerative type is relatively frequent. This is a matter, they hold, not simply of theoretical interest, but one that should be taken into consideration in weighing the indications for gastrectomy in a given case of ulcer of the stomach.

The Menace of Obesity.—Ernest Bulmer, writing on this subject in the *British Medical Journal* of June 4, 1932, says that body weight is an important factor in longevity, overweight after the age of 38 tending to shorten life. The weight after childhood represents the balance of two factors—the quantity of food ingested and the expenditure of energy in maintaining body heat and in glandular and muscular activity. The controlling mechanism is asserted by Grafe and Grünthal to be localized in the hypothalamic region. The obesity noted in persons who consume an inordinate amount of carbohydrates is assumed by Shui and Gordon to be due to hyperinsulinemia resulting from overstimulation of the pancreas by the starches and sugars. The increased mortality is due largely to diabetes associated with obesity, and also in some measure to the increased blood pressure which is found in the overfat. Degenerative diseases of the heart, arteries, kidneys, and liver which are

frequent in overweights terminate fatally between two and three times more often in the obese than in those of standard weight, and over three times more often than in those of underweight. Chronic cholecystitis and gallstones are also much more frequent in those of overweight. In the treatment of obesity the cooperation of the patient is absolutely essential. In the matter of diet the aim is to reduce the intake about 20 per cent below the needs of a person of the same age and of standard weight. Easily assimilable carbohydrates are replaced by bulky foods of low calory but high satiety value, the ideal being to use standard diets of 1,000 to 1,200 calories per diem. Increased exercise may be prescribed, but with caution. When the arteries are supple cold baths, which strongly stimulate metabolism, are advisable. Endocrine treatment may be resorted to when indicated. Thyroid may be tried in constitutional obesity, but it should not be forgotten that the main indication for this therapy is myxedema rather than obesity.

Phrenicectomy vs. Pneumothorax.—Weck and Bachmann, writing in the *Journal de Médecine de Lyon* of June 5, 1932, discuss the relative merits of these two measures in the so-called collapse therapy of pulmonary tuberculosis. The former has of late been gaining favor in the estimation of many phthisiologists but has not yet become the operation of choice. The authors think the operation has not had time to establish itself firmly as a legitimate therapeutic measure. It has the advantage of being performed once and for all and does not expose the patient to the dangers of repeated operations. The division or excision of a small section of the phrenic nerve is a comparatively simple operation and the patient is usually able to resume his former mode of life in the course of two or three months—a matter of considerable importance to a laborer or a farmer. Bernou of Leyzin, who is an enthusiastic partisan of this operation, has had favorable results in 80 per cent of his cases. The writers, however, are a little doubtful of the justifiability of phrenicectomy in cases in which the tuberculous process is extensive and progressive and not confined to one lung, for the danger of an aggravation of the lesions in the opposite lung, when both sides are affected, is very great.

The So-called Dry Bronchiectasis.—Bengt Ihre says that an abundant expectoration is usually, but he implies erroneously, regarded as a characteristic feature of bronchiectasis. This no doubt is the classical clinical picture,

but what makes it so is the *complicating* bronchitis, and if there is no inflammation of the bronchial mucous membrane with copious secretion there is no reason why bronchiectasis should give rise to any symptoms or be detected except at autopsy or in the roentgen picture of the thorax. Bezançon and Reinberg, indeed, maintain that dry bronchiectasis is the true uncomplicated condition, possibly later being complicated with a bronchitis with copious expectoration, assuming then the classical form. The author considers it a mistake to regard all cases of latent bronchiectasis as due to some congenital malformation or to pulmonary debility. In a few cases, of course, this might be true, but as a rule impossible to verify even patho-anatomically; in other cases, however, one may with a fair amount of probability connect their production and development with past affections of the lungs. The author reports three cases of dry bronchiectasis, in two of which there were evidences of tuberculosis.—*Acta Medica Scandinavica*, May 28, 1932.

Hemophilia: The Anaphylactic Treatment of Acute Emergencies by Passive Sensitization.—R. Cannon Eley reports a case which confirms the observations of Mills concerning the value of passive sensitization in the treatment of acute emergencies in patients suffering from hemophilia who have not previously been rendered sensitive to horse serum or to some other antigen. The patient, who gave a personal and family history of hemophilia, was admitted to the hospital in a critical condition as a result of continuous bleeding from an ulceration on the gingival mucosa. The extravasated blood had extended into the tissues of the face, neck and anterior chest wall, from the clavicles to the costal margin. The red blood cells numbered only 1,000,000 with hemoglobin 35 per cent. The intradermal injection of horse serum was not followed by wheal formation. A transfusion was then given, using a donor sensitive to horse serum. Within twenty minutes a typical wheal appeared at the site of the previously injected horse serum, and there was a coincident reduction in the coagulation time of the blood, from 3 hours and 30 minutes to 45 minutes, and at the end of 48 hours it had been further reduced to 12 minutes. It was necessary to repeat the injections at fourteen-day intervals in order to maintain the allergic state and the resultant reduction in the coagulation time. Six months after the patient's discharge he continued to be entirely free from hemorrhage, although he had sustained lacerations during the period.—*New England Journal of Medicine*, May 12, 1932, ccvi, 19.

Raynaud's Disease.—Sir Thomas Lewis, writing in the *British Medical Journal* of July 28, 1932, discards Raynaud's theory of a sympathetic nervous causation occurring through irritability of vasomotor centers, and advances his own theory that the local circulatory disturbance is due solely to the action of cold. In a typical case, he says, the events are as follows, the hands being at rest: The digital arteries already constricted in response to cold, become closed and the circulation in the fingers ceases. Cyanosis appears gradually and is usually but slight, the fingers being faintly violaceous. The arterial spasm continuing, the small vessels of the skin also close spasmodically and the fingers become completely blanched. This secondary spasm with its blanching of the skin, however, is not an integral part of the attack, but is a simple consequence of loss of circulation in the fingers. Another consequence of the loss of circulation is numbness. As the attack begins to subside the fingers acquire a deep violet tint, and when the blood again circulates freely there is a reactive hyperemia and the fingers become bright red in color and tingle. It is to be noted that in the attack the fingers show discoloration first of all in their tips, due to the fact that the digital arteries at first contract to obliteration near their termination, the obliterative spasm spreading gradually up the vessels of the fingers. When the attacks are very easily and frequently provoked, small areas of necrosis may appear at the finger tips. Raynaud's theory of the causation of these attacks, as above stated, was that the loss of circulation in the affected parts happened through sympathetic nervous influences and was due to irritability of the vasomotor centers. In opposition to this Lewis says that recent observations have shown that spasm of the vessels of the fingers in Raynaud's disease begins in the tips of the fingers and thence spreads to their bases and even to the hands. But when vasoconstriction is brought about through the sympathetic nervous system the vessels appear to contract simultaneously in all the territory involved, and there is no evidence of an orderly progression from the periphery to the center. Recent observations have shown that the vessels of the fingers in Raynaud's disease can be brought to a state of spasm by purely local cooling and that the digital arteries can be brought into complete spasm quite locally over any short stretch of their course through the fingers. The orderly manner in which the fingers are involved when the patient is exposed to a cold atmosphere is due merely to the fact that the fingers cool first at their tips and later at their bases. It is not abnormal, Lewis says,

for digital vessels to contract in response to exposure of the body to a cold atmosphere, but what is abnormal is that they should then close completely. The latter is probably due to a structural abnormality in the vessels, namely a thickening of the intima. Raynaud's disease is therefore a local disease of the arteries and is not caused by a disturbance of the vasomotor nervous system.

Certain Syndromes Associated with Arterial Hypertension.—Soma Weiss says that while the bearing of arterial hypertension on vascular disorders in general and on degenerative diseases of the brain, heart, and kidneys in particular has been sufficiently emphasized in recent years, it would seem to be in order to call attention to certain syndromes that occur frequently at a relatively early stage of hypertension. Among the early symptomatic manifestations of arterial hypertension the most frequent are those referable to the central nervous system. Among the symptoms directly referable to this system are headache, dizziness, nervousness, tinnitus aurium, insomnia, hot flashes, throbbing, and fainting spells, alone or in combination. It is probable that these phenomena are secondary to a relatively unstable vasomotor regulation of the cerebral circulation. Various vasomotor responses of the cerebral blood vessels, even in the presence of normal blood pressure, are great as compared with other vascular areas of the body and are of course accentuated in the presence of high blood pressure. Some patients with fluctuating blood pressure can estimate the height of their hypertension by the intensity of their symptoms, such as tinnitus. There is sometimes an alteration in the personal characteristics, but the role of the personality is more often a casual one, consisting in an overactivity, worry, a meticulous attention to details, etc. A comparatively infrequent but diagnostically very important syndrome is a cerebral vascular crisis. The onset is usually sudden, increasingly severe headache develops, often with confusion and drowsiness, and sometimes with impairment of vision, convulsions, or temporary palsy of the extremities. These manifestations may last for hours or days and in some cases probably cause death. There is a remarkable parallelism between this syndrome and the manifestations of brain tumor. When the question of diagnosis arises it may be remembered that the weight of probability is on the side of cerebral crisis when there are in the eyegrounds narrow arteries, tortuous small veins, hemorrhages, and white scars. Furthermore greatly elevated blood pressure, especially diastolic, seldom develops secondarily to brain tumor. Cerebral

hemorrhages in arterial hypertension are not infrequently preceded by certain symptoms. There may be a sudden change of personality with mental depression and a slowing down of motor and sensory functions. Some patients may even develop manic tendencies. Periodic severe headaches, often with radiation toward the occipital area may occur months before the onset of hemorrhage. Amnesia, disorientation, double vision or disturbed vision with lack of association and power of coordination in hypertensive subjects may presage a cerebral hemorrhage. Various other bizarre manifestations, be among the prodromal symptoms suggest, and increased tonus of the sympathetic nervous system with a decrease of that of the autonomic system. Severe epistaxis and pulmonary hemorrhage may occur as a result of arterial hypertension. Among the symptoms preceding circulatory failure in early hypertension is precordial pain, palpitation is frequently present without any evidence of myocardial failure, and also simple arrhythmia and premature atricular and ventricular contractions. Nocturnal nervousness and cough and paroxysmal dyspnea are also suggestive of hypertension. Spasmodic contraction of the arteries with symptoms recalling Raynaud's disease are sometimes present in addition to intermittent claudication. Finally patients with arterial hypertension quite frequently have hyperglycemia with or without glycosuria. Arteriosclerosis may develop secondarily to diabetes, but disturbances of the carbohydrate metabolism may also develop secondarily to arterial tension.—*The New England Journal of Medicine*, July 28, 1932

Abdominal Symptoms in Manifest Heart Disease—Emmet F. Horne and Morris M. Weiss recall the old clinical maxim "When the patient complains of his stomach, think of his heart," and add that the opposite is also to be admitted, both of them stressing the close relationship, anatomical and physiological, of these two organs. Their paper dwells upon certain special symptoms and problems which are encountered in manifest heart disease but which may primarily attract the attention of the gastroenterologist. The frequent coincidence of disease of the gall bladder and of the heart has attracted the attention of clinicians, but while the former may reflexly cause disturbance of the cardiac rhythm it cannot produce organic heart disease. Thrombosis of a branch of the right coronary artery may simulate very closely the so-called "acute abdomen." Jaundice occurs in cases of congestive

heart failure and is a frequent accompaniment of pulmonary infarction resulting from cardiac disease, but a satisfactory explanation for the pathogenesis of the jaundice in these cases is not yet forthcoming. Various disturbances of cardiac rhythm of neurogenic nature may result from gastroenteric disease. Finally dysphagia in patients with heart disease may result from compression of the esophagus due to various causes—aneurysm of the aorta, an enlarged left atrium, or congenital anomaly of the great vessels. The difficulty in swallowing resulting from pressure on the esophagus by the enlarged left auricle is often progressive when this enlargement occurs as a consequence of mitral stenosis.—*Southern Medical Journal*, July, 1932

The Glove Bath—Writing in the *British Medical Journal* of July 16, 1932, Matthew B. Ray describes a procedure which he has found very useful in the treatment of so called rheumatic troubles of the extremities. In the treatment of pain and stiffness associated with rheumatic and other conditions of the hands and feet, he says, the application of heat by means of hot air, vapor, paraffin wax, mud, electric radiation, or diathermy is usually adopted. As practically all these measures require some kind of special apparatus, which is not always available, he has found good results can be obtained by a simple and easily applied method which can be carried out wherever there is a supply of running hot water. The hands, enclosed in rubber gloves a few sizes too large, or the feet encased in rubber socks that reach half way up the calf, are immersed in hot water maintained at a temperature of from 105° to 110° F for twenty to thirty minutes every day or every other day. If desired an ointment of methyl salicylate, iodine, or menthol can be applied to the parts before putting on the gloves or socks. Owing to the retention of heat and the raising of the local internal temperature, it will be found that the hands and feet, on removing the coverings are bathed in a copious perspiration and are more supple. Massage can therefore be much more efficiently carried out as all muscular spasm is relieved. Among the many indications for the use of what the author calls the "glove bath" may be mentioned arthritic changes with stiffness, pain, swelling, or deformity in the wrists, ankles, hands, or feet, sprains and strains of the ankles or wrists, stiffness following old injuries, fibrositis of the palm or plantar fascia, in the manipulative treatment of flat foot where muscular relaxation is required, or in any condition in which pain and stiffness are prominent symptoms.



LEGAL



MALPRACTICE—LEGAL STANDARD IN CIVIL ACTION AGAINST UNLAWFUL PRACTITIONERS

By LORENZ J. BROSNAN, ESQ.

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A situation that is of interest to every physician is that which arises when a person not legally qualified or authorized to practice medicine is sued for malpractice. The situation may arise in the case of the magical healer or equally in the case of the chiropractor. Quite apart from the question of the criminal offense of practicing medicine illegally, the problem for the courts is by what standard shall such person be judged in a civil damage action based upon a claim of malpractice. An analysis of a few of the principal cases will show that a fair rule of law has been laid down by the courts.

In a nearby State, which like New York does not sanction the practice of chiropractic, an action was brought against a man who had been engaged in the practice for several years. The plaintiff, a married woman, had consulted him with regard to complaints of soreness of the neck and back, dizziness, numbness, noises in the head and other vague complaints. The defendant made what he called a chiropractic examination of the patient, consisting of taking the case history, palpation and the finding of the vertebra from the back of the skull to the diaphragm, along the spine. He then purported to explain to her the relation of the spine to the brain, and the various requisites of his proposed "treatment." She consented to his conditions and the chiropractor undertook to treat her. The particular "treatment" or "adjustment" involved in the case was described as follows: "By his direction she knelt on a pillow with her chest against another pillow on a chair and her head sideways, 'that position rendering the spine in a horizontal position.' Then the defendant 'took his right hand over his left and held it an inch or two above her neck, and came right down on her neck with all the heft he could put on it.'"

The defendant told her that if she did not feel better the next day she should go to a doctor, for if she did not improve, chiropractic treatment could not help her. She did very shortly consult a regularly licensed doctor and x-rays taken revealed a fracture of the transverse process of the second cervical vertebra of the right side. A plaster cast was applied to her neck and her injuries thereafter were given proper treatment by a qualified physician.

In the action which she brought against the chiropractor, the patient made the claim in her

complaint that he had held himself out as competent to treat her as a physician, but that he had treated her in so unskillful and careless a manner that she had suffered severe pain and injuries.

On the trial of the case the defendant sought to introduce evidence that he had possessed and exercised in his treatment the usual degree of care, learning and skill ordinarily used by the chiropractors in that community. The judge ruled that the said testimony was inadmissible, and in charging the jury stated in part: "That if this defendant was unlicensed to practice medicine . . . he cannot escape responsibility for any negligence such as I will describe in a few minutes by showing that he called himself a chiropractor rather than a physician, by showing that his system of treatment had a distinctive name—chiropractic—or by showing that he and the patient entered into a contract for the use and receipt of this particular system of treatment. That is, if he undertakes to practice medicine, and he does so contrary to the law, he cannot escape civil responsibility for negligence, such negligence as a physician would be held for, by pleading either that he was not a physician or that he made a contract to treat the patient according to a distinctive system not recognized by the profession of medicine. . . . So when this defendant undertook to apply medical treatment, if he did undertake to apply medical treatment, there was an implied undertaking on his part that he had, and would bring to the performance of his undertaking, not only due care and skill, but that degree of skill and capacity ordinarily possessed by the duly licensed and competent physician of average skill and ability in his locality. That is, the degree of care and skill required of him is not to be ascertained and determined by ascertaining what degree of care and skill a chiropractor might exercise. He is held up, as I construe the law, as I instruct you, to the degree of skill and ability which the physician or ordinary ability and the physician of ordinary experience possessed in his locality."

The jury brought in a verdict for the plaintiff and an appeal was taken. The appellate court approved the instructions which the trial judge had given, as above quoted. The appellate court made clear its attitude toward chiropractic treatment, stating:

defendant in his treatment of the ailment plaintiff was exercising his calling as a doctor in a matter within the field of medical surgery, and while so acting was not any of the exempted schools, classes, or situations enumerated and described in § 76 (the statute in point). His acts therefore were unlawful, as would be like acts of any other members of the school of medicine or chiropractic.

The unlawful acts of the defendant did not become lawful as between Mrs. W. and himself without her assent to the exercise of such acts on her behalf, or by reason of the alleged fact that a school of medicine justified them by its customs and principles of practice. The understanding of a physician is that he will treat his patient, if he may lawfully do so, according to the system or school which he professes or follows, and that he will use due care and skill according to the practice of that system or school of medicine in the community where he practices his profession. The purpose of the Legislature in enacting the statute before us was not to provide a penalty for its violation but to protect the public from ignorant and incompetent practitioners. The statute therefore should be construed as intended to afford relief by awarding damages to all persons suffering harm from the violation of the statute is the proximate cause of their injuries."

This case is similar to one that was decided in the northwestern States nearly half a century ago. In that case a fifteen year-old boy was diseased with some disease of the hip, and his mother took him to a so called clairvoyant "physician." The said "physician" undertook to diagnose the condition by going into a sort of trance, while in that state to give his diagnosis and prescribe for the ailment so disclosed. He made a physical examination of the patient and obtained no history of the case. The result was that the clairvoyant diagnosed as rheumatism a case of a disease of the hip joint.

The case was brought to recover for malpractice, and the defendant claimed that he was entitled to be judged by the ordinary skill and knowledge of a clairvoyant system. The appellate court, however, decided that he was to be judged according to the ordinary skill and knowledge of physicians in good standing practicing in that community.

In another similar case that arose recently involving a Chinese herb doctor who carried the following advertisement in a newspaper "Dr.

Professional services to the public, and a guarantee of a sure cure for all kinds of diseases, including chronic cases of long standing. No. 10 Main St., Phone 5152."

The patient, who had for many years been suffering from chronic pulmonary tuberculosis, consulted the man. The patient was given a super-

herb examination, the "doctor" looking at his tongue and feeling his pulse, and was asked a few questions. No examination of the lungs was made, and no test of sputum or urine was taken, but the "doctor" promptly advised the patient that the disease was not tuberculosis but a disease of the kidneys. He claimed he could cure the condition, and dosed the patient with herbs from China, forbade the use of eggs, chicken and milk as food, and also ruled out the drinking of cold water. The patient adhered to the treatment for seven months, by which time he had lost twenty-five pounds in weight, his cough had become much worse and his general condition had become frightfully weakened. He then returned to the care of recognized physicians, under whose treatment he partly regained his health.

The patient sued the Chinese doctor for damages in a malpractice action. The defense was set up that the treatment was in accordance with the teachings of the "generation" school of teaching, which the defendant had studied for long periods in China. On the trial he testified as to his experience in treating tuberculosis, but the testimony revealed that he was profoundly ignorant of fundamental matters of medicine and anatomy. The court concluded that he was simply a charlatan, without skill or scientific knowledge, who made it his business to practice upon the ignorant and the unwary for gain. The court refused to countenance his claim that his treatment was proper under the standards of his school of medical learning, and ruled that his liability for damages depended on whether or not he had exercised the care of physicians and surgeons in good standing in the community.

In those States, of course, where chiropractors and others are licensed who practice branches of medicine not recognized in New York State, the result is different. The highest court of one of the Pacific coast States, which legalizes the practice of chiropractic, recently in a malpractice action in which the liability of the defendant was determined, used as a criterion not what competent physicians and surgeons declared to be proper practice, but what chiropractors declared to be their standard of proper practice. The court based its decision in that case on their testimony as to the manner of properly applying pressure to the patient's side and hip "to relieve pressure upon the patient's sciatic nerves at the points of their departure from the spinal column."

The characteristic impertinence and impudence of the quack and the cultist is demonstrated in these cases. Deliberately defying the law they seek to invoke in the civil actions brought against them for malpractice, the standards of their cult. These standards are not only illegal, but also a menace to the public health. Fortunately, the courts have rejected their cowardly plea in this respect, and have justly held them responsible for their unlawful and negligent acts.

CLAIMED NEGLIGENCE BY FAMILY DOCTOR IN TREATING CHILDREN OF DEFENDANT

In this case a physician, at the request of the defendant, called at his home and found his twenty-year-old daughter suffering from scalp burns. The doctor removed the tissue and burned hair with scissors and forceps, and cutting away the good hair for an inch outside the burns, applied a boric acid dressing. This treatment was continued over a period of approximately one month and the patient subsequently discharged by the doctor. When the doctor discharged the patient he warned her, however, not to wash her hair without coming back and consulting him, but the patient disregarding his admonition went to her hairdresser and had her hair washed. After her hair had been washed she returned to the doctor, and he found she had an acute suppurative infection of the burned area, which the doctor treated by opening and draining a number of pus pockets and putting on dressings. Erysipelas subsequently developed, for which the doctor gave erysipelas vaccine and put the patient in a hospital where the patient remained until her scalp had healed.

Shortly thereafter the doctor was again called to the home of the defendant, this time to treat the defendant's son who was suffering from a fractured shoulder bone. The doctor reduced the fracture and put on a Velpeau's splint. He continued to treat the son until the fracture was healed and the boy had full use of his arm.

Sometime after the doctor had completed his treatment, he rendered a bill for services. Upon the failure of the defendant to pay this bill, the doctor directed his attorney to bring legal proceedings for the collection of his bill. The answer which was interposed on behalf of the defendant contained a counterclaim alleging malpractice in the doctor's treatment. On the day when the case appeared on the calendar for trial, however, the defendant's attorney evidently realizing the justness of the doctor's claim for the services he had rendered to the family, consented to withdraw the counterclaim and permitted judgment to be entered in favor of the doctor for the full amount of his bill, thus concluding the case.

ALLEGED FAILURE TO TREAT CHILD'S INJURY PROPERLY

In this case the superintendent of a school called the defendant doctor on the telephone and stated to him that a thirteen-year-old girl student had a sore leg which was apparently neglected, asking the doctor if he would apply a dressing to the child's leg if he sent her to the doctor's office. The superintendent further stated that he would see to it that the father of the child furnish any subsequent treatment which would be necessary.

The child came to the doctor's office and an examination of the leg revealed that it was caked with dried blood and that there was a cut approximately $1\frac{1}{2}$ inches long, just below the knee on the anterior portion of the leg, from which pus was oozing. The girl told the doctor that she had hurt her leg while climbing over a barbed wire fence. While the leg was red, swollen and inflamed, the swelling and inflammation were localized.

The doctor attempted to treat the wound by washing it, but the child complained that it hurt and would not permit him to do anything. He

therefore, covered the wound with a sterile gauze dressing and sent the girl back to the school, at the same time calling up the superintendent and telling him that it was his belief that the child needed medical attention.

This was the only time that the defendant saw the child. Subsequently she was taken to a hospital and a short time thereafter died of tetanus. The parents of the child shortly thereafter instituted legal proceedings against the doctor, in which they claimed that the defendant carelessly and unskillfully treated the injuries of the deceased girl, and that such negligent and careless treatment resulted in a condition which caused her death. The case duly came on for trial, and at the close of the plaintiffs' case a motion was made by counsel representing the doctor to dismiss the case on the ground that plaintiffs had failed to establish the cause of action set forth in the complaint or any other cause of action. This motion was granted by the trial judge, thus terminating the case in favor of the defendant physician.



THE DAILY PRESS



Mr. and Mrs.—



Joe's Nerve Fails Him



From New York Herald Tribune July 21 1932

STRENGTH OF HUMAN HAIR

The New York Sun of September first contains a news item regarding the experiments by Clement R. Brown of the Bureau of Standards, Washington, D. C., undertaken at the request of the American Hair Dressers' Association in order to introduce scientific methods of caring for the hair. The article says:

"Brown found that a single hair will support a weight of approximately a quarter of a pound before breaking. It has a cross section diameter of about nine millionths of an inch.

"Light brown hair tended to be the finest and to have a tensile strength of 33,550 pounds a square inch. Medium brown was recorded considerably thicker and weaker. Dark brown approached the fineness and strength of the light brown.

"An auburn hair was found thicker than a brown one and very much weaker. Blonde hair was somewhat finer and stronger, and red hair tended to be much thicker and a trifle less strong. But there was an entirely different story when it came to determining the point where hair began to stretch. Red hair would not yield until a pull had been applied which was about 53 per cent of the amount required to break it. The strong light brown hair stretched with a pull of only 46 per cent of its holding capacity.

"Gray hair with tensile strength of only about 26,150 pounds a square inch was found weakest.

"Various methods were used to determine the effect of heat on the strength of human hair. One type of test showed that the hair began to lose strength slowly after being subjected to heat of about 212 degrees Fahrenheit up to 392 degrees, after which the loss became much more rapid.

"A woman's hair, Brown concludes, can stand heating up to between 200 and 300 degrees Fahrenheit without appreciably losing strength, but beyond that it becomes progressively weaker with increasing heat until at about 446 degrees the hair loses all its strength.

"Another kind of test showed very little loss of strength up to 320 degrees, after which there was a very rapid decrease, the strength approaching zero at 446 degrees Fahrenheit.

"The result of the experiments, Brown says, disclosed that curling irons heated to about 302 degrees produce a satisfactory curling effect without materially lessening or changing the color of the hair. Even heat as high as 356 degrees, he believes, can be applied for short periods without causing perceptible injury, if the work is done by skilled operators."

MACHINES AND HEALTH

The New York Times of August 31 has the following editorial on the effect of machines on employment and health:

"In the New York cloak and suit industry it has just been settled by agreement that employers who make use of electrically operated pressing machines shall pay \$8 weekly for every machine into a fund for the relief of unemployed

pressers. This reads very like the ancient law of deodand by which any inanimate object which has been accidentally the cause of a man's death is forfeited to the crown for pious uses. A wagon that killed a man was confiscated and sold and the proceeds were distributed in alms. The electric ironing machine which has presumably thrown several human persons out of work

would thus seem to be compelled to make restitution. This incident in the New York clothing trade is sure to become a popular item in the indictment against the Machine. It would so well show the essential nature of the Machine as a menace to human values and human welfare.

"There is another side. In the same agreement that assessed the sum of \$8 a week against the Machine its operators were granted a raise of \$12 a week. If the Machine is deodand in depriving some workers of their livelihood, it gives a better livelihood to other workers. Do the victims exceed the beneficiaries? That is the contention in the usual plaint about "Technological Unemployment." The Machine works for increased idleness. Yet it has been repeatedly shown that over a long period the Machine does not destroy employment, but creates it.

"In this economic storm that we are now living through, many discern the break-down of our Machine Civilization. But that is to see only the short-time evil and forget the long-time good.

We see the millions of unemployed and forget the hundreds of millions to whom the Machine has given employment. We see the privation of the moment and forget the steady betterment through the years. Why, after three years of severe unemployment, do the health figures everywhere in the industrial countries show no decline? Why, in the face of such vast unemployment, do these countries exhibit a freedom from serious social unrest that is nothing short of extraordinary? The level of existence for the working masses has been so greatly raised by the Machine that they are able to bear up, body and mind, even under today's distresses. The current death-rate for children in New York is the lowest on record after three years of depression, because through preceding years our Machine Civilization had provided increasingly better food, housing, care and recreation for the children of the masses. The lowest infant death-rate in New York City is in Brownsville, Brooklyn, where many clothes pressers live."

A HALF CENTURY OF PRACTICE

The County Medical Societies of New York State often celebrate the completion of fifty years of practice by their members; but Dr. S. T. Shelly, of Mulvane, a village of a thousand people in Sumner County, Kansas, has achieved entrance into the editorial page of the New York *Herald Tribune* of August 27 because of his originality in holding a reunion of all the babies that he had ushered into the world, as is told in the following editorial:

"Congress would not go far wrong if it voted a special medal to Dr. S. T. Shelly, of Mulvane, Kan. Dr. Shelly is one of an almost extinct, though admirable, species, the country doctor of the '80s and '90s. Not content to retire at the age of seventy-six without something to crown an active career, Dr. Shelly invited the forty-five hundred-odd "babies" he had brought into the world to a get-together reception in Mulvane. A thousand responded, one all the way from Florida.

"The country doctor served the nation. And what an admirable figure he was! His life was dedicated to humanity in rain or snow, sleet or hail, often over almost impassable country roads

in buggy or sleigh or on horseback to win through and save life or usher it into the world. Often he performed emergency operations on some farmer's kitchen table, lacking a better anesthetist than an unskilled member of the victim's family. Known always as "Doc," he pulled teeth and mixed his own medicines. His tonics and purges were dispensed at inclusive rates from bottles on shelves in his office. Prescriptions were for city doctors. His black medicine case went with him everywhere, and with its contents he threw in a bedside philosophy which made him a family friend and counselor. And rarely did he pass from their life with more than half of his fees collected.

"The old general practitioner of the countryside is almost gone today, and with him the yeoman farmer and folk he lived to save. The nation has changed. The automobile, the cement road, the hospital within easy reach, by their use have done their work.

"Dr. Shelly, of Mulvane, Kan., probably knew this when he invited his wards back from whence they had flown in a modern age of travel. All honor to the passing clan—the country doctor."



BOOKS RECEIVED



Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits, or in the interests of our readers.

THE EXPECTANT MOTHER'S HANDBOOK. By **FREDERICK C. IRVING, M.D.** 16mo of 199 pages, illustrated. New York, Houghton Mifflin Co., 1932. Cloth, \$1.75.

PAIN IN THE PLEURA PERICARDIUM AND PERITONEUM. A Clinical Study. By **JOSEPH A. CAPPS, M.D.** Octavo of 99 pages, illustrated. New York, The Macmillan Company, 1932. Cloth, \$3.00.

REFLEX ACTIVITY OF THE SPINAL CORD. By **R. S. CREED, D. DENNY-BROWN, J. C. ECCLES, E. G. T. LIDDELL and C. S. SHERRINGTON.** Octavo of 183 pages, illustrated. New York, Oxford University Press, 1932. Cloth, \$3.50.

PRINCIPLES OF PREOPERATIVE AND POSTOPERATIVE TREATMENT. By **REGINALD ALEX CUTTING, M.D., C.M., M.A., Ph.D.** Quarto of 812 pages, illustrated. New York, Paul B. Hoeber, Inc., 1932. Cloth, \$10.00. (Hoeber's Surgical Monographs.)

RECENT ADVANCES IN PATHOLOGY. By **GEOFFREY HADFIELD, M.D., F.R.C.P., and LAWRENCE P. GARROD, M.A., M.B., B.Ch., M.R.C.P.** Octavo of 390 pages, illustrated. Philadelphia, P. Blakiston's Son & Company, 1932. Cloth, \$3.50.

MEDICINE AND THE STATE. By **SIR ARTHUR NEWSHOLME, K.C.B., M.D., F.R.C.P.** Octavo of 295 pages. Baltimore, Williams & Wilkins Company, 1932. Cloth, \$3.50.

MANUAL OF CLINICAL AND LABORATORY TECHNIC. By **HIRAM B. WEISS, A.B., M.D., F.A.C.P., and RAPHAEL ISAACS, A.M., M.D., F.A.C.P.** Fourth edition. 12mo of 117 pages, illustrated. Philadelphia, W. B. Saunders Company, 1932. Cloth, \$1.50.

MINOR SURGERY OF THE URINARY TRACT. By **HERMAN C. BUMPUS, JR., Ph.B., M.D., M.S. in Urology, F.A.C.S.** Octavo of 124 pages, illustrated. Philadelphia, W. B. Saunders Company, 1932. Cloth, \$3.00.

THE SURGICAL CLINICS OF NORTH AMERICA. Vol. 12, No. 3. (Lahey Clinic Number.) Published every other month by W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues): cloth, \$16.00, paper, \$12.00.

MATERIA MEDICA PHARMACOLOGY THERAPEUTICS AND PRESCRIPTION WRITING. By **WALTER A. BASTDO, Ph.G., M.D., Sc.D., F.A.C.P.** Third edition. Octavo of 739 pages, illustrated. Philadelphia, W. B. Saunders Company, 1932. Cloth, \$6.50.

A MANUAL OF PHARMACOLOGY. By **TORALD SOLLMANN, M.D.** Fourth edition. Octavo of 1237 pages. Philadelphia, W. B. Saunders Company, 1932. Cloth, \$7.50.

ELECTROSURGERY. By **HOWARD A. KELLY, M.D., LL.D., and GRANT E. WARD, M.D.** Quarto of 305 pages, illustrated. Philadelphia, W. B. Saunders Company, 1932. Cloth, \$7.00.

COLLECTED PAPERS OF THE MAYO CLINIC AND THE MAYO FOUNDATION. Vol. 23, 1931. Edited by **MRS. MAUD H. MCLLISH-WILSON and RICHARD M. HEWITT, M.D.** Octavo of 1,231 pages, illustrated. Philadelphia, W. B. Saunders Company, 1932. Cloth, \$13.00.

THE CHEMISTRY OF TUBERCULOSIS. By **H. GIDEON WELLS, M.D., Ph.D., and ESMOND R. LONG, M.D., Ph.D.** Second edition, revised. Octavo of 481 pages, illustrated. Baltimore, Williams & Wilkins Company, 1932. Cloth, \$7.00.

QUANTITATIVE CLINICAL CHEMISTRY. By **JOHN P. PETERS, M.D., M.A., and DONALD D. VAN SLYKE, Ph.D., Sc.D.** Vol. 2, Methods. Octavo of 957 pages, illustrated. Baltimore, Williams & Wilkins Company, 1932. Cloth, \$10.00.

ACCIDENTS, NEUROSES AND COMPENSATION. By **JAMES H. HUDDLESON, M.D.** Octavo of 256 pages. Baltimore, The Williams & Wilkins Company, 1932. Cloth, \$4.00.

MEDICAL CLINICS OF NORTH AMERICA. Vol. 16, No. 1, July, 1932. (Philadelphia Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues): cloth, \$16.00 net, paper, \$12.00 net.

THE SIGN OF BABINSKI. A Study of the Evolution of Cortical Dominance in Primates. By **JOHN F. FULTON and ALLEN D. KELLER.** Quarto of 165 pages, illustrated. Springfield, Ill., Charles C. Thomas, 1932. Cloth, \$5.00.

THE HEART RATE. By **ERNST P. BOAS, M.D., and ERNST F. GOLDSCHMIDT, Ph.D.** Octavo of 166 pages, illustrated. Springfield, Ill., Charles C. Thomas, 1932. Cloth, \$3.50.

THE ANATOMY OF THE HUMAN ORBIT. By **S. ERNEST WHITNALL, M.D.** 2nd edition. Octavo of 467 pages, illustrated. New York, Oxford University Press, 1932. Cloth, \$6.25.

INDIVIDUALITY OF THE BLOOD in Biology and in Clinical and Forensic Medicine. By **LEONE LATTES.** Octavo of 413 pages, illustrated. New York, Oxford University Press, 1932. Cloth, \$7.50.

THE USE OF LIPIODOL IN DIAGNOSIS AND TREATMENT. By **J. A. SICARD and J. FORESTIER.** Octavo of 235 pages, illustrated. New York, Oxford University Press, 1932. Cloth, \$4.00.

THE INTERNATIONAL MEDICAL ANNUAL. A Year Book of Treatment and Practitioner's Index. Fiftieth Year, 1932. Edited by **CAREY F. COOMBS, M.D., and A. RENDELLE SHORT, M.D.** Octavo of 658 pages, illustrated. New York, William Wood & Company, 1932. Cloth, \$6.00.

YOUR TEETH AND THEIR CARE. By **CARL W. ADAMS, D.D.S.** 12mo of 141 pages, illustrated. St. Louis, Mo., C. V. Mosby Company, 1932. Cloth, \$1.25.

AN INTRODUCTION TO DERMATOLOGY. By **RICHARD L. SUTTON, M.D., and RICHARD L. SUTTON, JR., M.D.** Octavo of 565 pages, illustrated. St. Louis, Mo., C. V. Mosby Company, 1932. Cloth, \$5.00.

PRINCIPLES OF CHEMISTRY. By **JOSEPH H. ROE, Ph.D.** 3rd edition. 12mo of 486 pages, illustrated. St. Louis, Mo., C. V. Mosby Company, 1932. Cloth, \$2.50.



BOOK REVIEWS



A SURVEY OF THE MEDICAL FACILITIES OF SAN JOAQUIN COUNTY, CALIFORNIA, 1929. By NATHAN SINAI, D.P.H. Octavo of 214 pages. Chicago, The University of Chicago Press, [c.1931]. Paper, \$1.00. (Publications of the Committee on the Costs of Medical Care: No. 12.)

This is another in the series of medical surveys of various selected areas by the Committee on the Costs of Medical Care.

One finds a description of the location, topography and climate of San Joaquin and a general survey of its medical, hospital, nursing, dental and pharmaceutical facilities. One chapter is devoted to "other practitioners."

In the second part of this book appears a description of three special medical facilities;—first, the tax-supported hospitals, then an extended chapter on the San Joaquin local health district, with the history of its development and tabulations of vital statistics which have been matured under the system.

Finally, a chapter is focused on the new country doctor, which is somewhat more frank in its imaginative fiction than any other part of the book.

F. E. ELLIOTT.

RESISTANCE TO INFECTIOUS DISEASES. An exposition of the biological phenomena underlying the occurrence of infection and the recovery of the animal body from infectious disease, with a consideration of the principles underlying specific diagnosis and therapeutic measures. By HANS ZINSSER, M.D. Fourth edition. Octavo of 651 pages, illustrated. New York, The Macmillan Company, 1931. Cloth, \$7.00.

This work is the outstanding monograph on the subject and with the re-writing of the chapters on phases materially affected by recent researches has been brought up to date. There are additions to the older material of value both to the worker in special branches of the fundamental medical sciences and to the practitioner of medicine.

The value of this work as an educational influence for the practicing physician cannot be over-estimated since it provides the résumé and explanation of infection and resistance to disease on the basis of the closest approach to physico-chemical phenomena. The analysis and personal experience of the author go far to make the cyto-humoral theory of the modern concept of infection and resistance an understandable theme.

As in any other work dealing with the subject there is still the deplorable necessity of employing terminology of ambiguous or controversial character. The statement which Bayliss, the physiologist, made some years ago in reference to immunology still holds good. Until immunology has achieved the same exact basis that physiological chemistry has attained today, the concepts of the science must be couched in defined terms which render discussion of immunological subjects an involved metaphysical exercise. The author has done much to provide an understandable and practical basis for the discussion of the phenomena of resistance and infection.

The book as presented by the publishers is well-made and attractively printed.

EMIL F. KOCH.

MEDICAL CLINICS OF NORTH AMERICA. Vol. 15, No. 1, July, 1931. (Mayo Clinic Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues): Cloth, \$16.00 net; paper, \$12.00 net.

That diet plays a decisive part in maintaining health

or in causing disease is well recognized. Certain academic phases of this problem are reviewed in this issue.

Colonic irrigation of ether in an intractable asthmatic attack where other agents had failed is recommended as a reliable means of therapy.

It is not generally recognized that what we regard as an ordinary varicose ulcer of the leg may on further investigation prove to be an arteriovenous fistula. By drawing off some blood from a superficial vein from the affected area we find its oxygen volume content to be much greater than from the vein of a normal area.

It is suggested to short-circuit the ileocecal sphincter in cases which on several examinations show roentgenologic evidences of definite ileal stasis.

EMANUEL KRIMSKY.

MEDICAL CLINICS OF NORTH AMERICA. Vol. 15, No. 2, September, 1931. (Philadelphia Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues): Cloth, \$16.00 net; paper, \$12.00 net.

Oxygen therapy seems to hold sway at the present time as a valuable adjunct in the treatment of pneumonia and other respiratory disorders. One of the contributors has made a study of this problem and finds that "oxygen is of value in pneumonia in so far as it alleviates the attending anoxemia. There seems to be no evidence that it hastens the occurrence of the crisis or shortens the course of the disease" or that the mortality rate is benefited in any way.

One writer has written a painstaking report to show that the injections of small doses of the products of streptococci are very helpful in cases of chronic atrophic and chronic hypertrophic arthritis. Too many diversified remedies have been offered for this discouraging ailment to accept such a report on its face value. Confirmation by other observers will be necessary.

Trichiniasis is an uncommonly diagnosed disease, but certain facts about hogs are here summarized and are worthy of the physician's attention.

In order to definitely establish whether a case is one of Thrombo-angitis Obliterans we find such tests as the histamine, oscillometric, thermocouple, and vasomotor index being used both for diagnosis and as a guide to prognosis. Case reports serve to illustrate the importance of these newer means of examination.

EMANUEL KRIMSKY.

MEDICAL CLINICS OF NORTH AMERICA. Vol. 15, No. 3, November, 1931. (Chicago Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues): Cloth, \$16.00 net; paper, \$12.00 net.

A group of splendid case reports and accompanying comments on a number of different conditions. Myelogenous leukemia is amply described and demonstrated. Cutaneous manifestations of acquired syphilis are shown by twenty-five splendid clinical photographs. Doctor Abt shows a few cases of fetal peritonitis. Banti's syndrome is well reviewed and several cases are demonstrated. There are also papers on cardiac lues, gall bladder disease, gastric carcinoma, juvenile hypertension, heart disease and pulmonary pathology, anemia from intestinal flagellates and polyarthritis complicating tonsillitis due to hemolytic streptococcus. The whole volume contains cases one sees more or less frequently and they are written in a very instructive manner.

KENNETH MACINNES.

MEDICAL CLINICS OF NORTH AMERICA. Vol. 15, No. 4, January, 1932. (Boston Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues): Cloth, \$16.00 net; paper, \$12.00 net.

This number of the Medical Clinics discusses certain phases of everyday practice that should be of interest to every practitioner. Whether we will choose to agree with everything that is said is another matter. We have in recent months been hearing about unfavorable results of indiscriminate tonsillectomy and are again requested to listen to a few more warmly-expressed opinions as to its benefits—"Tonsillectomy has proved an efficient means of stopping an attack of acute rheumatism where the usual purely medical measures have failed. The operation even in the presence of temperature and inflamed joints is not more dangerous than interval tonsillectomy." Such bold remarks will win friends, and possibly enemies too.

There is a chapter on the ravages of chronic arthritis with a consideration of its contributing causes. Possibly a chapter on the incidence of chronic arthritis in persons who have no discernible contributing factors might also be of interest. The comparative evaluation of X-Ray, iodine, and operation in the treatment of Graves' disease is well discussed. The part that rest alone plays in the course of that disease is, however, omitted. Diabetes insipidus is well discussed, and its intranasal therapy is encouragingly brought to the reader's attention with some explicit advice that should be filed away. Then there is a simple regimen for the treatment of non-diabetic malnutrition in adults by means of insulin.

EMANUEL KRIMSKY.

MEDICAL CLINICS OF NORTH AMERICA. Vol. 15, No. 5, March, 1932. (New York Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues): Cloth, \$16.00 net; paper, \$12.00 net.

In this issue the article by Dr. Mosenthal should be especially significant to the practitioner because of a radical departure in the routine method of treating chronic nephritis. "The rule that all patients suffering with chronic Bright's disease should have a low protein salt-free diet, should retire from active life, and preferably live in a warm climate is now believed to be a treatment that is not only inadequate to improve or check a diseased process of the kidney, increased blood pressure, secondary anemia, and certain forms of edema, but has on closer investigation been found to augment rather than to ameliorate these abnormal tendencies." If such a well-established procedure is, as Dr. Mosenthal now feels, detrimental it is quite unfortunate that such dangers were not recognized sooner. Let us hope that the newer method of treating chronic nephritis, formerly looked upon as dangerous, will win a more permanent respect. We are now told that "there is only one effective method that has thus far been developed in this connection and that is the feeding of liberal quantities of protein."

There are a number of neurological cases that are well written up and the discussions that follow these reports are stimulating in leading one to appreciate the possibilities that a neurological investigation can offer. The other reports are more or less familiar to the physician but will serve as reminders.

EMANUEL KRIMSKY.

MEDICAL CLINICS OF NORTH AMERICA. Vol. 15, No. 6, May, 1932. (Mayo Clinic Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues): Cloth, \$16.00 net; paper, \$12.00 net.

This contribution from the Mayo Clinic is somewhat different from the immediate predecessors of this series

in that less emphasis is placed on the ambulatory phases of clinical medicine and more on the hospital angle of it. As such, we read of progressive lipodystrophy, pulmonary calculus, spontaneous rupture of the myocardium, and of other conditions which many of us may never encounter in a lifetime of private practice.

There are, however, a few chapters that should win the attention of the practitioner. Cod liver has been used in the treatment of pernicious anemia with results that are quite as successful as from the liver of vertebrates. Cod liver oil, on the contrary, was found to be ineffective.

Iodine may serve as a diagnostic means in confirming the existence of a true Graves' disease. We are told that "clinical improvement and a fall in the basal metabolic rate following the administration of iodine as a trial measure confirms the diagnosis of exophthalmic goiter."

In a series of cases of stone in the common duct 13% were found to give a negative history of jaundice due, of course, to incomplete obstruction.

EMANUEL KRIMSKY.

THE HUMAN VOICE: ITS CARE AND DEVELOPMENT. By LEON FELDERMAN, M.D. 12mo of 301 pages, illustrated. New York, Henry Holt and Company (c.1931). Cloth, \$2.50.

A review of this book might best be summarized in the words which the author uses in opening the last chapter entitled: Summary. He says: "In this book the author has led the reader through devious, difficult pathways." Devious and difficult indeed if one should scan the headings of some of the chapters. Such titles as Diphtheria, Angioneurotic Edema, Goitre, Headache—an Important Signal, Immunity to Diseases, The Common Cold, and numerous others equally as foreign to the subject of the Human Voice, its care and development. In addition chapters contain material unrelated to their titles while several others are entirely irrelevant. The chapter entitled, Tonsils in Relation to Voice, contains subheadings and allots space to the Lymphatic System of the Head and Neck, and to the Postnasal Space. The chapter on Vasomotor Rhinitis has a section allotted to the Relation of Asthma to Animals. An equally inclusive chapter is the one entitled, Falsetto Voice, which includes subheadings titled: Aphonia, or Loss of Voice, Singers' Nodules, and Pachydermia Laryngitis.

The author had a very good idea when he set out to write his book but he became involved in too many other good ideas. One can say that it represents a pot-pourri of ear, nose and throat information poorly served.

Due credit, however, must be given for the numerous valuable chapters which deal with subjects such as, the Ph of the Blood, the Narcotic Problem, Quacks and Nostrums and others. The author shows evidence of the expenditure of a great deal of effort and hard work in assembling so many phases of so many subjects. It is unfortunate that the title of the book does not properly justify its contents and that the contents of its pages are so unrelated in many instances.

WHEELER AND JACK'S HANDBOOK OF MEDICINE. Ninth edition revised by JOHN HENDERSON, M.D., F.R.P.S. 12mo of 654 pages, illustrated. New York, William Wood & Company, 1932. Flexible cloth, \$4.00.

In this ninth edition, the revisor has brought this volume up to date. So many advances have been made recently in medicine that much of the book has been recast, and the new material incorporated. A careful review of this handy reference book proves it to be all-inclusive upon the subject of medicine in compact form and as formerly, this work will continue to be helpful to many. It seems almost incredible that so much information can be included in such a compact volume.

HENRY M. MOSES.



OUR NEIGHBORS



REFUND OF DUES IN PENNSYLVANIA

A refund of the money of the Medical Society of the State of Pennsylvania to the County Medical Societies is described in the August issue of the Pennsylvania Medical Journal. First is a letter from Dr. W. F. Donaldson, Secretary to the Chairmen of the Public Relations Committees of the County Societies, as follows:

"The Board of Trustees of the Medical Society of the State of Pennsylvania at their December, 1931, meeting authorized a refund, under certain conditions, of 50c per capita (members paid April 1) from the treasury of the State Society to the treasury of any county society whose 1932 Public Relations activities were approved by the Public Relations Committee of our State Society.

"The attached blanks have been prepared to be completed and submitted by the various component societies giving information as outlined in the conditions established by the State Society.

"Medical leadership in a given county undoubtedly depends upon the character of medical service rendered. Accurate knowledge in the possession of the proper representatives of the county medical society regarding existing facilities for such service is essential for the development of service worthy to be credited by the public to the influence of the county medical society.

"When your Committee has completed the county survey, as outlined in the attached sheets, it will have taken an advanced step toward medical leadership in the county. If the survey becomes continuous, and is sufficiently energetic, soon all lay health and social service organizations in the county will turn to the county medical society for guidance in coordinating the effort toward improving the quality and preventing overlapping of the service rendered to the public, and in minimizing pauperization."

The outline blank for the survey covers a page, and is as follows:

1. Hospitals: Name, location, type, beds, ownership.
2. Independent Laboratories: Name, location, type, ownership.
3. Industrial and Lodge Medical Service: Name, location, Non-Medical official in charge.
4. Free, or part pay, or pay dispensaries or clinics: Name, location, type of management.
5. Other organizations offering limited med-

ical service: Name, location, financed by, extent of medical service.

"Discuss character of medical, nursing and social service in connection with all the foregoing; also county medical society representation therein.

"Note any special or unusual characteristics in distribution of medical service in your county.

"Care of indigent patients in county.

"Any merit or defect in any phase of medical service in county.

"Information concerning existence of private group clinics.

"Mention valid complaints coming from either physicians, official or non-official health agencies, or the public regarding any or all phases of medical service in county.

"Evidence that the County Society Official Periodic Publication Constantly Sets Forth the Public Health and Sickness Prevention. Aims of the County Medical Society.

"Enumerate your editor's comments, local contributions, also excerpts from other publications dealing with sickness prevention aims.

"Enumerate letters or articles published since January 1, 1932, at the request of State Society officers or committees.

"Give evidence that your County Society official publication constantly sets forth public health and sickness prevention aims of your society.

"Copy of your publication's mailing list, exclusive of your own members including:

"Leading educators of the county.

"Editors of newspapers of the county.

"Judges and Poor Directors of the county.

"Trustees and Superintendents of hospitals and dispensaries of the county.

"Secretaries of women's and men's clubs of the county.

"Leaders of parent-teacher associations.

"Officers of health and welfare organization; e.g., Red Cross, Public Health Nursing Association, etc.

"Non-member physicians eligible to membership in the county medical society.

"Evidence of Effective Publicity Obtained Since January 1, 1932, Regarding All Medical Society Activities Through Local and County Newspapers by Radio, or by Lectures Before Interested Civic Organizations in County:

"Give name and date of issue of various

(Continued on page 1092—adv. xii)

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NO antiricketic substance will straighten bones that have become misshapen as the result of rickets. But Mead's Viosterol in Oil 250 D can be depended upon to prevent ricketic deformities. This is not true of all antiricketic agents, many of which are so limited by tolerance or bulk that they cannot be given in quantities sufficient to arrest the ricketic process promptly, with the result that the bones are not adequately calcified to bear weight or muscle-pull and hence become deformed.

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Mead's Viosterol, on the other hand, is capable of terminating the ricketic process in a brief period in virtually every type of case. Thus if given as a prophylactic in requisite dosage it may be expected to prevent not only bowing of the legs but also the more insidious skeletal defects such as malformation of the chest, hypoplastic teeth, and pelvic abnormalities, which may develop unnoticed when less effective vitamin D products are administered.

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Prematures, twins, infants of low birth-weight, and rapidly-growing, full-term infants are especially susceptible to ricketic deformities because of their greater need for calcium and phosphorus. Yet the first three types of infants, due to their small digestive organs, are generally unable to take even the usual dose of cod liver oil, much less increased doses. For them Mead's Viosterol is specific in preventing malformations just as it is in all other types of rickets.



Mead's Viosterol is packed in brown bottles and light-proof cartons to prevent rancidity and deterioration. Unique dropper-stopper is a convenience and avoids waste.

Because of its potency Mead's Viosterol prevents and cures rickets . . . in small dosage . . . without gastric upset . . . quickly . . . before deformity sets in.

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Maltcao
BUILDS FOR THE YEARS AHEAD

(Continued from page 1090)

newspapers in county containing references to scientific, economic, and community activities of your County and State Societies.

"Estimate total number of lines or columns printed.

"Attach sample clippings, showing name and date of paper.

"Give titles of lectures or instructive talks by representatives of your Committee or Society before interested civic, fraternal or social clubs or societies, mentioning names of latter, and giving dates.

"Give date and subjects of various broadcasts sponsored by your Committee or Society, naming radio station."

Commenting on the survey, the Journal says editorially:

"More or less complete surveys from twenty-three of the sixty-one county societies have been received, displaying in many of these societies, on the part of certain representative members, an astonishing grasp of the situation involved, while in other societies the response may only be said to be encouraging. It is believed that when the Public Relations Committee of the State Society has completed its review of the Surveys submitted and the Board of Trustees has authorized payment of the subsidy to the treasury of approved societies, then and only then will many members of the component societies awaken to the absolute need for an active Public Relations Committee in their county society. The results of the Survey in certain counties will be published in this Department, from time to time, in subsequent issues of the Journal, with the hope that thereby inactive societies may be stimulated and active societies be given proper recognition. In the meantime, it will be observed, we predict that the county medical societies qualified for health leadership in their respective counties will assume such position upon the basis of knowledge, experience, and unselfish community leadership."

INDEMNITY INSURANCE IN IOWA

The opinion of the Medico-Legal Committee of the Iowa State Medical Society differs in several important respects from the policy of the Medical Society of the State of New York, as will be seen by the following quotations from the annual report of the Iowa's committee printed in the *Journal of the Iowa State Medical Society* for July, 1932:

"During the year, the Medico-Legal Committee has conferred with the Board of Trustees concerning the advisability of taking blanket practice insurance for such of our members: desire policies issued to them in this way; and: far as we know, no definite decision has as yet

(Continued on page 1093—adv. xiii)

(Continued from page 1092—adv. an)

been made. Our committee has been anxious to conserve the best interests of society members and for the information of all, the following synopsis of the situation is here offered:

"(1) About sixty-five per cent of our members purchase commercial malpractice protection.

"(2) Of the three companies who sell most of this insurance, the Medical Protective Company, of Chicago, holds first place, the United States Fidelity and Guaranty second, and the Aetna third.

"(3) The U. S. F. & G. has made overtures to our society, promising a five or six dollar reduction in their premiums as compared with other companies, if we will purchase from them a master policy, under the conditions of which a given number of our members will purchase their policies.

"(4) Under the U. S. F. & G. master policy, each member will pay premiums direct to the company.

"(5) The above mentioned contract is virtually a promise of a small reduction of the individual premiums in return for the endorsement of the company by our Society.

"(6) As far as our committee has been able to determine, no real advantage will be gained in purchasing so-called blanket insurance aside from a slight reduction in premium costs.

"(7) Judging only by our correspondence with the state medical societies which have purchased blanket malpractice insurance, there has been no prejudicial effect as far as court procedures have been concerned, but very few of our correspondents have carried this type of insurance for any great length of time.

"(8) The Medico-Legal Committee has attempted to approach the situation from a judicial point of view, and its recommendation may be laid down as follows: We believe it best to disregard the slight reduction in malpractice policy premiums for the following reasons:

"(a) In order to prevent growing prejudice against the medical profession as a group, it would seem best to avoid appearance of paternalism and mass resistance against the public.

"(b) Knowledge that a physician is commercially indemnified tempts disgruntled patients to bring suits for malpractice, whereas a physician who quietly and personally purchases his own protection, may not be known to be indemnified.

"(c) The more paternalistic our organization becomes, the greater the ultimate expense of management.

"(d) The purchaser of an indemnity policy, if not satisfied with his protection, can purchase the same from any company which suits his

(Continued on page 1094—adv. xiv)

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Ammonium chlorid	61.17	Sodium nitrate	trace
Lithium chlorid	27.00	Sodium bicarbonate	2,206.54
Potassium chlorid	233.81	Calcium bicarbonate	1,877.09
Sodium Chlorid	2,511.61	Barium bicarbonate	trace
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Potassium iodid	1.60	Ferrous bicarbonate	23.15
Sodium sulphate	trace	Magnesium bicarbonate	874.71
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Total solids 7,856.87

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(Continued from page 1093—adv. xiii)

fancy without feeling obliged to support the company issuing a blanket policy to the Society.

"(e) Iowa physicians have been very fortunate in the past in malpractice affairs, and it has always been a good practice to let well enough alone when all is well. The chief anxiety of the Medico-Legal Committee rests in the fact that we believe it to be ill-advised, for the sake of a few dollars saving per member, to let it be known that we are massing our forces in a defensive campaign against the public."

The report on malpractice cases is as follows:

"We are submitting herewith our annual report of malpractice cases for the year ending April 25, 1932. The report includes all cases brought against the members of the Society whether they have indemnity or not, so far as the same have been reported to us, with the exception of one case in Polk County which has been recently begun against Dr. Pearson and which case is being defended by the United State Fidelity and Guaranty Company.

"During the year seventeen new cases have been begun, twelve cases have been disposed of and twenty-nine cases are still pending. Of the twenty-nine cases now pending, fourteen of them have no indemnity and are being defended at the expense of the Society. Of these fourteen cases four have been begun during the last year and three of them were pending at the date of the arrangement between the Medical Protective Company and the State Medical Society, whereby one-half of the expense of the defense was to be paid by the State Medical Society and one-half by the Medical Protective Company. The total aggregate amount claimed in petitions filed in malpractice cases during the last year is \$180,435.

"Since the organization of the Medical Defense Committee of the State Medical Society 347 cases have been commenced against members of the Society, of which 29 are still pending.

"The total amount claimed in damages to date in all these malpractice cases is \$4,403,440.85.

"Judgments have been obtained against members, aggregating \$63,494.35."

HOUSE OF DELEGATES OF IOWA

The July issue of the *Journal of the Iowa State Medical Society* devotes 47 pages to the minutes of the annual meeting of the House of Delegates held on May 4-6, 1932, in Sioux City. The reports of the officers and committees cover about 40 pages of the minutes.

Secretary's Report: The Secretary reported that a meeting had been held in each of the eleven Councilor Districts. The Secretary also gave a financial report which included a six-page table, listing every check that was drawn on the State Society funds.

(Continued on page 1096—adv. xci)

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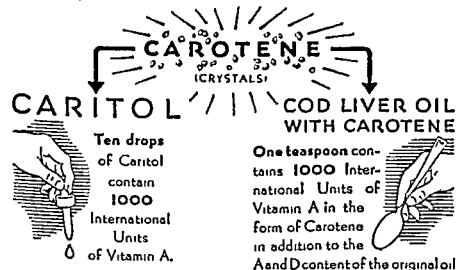
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While many cases of Vitamin A deficiency are met with in practice, the average human diet contains enough Vitamin A to meet the minimum requirements of man. However, it is generally admitted that a much higher intake of Vitamin A is required for the maintenance of the highest degree of bodily health and vigor. The need of these higher requirements of Vitamin A for optimum growth and development, for reproduction and lactation, for the development of strong teeth and bones, for healthy resistance against spontaneous infection, and its intimate association with the blood is generally conceded. Therefore, we believe that the intelligent prescription of the appropriate form of Vitamin A to most adults, as well as to infants, young and adolescent children, and especially to gestating and lactating mothers, and in post-operative and anemic cases, is in line with advanced medical practice.

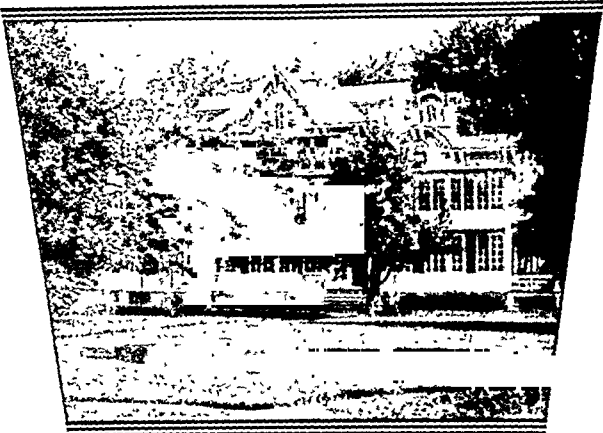
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(Continued from page 1093—adv. xiv)

Public Relations Committee: The Chairman of the Council reported as follows on a Public Relations Committee:

"The Council has taken a forward step in forming a Public Relations Committee, which shall establish sustained working relations with other agencies concerned with related activities. This committee is composed of Dr. W. W. Pearson, Dr. F. P. Winkler, and Dr. J. G. Macrae. The Council feels that this should be a permanent committee of the State Society to maintain harmonious relations with all organizations having a health program.

"The necessity for having a committee of this kind became manifest in connection with the new Bureau of Maternity and Child Hygiene of the State Department of Health. After discussing this matter at two meetings, the Council voted unanimously to cooperate with the State Department of Health because the Commissioner of Health was acting in an ethical manner and seeking medical rather than lay control of this work."

Councilor Districts: The reports of the Eleven Councilors cover nine pages, and contain a wealth of information regarding the county societies.

Managing Director: The Trustees utilized over a page of their report in discussing the duties of the Managing Director, whose employment was made mandatory by the last House of Delegates. A summary of the duties of the Director, who is a layman, is as follows:

"Approximately one-fourth of his time is devoted to some phase of legislative work required by the Committee on Public Policy and Legislation.

"The Managing Director also keeps the county societies informed on the attitude, the activities, and the voting on important medical questions by the respective representatives.

"He is also the liaison officer between the members of the Society and the attorney-general, as well as the law enforcement division of the Department of Health, which has done such effective work against quackery and irregular practice.

"As executive secretary to the Council, he must, in addition to keeping the minutes, acquire contacts through the Public Relations Committee with lay organizations such as the Federation of Women's Clubs, the Parent-Teacher Association, the social workers, etc., so that no program touching medical subjects and relations shall be given without the endorsement of the local medical society.

"He is the executive secretary of the Speaker's Bureau Committee which has won such favorable recognition throughout the state, both lay and medical, as a result of special post-graduate

(Continued on page 1097—adv. xvii)

(Continued from page 1095—adv. xvi)

clinics, radio talks, and public addresses by recognized authorities on medical subjects in the interest of progressive medicine.

"With the Medical Economics Committee, his chief duties have been in securing a satisfactory form of contract for the county societies in their dealings with the boards of supervisors regarding care of the pauper sick. Twenty of these contracts are in force, netting a total sum of over \$60,000.

"The Managing Director is also business manager, assistant editor of the Journal, and secretary to the various state society officers. As business manager, he is responsible for all records, filing and card-index systems, bookkeeping, and the monthly budget sheet.

"Under general service, by his direction, the State Society offices become a clearing-house for information and advice, serving the county societies and their members. Questions by individual members as to what department to approach for help are answered either by citation to some official action by a certain committee or by reference to any officers of that committee for further direction. Aside from these, many miscellaneous questions affecting the board of health, the attorney-general's office, the board of assessment and review, regarding hospital equipment, library, etc., in their relation to taxation, are a few of the many subjects which call for the individual consideration of the Managing Director.

"With a realization of the fact that it is within our delegated authority to appoint the Managing Director and determine his salary, we would not be imperious in these matters, if it is the expressed wish of the House of Delegates that, in the interest of economy and efficiency, his salary be reduced or that he be removed.

"Mindful of the present unreliability of the economic future, it is conceivable that, however desirous the State Society may be to continue the present activities and even the extension of greater ones, it may not be possible to realize them without financial loss. In such an event it is absolutely necessary that some constructive plans be proposed to meet the situation. Shall our activities, wholly or in part, be curtailed or abolished and considered not worth the cost? If only in part, which ones shall be curtailed? Shall the Trustees reduce salaries and not allow traveling and other expenses of special committees? Shall the Board of Trustees draw on our reserve fund to make up any existing deficit? Shall the office of Managing Director be abolished? If so, under what form of management shall the administrative affairs be conducted? By clerical help alone? By the Secretary, with added compensation, or by the Secretary and Editor jointly aided by clerical help?

(Continued on page 1098—adv. xviii)

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**COMMITTEE
ON PUBLICATION . .**

(Continued from page 1097—adv. xvii)

"One of the members of the Board of Trustees discussed the employment of a physician as Manager, as follows:

"Personally, and I believe I have the support of the other two members of the Board, I am opposed to the appointment of a physician as Managing Director. By no process of reasoning can I bring myself to see how any successful practitioner, and we would want none other, who might qualify for this particular and important kind of work, could by any method of persuasion be induced to give up his practice for the sum of \$6,000 or less, as has been proposed."

These, and other reports revealed a great activity on the part of the Iowa State Medical Society during the year 1931.

STANDING OF COUNTY SOCIETIES IN OHIO

The August issue of the Ohio State Medical Journal has the following comment inspired by an editorial in the NEW YORK STATE JOURNAL OF MEDICINE of April 1, 1932, page 398:

"Not long ago the editor of the NEW YORK STATE JOURNAL OF MEDICINE asked the members of the medical organization in that state to answer the following questions:

"What do people say about your County Medical Society?

"Do they realize that your society is the advisor of the community in public health matters?

"Do the people turn to the County Medical Society for final advice when lay health organizations propose clinics and consultations and lecture courses?

"Do the people know that your county has a medical society?"

"There is a pertinent suggestion in the foregoing for every county medical society, whether in New York or Ohio or elsewhere.

"It is well for every county society to appraise itself periodically in order to ascertain whether or not it is meeting the requirements expected of it. Self-appraisal frequently discloses hidden weaknesses, whether it be of individuals or organizations. Proper remedies for such disclosures are bound to react favorably, not only to the individual county society but to medical organization generally.

"As a matter of fact, it would be a good idea for every member of medical organization to quiz himself to see if he is devoting sufficient time and effort toward promoting the activities of his local medical society.

"As Dr. A. E. Brant, president of the Mahoning County Medical Society, so aptly said in a

(Continued on page 1099—adv. xix)

(Continued from page 1098—adv. xviii)

recent issue of that society's official publication: "It has been proven without a doubt that nothing can be accomplished without an efficient organization which will function well under any and all conditions. It is apparent, to some extent at least, that we must cast aside our cloak of indifference and respectable aloofness and get into the game. It does no good in isolated groups to air our grievances, rant about injustices, discuss with dismay the question of state medicine and an unappreciative public, unless to blow off steam. It does do good, however, to give these questions real thought, to analyze them honestly and to act constructively even though the benefits we expect may only come several years hence. If we are wrong, let us enter into a program of correction. If the public is wrong, let us educate them. How really can we expect our friends and others to do things for us when we make no attempt ourselves, or not even intelligently inform them? An organization in the business world that wants something goes after it. Why can't we, and still maintain our ideals and self-respect? We can."

BROADCASTING IN RHODE ISLAND

The Committee on Education of the Rhode Island Medical Society has the following report in the August issue of the *Rhode Island Medical Journal*:

"Through the courtesy of the Outlet Company, we were able to run a series of weekly broadcasts, fourteen in number, at approximately 6:10 each Tuesday evening, approximately meaning that the medical speaker and his subject were contingent upon commercial patrons. At the request of the Providence Y.M.C.A., the committee furnished a radio speaker for its vocational talk period, this being limited to a single broadcast.

"While on the subject of radio broadcasting, it might be well to say that the hour set for the five-minute talks over the air by the local station was rather unfortunate, in that while it was a desirable time to reach listeners at the evening meal, the period was also an opportune one for commercial ventures, so that our five-minute period was frequently cut into on either end and the period shortened. The radio station cannot be censured, for this inconvenience as the medical broadcast is gratis, and we are indeed thankful to get our message to the public. A period at noon, when there is not so much commercial aspect and when we could have a ten or fifteen minute period, would be a way out of the difficulty.

"As there were no other means of education to the layman from this body than the radio broadcast, it is suggested that in other years the list of the talks (not the speakers), the time and the radio station be advertised in the *Medical Journal* and the local newspapers."

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S.M.A. Corporation also offers Carotene in cod liver oil of such dilution that one teaspoonful contains one thousand International Vitamin A Units in addition to Vitamins A and D of cod liver oil.

Carotene has hitherto been available in very limited quantities, of less purity, at prices as high as \$11,000.00 a pound. S.M.A. Corporation is now offering crystalline Carotene at prices research laboratories can afford.

Carotene is the primary form of Vitamin A. Sherman and Smith state that the term Vitamin A may (and often does) cover both the "primary" or precursor form (Carotene) and the "secondary" form immediately active in animal nutrition (Vitamin A in the spectrographic sense). For this reason, and because it can be obtained in a state of great purity, Carotene has been adopted as the provisional standard for the biological measurement of Vitamin A potency.

The *Journal of the American Medical Association* reports editorially as follows: "The permanent Standards Commission of the health organization of the League of Nations has been concerned with the problem of vitamin standards and units. . . The Standards thus far selected are as follows: for vitamin A, one International Unit is the potency of 1 gamma (= 0.001 mg.) of pure Carotene, which is converted into Vitamin A in the body."

Carotene is to Vitamin A what sunlight is to Vitamin D therapy. Caro-

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tene and sunlight are nature's forms of the fat soluble Vitamins A and D.

Eusterman and Wilbur point out that until recently, the versatility of Vitamin A has apparently not been appreciated, and that a remarkably increasing literature in the last year or two attests its growing importance in the chemistry of food and nutrition, not only in the prevention and cure of certain ailments of man but, when supplied in liberal proportion, in the maintenance of a satisfactory state of nutrition and a high degree of health and vigor, both in the growing child and in the adult. See page xv.—Adv.

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NEW YORK STATE JOURNAL of MEDICINE

PUBLISHED BY THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

Vol. 32, No. 19

NEW YORK, N. Y.

October 1, 1932

FURTHER EXPERIENCES WITH TRICHOPHYTIN

By LAIRD S. VAN DYCK, M.D., JEROME KINGSBURY, M.D., BINFORD THRONE, M.D.,
AND C. N. MYERS, Ph.D., NEW YORK, N. Y.

From the Stuyvesant Square Hospital, formerly the New York Skin and Cancer Hospital, New York, N. Y.

DURING the past few years considerable interest has developed in regard to the treatment of mycotic infections. A great variety of remedies has been suggested, including x-rays; but unfortunately most of these have no place in the armamentarium concerned with the handling of this disease. The majority of these products are for local application only, and it is our belief that in many of these cases a definite cellular sensitization exists. Our experience has convinced us that where this sensitization is present, local treatment alone is only of temporary value; and that a permanent cure can be obtained only through desensitizing measures.

In a previous article (NEW YORK STATE JOURNAL OF MEDICINE, May 15, 1931, Vol. 31, No. 10, Page 611), Van Dyck and others reported their experiences with Trichophyton Extract in mycotic infections of the skin, both for the diagnosis of sensitization, and also for its therapeutic effect in producing desensitization. In many cases which were refractory to this type of treatment, a complete blood chemical examination, including a glucose tolerance test, sometimes disclosed errors in metabolism which seem to have inhibited the action of the trichophytin; and the correction of these errors enabled the remedy to produce desensitizing effects.

It was felt that the results obtained in the first study justified a continuance of this work. The clinical results, in some instances, were unusually satisfactory; and therefore, after prolonged observations on the original group of one hundred patients, it was decided to make a careful summary of the end results from the therapeutic point of view.

In the previous article a tabulated discussion of the diagnosis, location of lesions, description, duration of infection, results of the test, treatments, duration of treatments and results were presented. It was stated "that recurrences or exacerbations were uniformly seen when the curative injections were not continued until there no

longer appeared any reaction at the site of the injection; or in other words, until a general desensitization had developed." In summarizing these results it was shown that, irrespective of the type of infection, 32 per cent were apparently cured; 28 per cent greatly improved; 21 per cent slightly improved, and 19 per cent unimproved. These results were obtained irrespective of the number of injections and the duration of the infection.

These cases have been called to the clinic and a careful check-up made. It was possible to locate 70 of these cases and it has been found that 93 per cent are free from clinical symptoms and may be regarded as apparently cured. In this group 18 patients had mild recurrences in the form of vesicular and scaly lesions on the hands and feet, from one to six months after stopping treatment. It was universally stated that these recurrences were always milder than the original eruption and responded readily to a few more intradermal treatments with Trichophytin. Three patients were greatly improved and two showed no improvement.

The Trichophytin used in this investigation was prepared according to the method devised by Dr. Walther Scholtz, Director of the University Skin Clinic, Koenigsberg, which consists of a polyvalent extract of the various species of Trichophyton, including *T. gypseum* (40%), *T. cerebriforme* (20%), *T. microides* (10%), *T. rosaceum*, *T. violaceum*, and *T. crassum* (each in equal parts, 20%). The various mycelia are cultured in a suitable media and then dried by heat. The extract of these dried mycelia furnishes the basis for the material used therapeutically and therapeutically.*

The method of treating these patients consisted of intradermal injections of 0.1 cc. of 1% Trichophytin, beginning with one injection at four or five day intervals.

*Trichophyton Extract (Trichophytin) is a product of these investigations.

face of the forearm. Stronger dilutions, such as 1-10, 1-5, 1-2, and 1-1, were given as soon as the previous injection failed to show a positive reaction on observation after 48 hours. For example, if an injection of a dilution, 1-10, gave a strongly positive reaction, the same dilution was used for successive treatments until it failed to produce the reaction. The same procedure was used for each of the other dilutions. When a given dilution failed to give a reaction, the next higher concentration was employed until a concentration of 1-1 was reached. It was very rarely necessary to use the full strength Trichophytin.

It is also most important to be sure that the solution to be injected is perfectly clear in all dilutions, otherwise contamination may be present. If the vials containing the various dilutions are left standing too long in a warm room, decomposition may take place. This also gives a cloudy appearance to the solution. If this liquid is injected intradermally, a pustule may appear at that site, with perhaps subsequent scar formation. It is also important to avoid the use of too much alcohol in sterilizing the needles. Alcohol will tend to precipitate the protein extract.

Plato and Neisser (1902) first had the idea of preparing a trichophytic extract. Bloch perfected the technique of preparing it, and demonstrated by his experiments allergic phenomena of the skin in animals after fungus infections.

Scholtz, 1918, first used intradermal injections of Trichophytin in the treatment of *Tinea Profunda*. His method was to inject 0.1 to 0.2 cc. of Trichophytin into three or four points on the upper arm. He began with a 1-100 dilution, increasing to 1-50, 1-30 and finally 1-10 or 1-5. He also noted that the optimal dilution was that which produced marked local reactions, which is in accord with our observations.

Jadassohn and Peck, 1929, showed that a positive Trichophytin reaction with development of epidermophytids is a frequent occurrence in epidermophytosis of the feet, although the infection in such cases is relatively superficial. In an experimental reproduction of epidermophytosis of the feet, Peck found that the trichophytin reaction became positive 13 days after the beginning of the experiment.

Rosen, Peck and Sobel, 1931, tested 102 persons for hypersensitivity to Trichophytin. They found the intradermal method of testing much more reliable than the Pirquet test or the patch test. Sixty-seven of their cases gave positive reactions to Trichophytin. Examination of the feet showed some of these cases had typical mycotic lesions, and most of the cases showed some scaling and maceration between the toes. Fungi were found microscopically in only nine out of 48 cases examined. Eight of these nine patients showed a positive trichophytin reaction. For comparison they used two brands of Trichophytin, one from

Zurich and one from Hoechst. They found that the Hoechst diluted product (1-50) gave the same degree of reaction as the Zurich Trichophytin in 21 cases tested.

Riecke, 1931, states that the Trichophytin of Hoechst had proved, in his experience, to be the best of all trichophytic extracts in the treatment of *Tinea Barbae*.

In our cases the Hoechst Trichophytin was used exclusively.

Jausion and Sohier, 1929, were the first to report successful results from the use of a "clado-vaccine" in the treatment of superficial mycotic infections.

Ravaut and Longhin, 1931, used "levurine," an extract of various yeasts, both intradermally and intravenously in the treatment of intertrigo with "eczematides" due primarily to a yeast infection. They found that this method of treatment produced first an exacerbation of both the primary and secondary lesions, but later benefited the condition. Using a sample of Levurine, given us by Ravaut, we have treated one such case in our clinic with good results.

Jausion and Sohier, 1930, in a later report on vaccinothrapy of dermatomycoses, mention Plato, Truffi, Bloch, Stein, Scholtz, Fuhs, Rozsabolgyi, Person and Novaki as all having attempted the use of Trichophytin therapeutically, but with doubtful results. They also mention Cranston Low as having criticized its use on the ground that results are uncertain and are obtained at the price of local, focal and general reactions which are often alarming. Our experience with the Trichophytin of Hoechst in more than 200 patients, to whom a total of about 2,000 intradermal injections were given, has failed to produce a single alarming reaction. It is probable that subcutaneous injections would produce severe reactions in many cases, and no one who has tried it, as far as we know, recommends this technic.

The "clado-vaccine" of Jausion and Sohier (1930) is a product of the chemical destruction of cultures of various fungi of the *tinea* group. The cultures were treated first with nitric acid, then boiled, neutralized and filtered. The solution obtained was injected subcutaneously or intramuscularly in doses ranging from 0.5 cc. to 3 cc. at intervals of five days. Ordinarily six injections were given, sometimes twelve. The cases they treated were classified as *Dermatomycoses*, *Mycotic Eczema*, *Parakeratosis psoriasiforme*, *Eczematides pityriasiformes*, and *Trichophytides psoriasiformes et licheniformes*. Out of a total of 45 cases they obtained 36 apparent cures. Nine of the patients were improved, and three had relapses.

The same authors stated that Trichophytin was capable of improving patients slightly, but nevertheless should not be used therapeutically.

They stated that they had seen focal reactivations and slight general reactions following its use, although these incidents were very mild compared to the descriptions of other authors.

The cases of dermatophytosis selected by us for the Trichophytin treatments were, as a rule, the most severe cases that came to the clinic. Mild cases with only slight scaling or maceration between the toes were generally given merely the routine local treatment with Whitfield's ointment iodized alcohol, etc. Most of the cases in our series were told to use nothing locally except boric acid ointment, but occasionally the local treatment had to be varied to give quicker relief. Very acutely inflamed lesions on the hands and feet were treated locally with wet dressings of either boric acid or Burrows' solution.

Since the publication of the first series of 100 cases in May, 1931, a second series of 317 cases has been treated. The results of a typical group are shown in the accompanying table (See Table 1).

A routine blood chemistry analysis was made on every patient of both series. The average blood sugar for the first 100 cases was 106 mgs per 100 cc of blood. The average for the second series was 109 mgs. Variations ranged from a minimum of 84 mgs to a maximum of 159 mgs. The Hastings MacLean method was used for determining the blood sugar, our normal being 90 mgs to 100 mgs.

Among the most interesting of the cases treated was that of a physician who had a very severe tinea infection of the feet with eczematization for three years. Both feet were covered with vesicular and weeping patches which kept his shoes soaked with fluid. He was also subject to hay fever. Having tried every kind of treatment mentioned in the textbooks on dermatology, including a long course of x-ray treatments without getting results, he came to us to be experimented on. A strongly positive trichophytin test was accompanied by a mild flare up of his hay fever. Under treatment with Trichophytin intradermally, every four or five days, he improved steadily, and at the end of three months was discharged cured. A check up six months later found him still cured. He had no recurrence of his tinea in the interval, but had a dermatitis for a few days after wearing a pair of shoes which he had cleaned inside with formaldehyde. This cleared up when he discarded the shoes.

Another patient, a woman aged 45, with vesicular, scaling and hyperkeratotic patches in the hands had been treated for three years by several of the city's leading dermatologists. All the treatments she had received had been local, including every sort of ointment and cream, parasiticide solutions, x-rays to the limit, ultra-violet rays, etc. During the three years her hands had never cleared up even temporarily. The improve-

ment immediately following the trichophytin test was very definite, the test being three plus. The next injections were weaker dilutions, and very little local reaction appeared. The skin lesions likewise showed little further improvement. The patient begged for another strong injection, and was given 0.1 cc of the full strength undiluted Trichophytin. A marked local reaction appeared in 24 hours, and the hands became very much better. At the end of six weeks she was discharged cured, and has had no recurrence in the three months since that time.

One case of fairly severe tinea of the feet developed a typical pompholyx of the palms after the third injection of Trichophytin. A bulla appeared on the forearm at the site of the third injection simultaneously with the appearance of the pompholyx of the palms. Two weeks later the patient's hands, feet and arm showed no apparent lesions, after two more intradermal injections had been given. This case appears to illustrate the laws of both isomorphism and biotropism.

Another case of tinea of the feet was in a patient who had been subject to asthmatic attacks for several years. Following the injection of a 1:50 dilution of the Trichophytin intradermally she had a typical wheezing attack and refused further treatments.

Three of our patients with tinea of the hands and feet and one with tinea of the groin, developed a pityriasis rosea like eruption during or after treatment with Trichophytin. In each case this eruption disappeared within three weeks. The very large percentage of positive Trichophytin tests obtained in a series of cases of pityriasis rosea had led us to examine carefully the feet of those that gave strongly positive tests. Scaling or macerated skin was found between the toes in six out of eight cases examined.

Four cases of lichen planus, which gave positive trichophytin tests, were all found to have evidence of interdigital mycotic infection. One of these patients was also subject to hay fever and another had vernal catarrh of the eyes. These patients have not been treated with Trichophytin, although Jauson, Sohier and Lartigau have reported cases of lichen planus cured by polymycotic vaccines.

Wise and Sulzberger, 1930, reported a case in which a skin test with Trichophytin elicited not only a skin reaction but an attack of violent sneezing and edema of the eyelids and nose which were checked only by the administration of epinephrin. In several cases of our series an urticarial wheal appeared at the site of the injection a few minutes after the test was made, but no violent reactions were observed. Ramirez, 1930, had reported a case of asthma due to tinea. Sulzberger and Kerr, 1930, have reported successful passive transference by means of the blood serum (method of Prausnitz Kustner) in

TABLE I

No.	Diagnosis	Location	Description	Duration	Test	Treatment	Results
1	Tinea	Rt. Hand and Foot	Scaly and Vesic.	1 year...	++	18 inject...	Much improved
2	Tinea	Hands and Feet	Scaly and Vesic.	18 months.	++	25 inject...	App. cured
3	Tinea	Hands and Feet	Scaly and Vesic.	2 months.	+	5 inject...	App. cured
4	Tinea	Hands and Feet	Scaly and Vesic.	7 years...	+	5 inject...	App. cured
5	Tinea	Left Foot	Scaly and Vesic.	4 days...	+++	10 inject...	App. cured
6	Tinea	Hands	Scaly and Keratotic.	2½ years.	+	14 inject...	App. cured
7	Tinea	Feet	Scaly and Vesic.	1 year..	+	12 inject...	App. cured
8	Tinea	Hands	Scaly and Vesic.	2 weeks..	+	9 inject...	App. cured
9	Tinea	Hands	Vesico Pust.	2 months	++	8 inject...	Improved
10	Tinea	Hands	Pap. Vesic.	3 weeks..	+	13 inject...	Improved
11	Tinea	Hands	Scaly and Vesic.	1½ years.	±	14 inject...	No improvement
12	Tinea	Right Foot	Scaly and Vesic.	5 weeks..	++	19 inject...	Much improved
13	Tinea	Hand and Feet	Scaly and Vesic.	3 months.	+	4 inject...	Much improved
14	Tinea	Feet	Scaly and Vesic.	2 months.	++	22 inject...	App. cured after 3 exac.
15	Tinea	Fingers	Scaly and Vesic.	2 months. (Recurrence 1 month later.)	+	12 inject...	Improved
16	Tin a.	Hands and Feet	Scaly and Vesic.	3 months.	+++	17 inject...	App. cured
17	Tin a.	Feet	Scaly and Vesic.	5 months.	+	16 inject...	App. cured
18	Tin a.	Groins	Scaly and Vesic.	1 month..	+++	6 inject...	Improved
19	Tinea	Hands and Feet	Scaly and Vesic.	2 years...	+	4 inject...	Improved
20	Tinea	Hands and Feet	Scaly and Vesic.	1 year...	++	27 inject...	Much improved
21	Tinea	Feet	Scaly and Vesic.	2 months.	+	9 inject...	App. cured
22	Tinea	Feet	Pap. Vesic. Scaly	2 months.	+	4 inject...	Much improved
	Ecz. Derm.	Arms and Legs					
23	Tinea	Feet	Scaly and Vesic.	6 weeks..	+++	14 inject...	App. cured
24	Tinea	Feet	Scaly and Vesic.	2 months.	+	10 inject...	App. cured
25	Tinea	Hands and Feet	Scaly and Vesic.	1 year...	+++	13 inject...	Improved
26	Tinea	Hands, Feet & Nails	Scaly and Vesic.	1 year...	+++	21 inject...	Much improved
27	Tinea	Hands	Vesic.	7 years...	++	26 inject...	App. cured
28	Tinea	Hands	Scaly and Vesic.	6 months.	+	12 inject...	Improved
29	Tinea	Feet	Scaly and Vesic.	1 month..	+	9 inject...	Improved
30	Tinea	Feet					
	Psoriasis.	Trunk	Scaly and Vesic.	2 years...	+	31 inject...	Both app. cured
31	Tinea	Hands and Feet	Microsc. Pos.	3 months...	++	17 inject...	Cured
32	Tinea	Right Hand	Scaly and Vesic.	6 months.	+++	5 inject...	Almost cured
		(Relapse 1 month later.	40 inject.; no improvement.			Four in family died of diabetes.)	
33	Tinea	Left Foot	Scaly and Vesic.	6 months.	++	6 inject...	Improved
34	Tinea	Fingers	Scaly and Vesic.	4 years...	+++	52 inject...	App. cured
35	Tinea	Right Foot	Scaly and Vesic.	3 months.	++	29 inject...	Improved
36	Tinea	Feet	Scaly and Vesic.	3 months.	+	10 inject...	Improved
37	Tinea	Hand	Scaly and Vesic.	2 months.	+	24 inject...	App. cured
38	Tinea	Face and Scalp	Circ. and Scaly	4 weeks..	+	12 inject...	Improved
39	Tinea	Scalp	Circ. and Scaly	4 weeks..	+	12 inject...	Much improved
40	Tinea	Feet	Vesic. and Scaly	5 years...	+	48 inject...	Much improved
41	Tinea	Hands	Vesic. and Scaly	1 month..	+	14 inject...	Much improved
42	Tinea	Hands, Feet and Groin	Vesic. and Scaly	1 year...	+	35 inject...	App. cured
43	Tinea	Right Foot	Vesic. and Scaly	1 year...	+	36 inject...	Much improved
44	Tinea	Hands	Vesic. pust.	2 months.	+	7 inject...	Much improved
45	Tinea	Hands	Vesic. and Scaly	3 weeks..	+	54 inject...	Much improved
46	Tinea	Left Foot	Vesic. and Scaly	1 year...	+	18 inject...	Much improved
47	Tinea and Pruritis.	Vulva	Scaly and Exc.	1 year...	+	9 inject...	Very much imp'd
48	Tinea	Hands	Scaly and Vesic.	1 month..	+	34 inject...	Very much imp'd
49	Tinea	Arms, Legs, Toes, Hands	Scaly and Vesic.	3 weeks..	+	6 inject...	Improved
50	Tinea	Right Foot	Large Vesicles.	2 weeks..	+++	5 inject...	
		(Outbreak of large bullae on palms after 3rd inject., also at site of inject.)					
51	Tinea	Toes	Vesic. and Scaly	8 months.	+	13 inject...	Much improved
52	Tinea	Feet	Vesic. pust.	3 months.	+	14 inject...	Almost well
53	Tinea	Feet	Scaly and Vesic.	7 years...	+++	4 inject...	Improved
54	Tinea	Axilla, Groins and Toes	Circ. & Scaly Lesions	3 weeks..	+	24 inject...	Cured
		(Lab. plus for all areas.)					
55	Tinea	Hands and Feet	Vesic. and Scaly	5 years...	+++	3 inject...	Much improved
56	Tinea	Hands and Feet	Vesic. and Scaly	2 years...	++	9 inject...	Very much impr'd
		(Left to go to private doctor.)					
57	Tinea	Hands and Feet	Vesic. and Scaly	2 years...	+	10 inject...	Imp. on Feet No imp. on Hands
58	Tinea	Feet	Vesic. and Scaly	2 years...	+	6 inject...	Improved
59	Tinea	L ft Foot	Vesic. and Scaly	4 months.	Neg.	7 inject...	Improved
60	Tinea	Hands	Vesicles	4 days...	+	13 inject...	Cured

TABLE I—Continued

No.	Diagnosis	Location	Description	Duration	Test	Treatment	Results	
61	Tinea.....	Hands.....	Vesicles.....	5 days.....	+	5 inject...	Much improved	
		Toes.....	Scaling.....					
62	Tinea.....	Hands.....	Vesic. and Scaly.....	2 months.....	+	9 inject...	Improved	
63	Tinea.....	Hands.....	Vesic. and Scaly.....	3 years.....	+	5 inject...	Improved	
64	Tinea.....	Hands.....	Vesic. and Scaly.....	6 weeks.....	+	24 inject...	Improved	
65	Tinea.....	Hands.....	Vesic. and Scaly.....	5 months.....	+	30 inject...	Much improved	
66	Tinea.....	Feet.....	Vesic. and Scaly.....	6 months.....	++	18 inject...	Much improved	
67	Prur. Vulv.	Vulvar Region.....	Vesic.....	6 months.....	+	7 inject...	Much improved	
68	Tinea.....	Left Hand.....	Vesic. and Scaly.....	1 month.....	++	15 inject...	Much improved	
69	Tinea.....	Feet.....	Vesic. and Scaly.....	3 years.....	+	34 inject...	Improved	
70	Tinea.....	Feet and Hands.....	Vesic. and Scaly.....	3 years.....	±	27 inject...	Much improved	
71	Tinea, Prur.	Vulvae.....	Vulvar Region.....	Vesic.....	1 year.....	+	9 inject...	Much improved
72	Tinea.....	Feet and Legs.....	Vesic. and Scaly.....	1 year.....	+	16 inject...	App. cured	
73	Tinea.....	Hands.....	Vesic. and Scaly.....	3 months.....	++	11 inject...	Imp. & Relapsed	
74	Tinea.....	Feet.....	Vesic. and Scaly.....	1 month.....	++	13 inject...	Much improved	
75	Intertrigo.....	Breasts, Axillae.....	Vesic. and Scaly.....	2 weeks.....	+	7 inject...	No change	
76	Tinea.....	Hands.....	Vesic. and Scaly.....	6 weeks.....	+	9 inject...	Improved	
77	Tinea.....	Hands and Feet.....	Vesic. and Scaly.....	1 month.....	++	43 inject...	Cured after 25 inj.	
78	Tinea.....	Right Foot.....	Vesic. and Pust.....	1 week.....	++	11 inject...	Much improved	
79	Tinea.....	Hands.....	Vesic. and Scaly.....	2 years.....	+	11 inject...	Much improved	
80	Tinea.....	Hands.....	Vesic. and Scaly.....	1 year.....	+	21 inject...	Much improved	
81	Tinea.....	Hands and Feet.....	Vesic. and Scaly.....	2 years.....	+	19 inject...	Feet cured Hands improved	
82	Tinea.....	Hands and Feet.....	Vesic. and Scaly.....	2 years.....	++	31 inject...	Practically well	
83	Pompholyx.....	Hands.....	Vesic.....	3 weeks.....	±	5 inject...	Much improved	
84	Tinea.....	Hands and Feet.....	Vesic. and Scaly.....	2 weeks.....	++	6 inject...	Much improved	
85	Tinea.....	Hands and Feet.....	Vesic. and Scaly.....	3 months.....	+	13 inject...	Better and Worse	
86	Tinea.....	Feet.....	Vesic. and Scaly.....	9 months.....	++	10 inject...	Improved	
87	Tinea.....	Feet.....	Vesic. and Scaly.....	6 years.....	+	14 inject...	Much improved	
88	Tinea.....	Hands and Feet.....	Vesic. and Scaly.....	2 years.....	+	18 inject...	Feet cured Arms improved	
89	Tinea.....	Feet.....	Vesic. and Scaly.....	3 weeks.....	+	27 inject...	Improved	
90	Tinea.....	Feet.....	Vesic. and Scaly.....	6 weeks.....	+	6 inject...	Much improved	
91	Tinea.....	Feet.....	Vesic. and Scaly.....	1 week.....	++	9 inject...	Much improved	
92	Tinea and Prur. Vulv.	Vulvae, Feet Groin.....	On Feet Vesic. and Scaly.....	5 months.....	++	12 inject...	Improv. on Hands	
93	Tinea.....	Hands and Feet.....	Vesic. and Scaly.....	4 months.....	++	19 inject...	Cured Feet Improv. on Hands	
94	Tinea.....	Feet.....	Vesic. and Scaly.....	6 months.....	+	15 inject...	Much improved	
95	Tinea.....	Feet.....	Vesic. and Scaly.....	10 days.....	++	16 inject...	No improvement	
96	Tinea.....	Hands.....	Vesic. and Scaly.....	2 years.....	±	16 inject...	App. cured	
97	Tinea.....	Feet.....	Vesic. and Scaly.....	2 weeks.....	±	10 inject...	Improved	
98	Tinea.....	Feet.....	Vesic. and Scaly.....	5 months.....	+	21 inject...	Improved	
99	Tinea.....	Feet and Hands.....	Vesic. and Scaly.....	1 month.....	+	5 inject...	Improved	
100	Tinea.....	Hands and Feet.....	Vesic. and Scaly.....	10 years.....	++	10 inject...	App. cured	
101	Tinea.....	Feet.....	Vesic. and Scaly.....	3 years.....	++	5 inject...	Improved	
102	Tinea.....	Feet.....	Vesic. and Scaly.....	2 years.....	+	16 inject...	App. cured Then Pruritis	
103	Tinea and Prur. Vulv.	Vulvar.....	Vesic.....	4 years.....	+	10 inject...	Much improved	
104	Tinea.....	Hands.....	Vesic. and Scaly.....	6 months.....	+	18 inject...	Cured, then 18 more inj. given	
105	Tinea.....	Hands, Feet and Nails.....	Vesic. and Scaly.....	2 years.....	++	13 inject...	Very much imp'd	
106	Tinea.....	Hands.....	(Previously had 14 treatments of X-ray (1/4) with no improvement) Vesic. and Scaly.....	6 months.....	+	15 inject...	Much improved	
107	Tinea.....	Feet and Anal.....	"	3 years.....	++	22 inject...	Much improved	
	(Had 8 X-Tinea.....		Developed Zoster after 20th injection of Trichophytin.)	1 year.....	+	9 inject...	Improved	
109	Tinea.....	Palms and Soles.....	Hyperkeratotic type.....	6 years.....	+	20 inject...	App. cured. Five more inj. given after	
110	Tinea.....	Feet.....	Vesic. and Scaly.....	1 1/2 years.....	+	7 inject...	Cured	
111	Tinea.....	Hands.....	Vesic. and Scaly.....	1 year.....	+	35 inject...	Alternately better and worse N.C.	
112	Tinea.....	Hands and Feet.....	Vesic. and Scaly.....	5 years.....	++	35 inject...	Not cured	
113	Tinea and Paronychia.....	Hands.....	Vesic. and Scaly.....	2 years.....	+	17 inject...	Improved	
114	Tinea.....	Hands.....	Vesic. and Scaly.....	6 months.....	+	13 inject...	Improved	
115	Tinea.....	Feet.....	Vesic. and Scaly.....	6 months.....	±	8 inject...	Improved	
116	Tinea.....	Hands.....	Vesic. and Scaly.....	6 months.....	±	9 inject...	Slightly improved	
117	Tinea.....	Hands.....	Hyperkeratotic and Fissured Palms.....	Many years.....	++	22 inject...	Slightly improved	

a case of trichophyten hypersensitiveness of the urticarial type. This would indicate that certain products of pathogenic fungi may be the cause of some asthmas and hay fevers as well as urticarias. The list of possible allergic manifestations that may be attributed to the presence of ringworm infections should also include certain eczematous reactions.

As a rule it was noted in our cases of tinea of the hands and feet that local reactions to the intradermal injection of Trichophyten would gradually diminish unless stronger concentrations were used on successive treatments. On the other hand it was found that if too strong a concentration were injected, a focal reaction might be produced. This may be associated with exacerbation of the itching and occasionally slight malaise. No serious reactions have been observed in any of the cases in this report. Care has been taken to inquire in each case as to whether there was a history of allergic disease such as asthma, hay fever, etc. In cases subject to hay fever or asthma, weaker dilutions were used; usually 1-100 or 1-50. Only one patient had an asthmatic attack as a result of the Trichophyten test, although several of our cases had symptoms of a mild hay fever attack following the preliminary injection. With subsequent injections these attacks usually subsided.

Physiological Explanation of Intradermal Therapy

The investigations of Mueller, 1925, have been carried out with the idea of determining the physiologic basis of resistance and to point to certain organs whose common functions were practically synonymous with resistance.

The functions of resistance are normally inherent in everybody, but during healthy conditions their activities are restricted to a minimum. When infectious conditions prevail evidence of this functional activity becomes apparent, i.e., leukocytes and antibodies are produced.

Experiments of Mueller, 1926, lead to the opinion that the entrance of bacterial excitants in the body causes a reaction involving chiefly two groups of organs:

1. The bone marrow system, which is the originator of the white blood corpuscles and probably the source of the carriers of specific resistance (such as agglutinins).

2. The involuntary nervous system, the conductor not only of the stimulation of the site of the infection to the bone marrow system, but also of the newly formed immunizing substances and leukocytes to the site of the infection.

The vasodilatation by the parasympathetic portion of the involuntary nervous system and the vasoconstriction by its sympathetic portion are, under normal conditions, in that state of regulatory equilibrium that is demanded by the nutri-

tive and functional synergism of the organs. We know of influences of various kinds, acting in the main on the body from without, which disturb this equilibrium by giving a preponderating influence to one or to the other of these two antagonists. Less known to us, however, are the *paths* of stimulation on which these impulses of the involuntary system operate and thus lead to changes in the equilibrium of the blood vessel tonus.

While the described skin stimulation is held in balance by the sympathetic nervous system in all vascular regions, with the exception of the site of injection and of the visceral area, this equilibrium is also missing at the site of inflammation because it is subjected to a constant overbalanced tonus of the local fibers of the parasympathetic nervous system. This overbalance of the parasympathetic tonus is further increased by the sudden stimulation emanating from the skin, and now there occurs the phenomenon that is described above as relating to the increase of leukocytes. The leukocytes in the blood stream are fixed along the walls of the blood vessels, later penetrating the walls and entering the bacterially endangered parts. We are not positive whether this penetration is due to chemotaxis or to impulses inherent in the leukocytes; whichever it may be, the fact remains that they are found in the tissues and in the excretion, where formerly they were absent.

Though leukocytes play an important part in all local processes, connected with infection and inflammation, they are produced in only one organic system, namely, in the bone marrow of the short bones (vertebrae, ribs, skuli) and in the short bones of the hands and feet. In times of great need, as for instance during acute general infections, such as pneumonia, leukocytes are also formed in the long bones of the extremities, which usually contain only fatty tissue. In studying leukocytosis and the activity of individual leukocytes and especially the cause of the appearance of large numbers of leukocytes of the polymorphonuclear type in such infected areas, an interesting problem presented itself. As far as human beings are concerned the well-known old theory of chemotaxis, first established by the botanist Pfeffer, is unsatisfactory. It may be that in test tubes, as well as under the abnormal conditions surrounding experimental work in animals, leukocytes will accumulate around germs, moved by chemotactic processes, but even so the question of the cause of leukocytic migration is not settled as long as the vessels are not injured, as is prerequisite to animal experimentation.

It is astonishing, indeed, that the intradermal injection of a non-irritating albumin does not cause the slightest pathologic change in the cells, and tissues surrounding the site of injection should cause a reaction in the entire circulation. This phenomenon consists not only of a local

change of the leukocytes in the vessels involved by the injection, but of a rearrangement of these cells in the entire circulation. Expressed in numbers, the exact loss of leukocytes to the peripheral circulation and their accumulation in the vessels controlled by the splanchnic nerve reaches from 50 to 75 million; these leukocytes are actually moved from one place to another. In discussing such a migration it must be taken into account that leukocytes are not stationary in the body, but rather that they are continually in circulation and that, normally, they are evenly distributed, an equal number of cells being found in equal amounts of fluid serum. It has been proved experimentally that within a period of one hour the total number of leukocytes does not vary so long as the individual keeps quiet and experiences no physical or mental excitement.

Rationale of Intradermal Therapy

The rationale of intradermic treatment has been firmly established, and it is based on definite scientific principles, viz: antigen-antibody combination and antibody stimulation.

In 1926 two of us (M. and T.) reported results obtained with this method of therapy in Sycosis. Barber and Foreman, 1931, recently reported similar good results in this extremely refractory disease, and they stated that no other method of treatment in their hands gave comparable results. It was their opinion that intradermal therapy was applicable to infections other than staphylococcal, e.g., with streptococci and the higher fungi. Goldsmith, in discussion of Barber's report, raised the question as to whether a positive intradermal test should be interpreted in these cases as evidence of lack of immunity, or of the presence of allergic antibody. His opinion was that there must be some kind of tissue or cell immunity in the skin itself independent of transmissible antibodies.

Scholtz, 1930, states that the employment of intracutaneous injections of very small doses of extremely dilute tuberculin solutions is more effective than subcutaneous injections in the treatment of skin tuberculosis.

Richter, 1930, using as a method of desensitization intradermal injections of specific antigens, has reported success in treating occupational dermatoses and cases of drug sensitization. Our own results with this type of therapy in some cases of occupational eczema, where the specific antigen was discovered, have been extremely satisfactory.

It is our opinion that careful regulation of the diet is a helpful means of assisting in the therapy of mycotic infections. Alleged failures in the use of Trichophytin are largely due to the technic of treatment. Our experiments confirm

the original ideas in regard to the handling of these cases.

Summary

Further investigations on a second series of cases suffering with mycotic-like eruption confirmed our earlier observations that a positive trichophytin test might be obtained in these patients. From these observations it appears that the extract finds ready application in differential diagnostic point of view. The observations are important in establishing the mode of procedure in treating eruptions sometimes closely simulate symptoms of other causes.

Analysis of the therapeutic results indicates that with a small number of treatments very satisfactory clinical findings are obtained. Emphasis is placed on the importance of regularity in treatment and also the necessity of maintaining concentration adequate to produce a local effect. Desensitization can only follow under certain circumstances.

Complicating skin eruptions must be treated on a separate basis. To do this the importance of a complete blood chemistry is urged. Analysis of the clinical findings indicate that at least 50 per cent of patients are apparently cured; 32 per cent are greatly improved; 32 per cent are somewhat improved and 5 per cent unimproved. In the last group, complicating eruptions were observed.

The average number of injections was 10, using a range of concentrations as indicated in the body of the paper. Turbid solutions should not be used under any circumstances for the reason that they are bacterially contaminated and contain alcohol used to sterilize the needle.

A follow-up of the first series of patients reported in 1931 showed that 93 per cent of who returned are now free from clinical eruptions; 26 per cent had mild recurrences and 26 per cent had mild recurrences and were found among the cured cases.

The average blood sugar for 200 cases was 90 mgs. per 100 cc. of blood as compared to 90 mgs. as our normal value (Hastings-McCormack method).

Various manifestations of sensitization to fungi are enumerated.

Results of vaccino-therapy by subcutaneous injections of polymycotic vaccines are summarized from reports of other investigators.

Mueller's explanation of intradermal therapy in general is discussed from the physiological point of view.

An attempt is made to explain the rationale of intradermal therapy as applied to mycotic infections of the skin, tuberculosis of the skin, syphilis, vulgaris and occupational eczema.

RUPTURE OF THE PREGNANT UTERUS AT FULL TERM WITH REPORT OF A CASE*

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ONE of the most alarming and distressing accidents that can befall a pregnant woman is rupture of the uterus. That such accidents occur, not rarely, is a matter of common knowledge among obstetricians. In searching the literature for the past ten years, it was possible to pick up references of numerous case reports describing this very dramatic, if not actually spectacular event in the life of the gravid female. The factors concerned in spontaneous rupture of the uterus, and the phenomena observed at the time of such accidents have been faithfully recorded in the standard modern text-books in this country and in Europe, and the actual cases described in various journals devoted to surgery, gynecology and obstetrics. These descriptions are well worth perusal by any who are interested in the subject. The majority of the reports have appeared in German medical literature, especially in those medical periodicals emanating from Berlin. Briefly, the causes to which this accident has been ascribed are as follows:

Causes associated with

1st. Mechanical impediment to passage of the child, as

- a. Transverse presentation.
- b. Pelvic deformity.
- c. Large size of foetus.
- d. Obstruction from fibroid or other tumors.

2nd. Without mechanical impediment to passage of child:

- a. Uterine tissue degenerations, as old Cæsarean section scars of the uterine wall, or other operation scars.
- b. Traumatism, as blows, falls, etc.
- c. Multiple pregnancies and thinning of uterine wall, due to frequent child bearing.

Symptoms:

The symptoms vary as to whether the rupture is complete or incomplete. When complete, rupture usually occurs suddenly and without warning. A sudden, sharp pain occurs in the abdomen, and symptoms of violent shock and collapse, with feeble and frequent pulse or complete absence of the pulse, cold hands and feet, vomiting, etc., supervene. The merest tyro in the art of abdominal examination can detect the physical signs, and a round, hard, movable tumor, the head of the foetus, may be felt by the hand in the mid line of the patient's abdomen, seemingly directly under the skin.

In incomplete rupture, where the peritoneum covering the uterus remains intact, the symptoms are less striking. While the wall of the uterus

may be broken through, the child will not have escaped completely into the abdomen, but will be contained in a stretched pouch of peritoneum of rather indefinite outlines.

It is not the purpose of this paper to enter into any prolonged discussion of the phenomena leading up to rupture of the uterus. Such phenomena are described in detail in every text-book on obstetrics, and are more or less familiar to every practitioner. Suffice it to say that either form of rupture of the uterus, involving any portion of the uterine wall above the cervix uteri, is an accident of the utmost gravity, whether it occurs during the progress of labor in a well conducted hospital or whether it happens to a woman doing her house work on a backwoods farm.

The prognosis depends upon the extent of the rupture, the amount of hemorrhage, the patient's general condition and ability to withstand shock. Formerly, in the older works on obstetrics, it was stated that one out of six cases survived, 83⅓% mortality. Modern surgery, in the treatment of these lamentable accidents, has reduced this terrible maternal mortality to about 26%. The foetal mortality, however, still remains high, it being a rare exception for the child to survive.

The treatment is surgical and requires immediate operation, as a major surgical emergency.

The following report presents some rather unusual features of a case of complete uterine rupture:

Case 1—Helen M.—White—Age 32—Housewife—German parentage. Married twelve years. Two previous Cæsarean sections had been done at full term, and one child was born at eight months naturally. The reason of the previous Cæsarean sections had been that she was a frail, slight woman with a justo minor pelvis.

She was taken ill at 11:00 o'clock A. M., November 9, while working about her house, with a sudden, severe, abdominal pain and vomiting. She was pregnant, and had expected delivery November 15th. Being alone in the house, she lay down on a lounge. Pain and fainting continued. At noon, her husband came in from his work, and medical aid was summoned. The family physician, residing several miles away, arrived at 2:00 P. M., and found her without pulse, countenance pallid, apparently dying from shock. A short examination determined what had probably happened. He was a man of energy and experience. He realized at once that he had to deal with a case of ruptured uterus at almost full term. At his request, a consultation and examination were carried out at the farm home. The diagnosis was unquestioned, the head of the foetus could be easily felt in the median line just

* Read at the annual meeting of the Seneca County Medical Society, at Willard, N. Y., October 12, 1931.

beneath the wall of the abdomen, and it appeared that the entire body of the child had escaped from the uterine cavity into the peritoneal sac.

An improvised stretcher was made from an ordinary household ironing board, upon which the patient was carried for a distance of about one quarter of a mile to a waiting automobile, and the patient was rapidly transferred, on the board supported on the backs of the seats, to the hospital. After a short abdominal preparation, by shaving and washing, she was placed upon the operating table, and 1,000 c.c. of normal saline solution slowly instilled into the right bicipital vein. The patient was conscious and rational. The heart sounds could be heard by stethoscope, but no pulse could be felt in either wrist. Hypodermoclysis was then resorted to. Saline solution being infused under the skin below each breast. This procedure was continued throughout the operation. In all, 2,400 c.c. of saline solution was used. Other assistants having arrived, it was decided to proceed at once with operation. Ether was administered, and a right median abdominal section made, incision being about ten inches long. Upon opening the abdomen, a vast quantity of mixed blood and amniotic fluid poured forth. The blood had clotted in the pelvis and in the renal fossæ. The fluid blood and amniotic fluid were sponged away, sterile soft towels being used as sponges. The dead child and placenta were free in the abdominal cavity, and were removed at once. The uterus was found to be split longitudinally from fundus to cervix, anteriorly. It was empty, well contracted, spread widely open, and in size and appearance it resembled very much a large, split muskmelon, about the size of the two closed fists. All the fluids having been removed, and the intestines packed off by large gauze pads, all bleeding was found to have ceased. It was decided to remove the uterus, which was done forthwith, using the technique of ordinary supravaginal hysterectomy. The left ovary and tube which were pathologic and, consequently, useless, were removed along with the uterus. A very long and diseased appendix was then removed. The abdomen was closed in layers without drainage. These operative procedures were easily and quickly performed as the abdomen lay widely open and complete relaxation was present. The condition of the patient upon removal from the table was

unchanged. No pulse could be felt in either wrist. One pint of saline solution, 5%, was injected into the rectum immediately after her return to her room.

Time of operation, 65 minutes.

Subsequent history.

November 10, 1928—T 102—P 140—R 24. Abdomen slightly tympanic. Voided naturally.

November 11, 1928—T 100.4—P 80—R 22. Patient's condition exhibited a marked reaction for the better. She expressed a desire to eat.

Further progress of the case was noted, as an uncomplicated, uneventful recovery.

Comment.

The striking features of this case were:

1st. The ability of the individual to withstand shock.

2nd. The evidence that the hemorrhage from the uterine rupture had ceased by natural uterine contraction before the opening of the abdomen.

3rd. Since the rupture had taken place through the scar tissue line of two preceding uterine incisions, it is strongly suggested that after one or more Cæsarean sections, that sterilization of the female is indicated. Authorities differ on this point.

Swift believes that while every case presents a separate problem, and that no woman should be sterilized on her first Cæsarean section unless there are definite indications of danger, other than the possibility of a second successive Cæsarean section.³

Holland in England has shown that the danger of rupture of the uterus in mothers who have been delivered by Cæsarean section is one to four labors.⁴

4th. The consensus of opinion in this class of cases would indicate that the maximum number of Cæsarean sections for any one mother should not be more than four, and that sterilization during any one of such major surgical procedures might be undertaken with perfect ethical propriety.

NOTE. From a considerable mass of literature pertaining to this subject, I have selected a few striking articles which are especially valuable for reference, which are arranged in the form of a bibliography below.

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THE EFFECT OF NOISE ON THE NERVOUS SYSTEM. A PLEA FOR OFFICIAL ACTION BY THIS SOCIETY TOWARD ABATEMENT OF THIS DAMAGING NUISANCE*

By LASALLE ARCHAMBAULT, M.D., ALBANY, N. Y.

IT is already several years ago that an anti-noise campaign was launched in the leading capitals of Europe and more recently in this country, but it is only within the last two or three years that the movement has become actually militant. Those of us who read the *Journal of the A.M.A.* surely must have been impressed with the huge amount of information that has come to us from abroad, under the heading of "Foreign Letters," regarding the intensive study of the noise-problem and the measures taken to combat this growing evil. Since 1927 I have taken note of at least 20 abstracts devoted to this extremely important question. While men belonging to every profession have long ago realized the pernicious influence of noise in its various forms, it is on the shoulders of the medical profession that plainly rests the responsibility of taking the necessary means to fully acquaint local government officials with the sinister effects of noise and urgently to demand that through adequate ordinances or statutes, the text of which local newspapers would be requested repeatedly to publish, they inform the public that noise abatement is one of the outstanding accomplishments that the municipal government actually intends to realize. Such steps have already been taken abroad by the British Medical Association (Noise Commission of London), the French Academy of Medicine (Committee on Noise) and corresponding medical organizations in Berlin, Vienna and elsewhere. In this country, the Health Department of the City of New York published in 1930 a booklet entitled "City Noise," representing the results of an extensive investigation carried on by the "Noise Abatement Commission" composed of prominent citizens and above all of some of the most eminent physicians in New York City. The revelations contained in this booklet, based not on mere conjectures and guess-work but on the most unassailable scientific methods, are simply appalling. They fully confirm the observations and conclusions already published by foreign scientific bodies.

It is generally held that the progress in the civilization of a race or country is to be measured not only in terms of mechanical, industrial, educational and scientific advancement but also in terms of the personality traits and behavioral characteristics of its inhabitants. Granting that this adage is correct, it is a sad commentary on the civilization of our own nation that we are becoming noisier each year and that the conduct of a large contingent of our population rivals the

primitive habits and customs of the original lords of our land, the red men of North America. The reciprocal jealousies and enmities of the various Indian tribes and the resulting war dances, howling feasts, brutal revenges and weird ceremonials of various kinds were no more inhuman or incomprehensible than are many practices and performances tolerated in the present generation.

I cannot possibly undertake the consideration of all the varieties of noise which collectively constitute a steadily growing menace to public health, this already has been done and well done by others. It is my intention in this paper merely to present to you the more important data thus far available regarding the actual effect of noise on the economy in general and on the nervous system in particular, and, further, to discuss certain varieties of noise, for the existence of which there is no legitimate excuse and which a wide-awake city government surely can suppress, if not entirely, at least in very large part.

EFFECTS OF NOISE

1. The effect of noise on sleep. It is universally admitted that the average individual requires from 6 to 9 hours of sleep in order to remain fit physically and mentally. The pediatrician knows that in infancy and childhood a much greater amount of sleep is absolutely necessary. Every physician has learned how important are rest and sleep in the case of expectant mothers, invalids, patients critically ill in their own homes as well as in hospitals. Finally comes the case of night workers such as: nurses, printers, railway employees, night-watchmen and others who can obtain sleep only during the day and in whom insomnia assumes particular importance in that it not only saps their vitality but jeopardizes their ability to continue their occupation. Professor Portier of Paris, an authority in physiology, has stated that "noise diminishes the recuperative value of sleep even though sleep is not interrupted for the brain continues to receive auditory impressions even though it does not analyze them." I have had more than once the occasion of verifying the correctness of Professor Portier's statement. While examining patients at their homes I have seen babies jerk and twitch in their sleep at the bark of a police dog or the continued tooting of an automobile horn, thus witnessing the birth, so to speak, of subsequent instability or neurosis. As a neurologist of more than 25 years' experience, I have had abundant struggles with the problem of insomnia and its relief. To be sure noise is not the only cause of insomnia but it constitutes nevertheless one of

* Read before the Medical Society of the County of Albany, April 26, 1932.

the most important factors involved in the case of persons whose means or occupation oblige them to dwell in the more congested tenement districts. We cannot all afford to live in the more quiet residential sections of the city or under the peaceful skies of suburban villages. Much as I detest to resort to drugs for these patients I do not hesitate to prescribe some of the milder sedatives and hypnotics in order to facilitate or procure sleep, being morally convinced that the judicious use of such medication in properly selected cases is infinitely less detrimental and demoralizing than the persistent insomnia which exhausts both the physical energies and the moral stamina of the struggling victim. Moreover it is a well known fact, although this particular aspect of the problem receives insufficient emphasis, that many people can, under the present laws, obtain these various drugs and hypnotics of their own accord and regulate the dosage themselves. I have even known otherwise honorable citizens who were impelled to have recourse to narcotics in order, as they themselves state, to stay on the job.

2 The effect of noise on brain pressure. At Bellevue Hospital, in the Department of Neurology, Dr. Foster Kennedy and his associates have carried out experimental studies of the effect of noise on the brain in patients having undergone decompression (for tumors, old skull injuries, etc.) with removal of the bone flap. By employing a cleverly conceived device, a part of which lay on the integument overlying the brain and the other, consisting of a recording needle that impinged on a revolving drum covered with carbon blackened paper, they were able to get accurate graphic records of the increased brain pressure occasioned by noises of various qualities and intensities. These studies showed conclusively that the brain is exquisitely sensitive to noise and that its reaction to this potential traumatism can be measured as accurately as the blood pressure or the sugar content of the urine.

3 The effect of noise on the cardio-vascular system. Many research workers in this field have studied intently certain groups of workers such as stenographers, bookkeepers and office clerks and have described as the direct result of noise, heightened pulse rate, heightened blood pressure, irregularities in heart rhythm, all of which simply means that the individual is attempting to overcome the distraction or obstruction by putting forth additional energy in order efficiently to acquit himself of his task. These observations lend support to the belief that the effect of continued noise is premature degenerative changes in the heart and blood vessels.

4 Effect of noise on mental effort and concentration. Noise seriously interferes with the efficiency of the brain worker. It lessens attention, renders proper concentration upon any set

task impossible, requires undue expenditure of energy or extra effort and imposes excessive fatigue. While this affects more especially school children, college students, teachers and brain workers in general, it has been shown that noise likewise adversely affects workers in the humbler walks of life, those engaged in various trades. Hence the high incidence of occupational strain and the occurrence of so called nervous breakdowns, instability, neuroasthenic and psychasthenic complexes and so on. Robert Armstrong Jones speaking for the Noise Commission of London states "It further believes that neurosis may be attributed to noises just as in the case of shell-shock. Unless something is done to check this evil, we may find ourselves deprived of a capacity for sustained work, clear thinking and energetic action which is the mainstay of civilized life." Sir Maurice Craig, the psychiatrist of Oxford, England, declared that the popular view that people should be able to get used to noise as to so many other things in life was a dangerous error and authorities the world over have admitted that to the busy brain worker the sick and the wakeful, noise is a serious menace to which adaptation may be totally impossible. Closing the windows implies inadequate ventilation and even this does not suffice in the case of professional men grappling with intricate problems.

5 Effect on hearing. Competent otologists have furnished unchallengeable statistics on the damaging influence of noise on the special sense of hearing and consequently on the progressive weakening of the worker's efficiency. It is known that there are more than 25 noisy trades whose workers suffer from industrial deafness. German observers consider that tinnitus aurium of some type or other dizziness and headache are positive evidence of direct lesion of the internal ear caused by noise and, in Berlin, deafness arising from noise is a compensable industrial disease. A British author believes that as our own cities become noisier occupational deafness will increase among printers, bus drivers, road breakers, traffic policemen and still others.

6 Finally, Laird and his co-workers at Colgate University have shown that the normal development of infants and young children is seriously interfered with by constant loud noises.

After a just appraisal of the foregoing data, what more proof do we need of the extremely detrimental effect of noise on the general health of the individual and on the functional integrity of his brain and special senses in particular? It is perfectly obvious that the noise evil has assumed such proportion that we can no longer ignore the necessity of uniting all of our resources in order to check its further growth and, if possible to substantially reduce its present volume.

The medical profession, the public health departments and the State and Federal Governments

have long ago recognized the importance of vigorously combating the ravages caused by physical ailments; nationwide and even international crusades have been organized against tuberculosis, cancer, syphilis, malaria, yellow fever, diphtheria, etc., the State of New York has voted a considerable sum for the purchase, collection and proper distribution of human immune serum in its fight against poliomyelitis. There has been therefore no negligence in the attempt to save life and minimize physical deformity but does not the mind deserve at least as much attention as the body? What purpose does a physically perfect organism serve if it be not directed by an equally sound and efficient mind? It has been shown conclusively that by interfering with sleep, causing dangerous variations in arterial pressure, overtaxing nerve energies, noise materially diminishes intellectual output, undermines the stability and resistance of the entire nervous system, and predisposes to various types of neurosis and psychoneurosis. Surely it cripples the mind just as severely as external violence or infection disables a joint or a limb.

As previously stated it is my purpose to discuss more especially certain types of noise which are, in large measure, preventable. Some forms of noise disturb us less than others either because of their rhythmical quality or because we have grown up with that particular variety of noise and have become accustomed to it. There are some types of noise such as locomotive or tug and steamboat whistles that one cannot well eliminate, particularly in times of heavy fogs, although there can be no question that some of it is totally unnecessary. As to Albany, we wanted a Port of Albany, we now have it and shall have to put up with whatever annoyance it has in store for us. As to the most exasperating noise caused by pneumatic drills and riveting, the time presumably is not far off when the ingenuity of man will supply us with less disturbing mechanical devices.

The outstanding cause of unnecessary noise is furnished by automobile horns, breaks and cut outs. The average automobile driver is intoxicated with the power of speed within his grasp, he itches with the desire of supremacy and owns the road. In order to clear his path, he mercilessly blows the horn, totally devoid of consideration for the rights of pedestrians or even for the infirmities of his fellowmen. To my mind he is the most accomplished barbarian of the present day. While it is granted that speed is permissible on the highway, it should not be tolerated within city limits. If we except the congested thoroughfares of the shopping district where traffic is so jammed that speed is a material impossibility, I do not hesitate to affirm that cars are commonly driven in other sections of the city at the rate of 30 miles and even 40 miles an

hour. If a horse were driven at a speed averaging a mile in three or four minutes, his driver would be labeled a maniac or a fiend and he would land in jail in no time. This very speed is in large measure responsible for much of the unnecessary blowing of horns and other sound signals. Another cause of this evil is the farcical brevity of the supposedly safeguarding yellow or amber light. The fact is that wherever Traffic Light Signals exist (and surely they are sufficiently abundant in our city), barely a two-second interval elapses in the shift from red to green or vice versa. This simply means that the channel is open at the same time for both autos and pedestrians and of course the pedestrian has not the ghost of a chance. It is obvious that the whole situation could be remedied, first by reducing the speed limit to 15 miles an hour within the confines of the city, which represents the limit rigidly enforced in Berlin, Germany, and, secondly, by lengthening the duration of the amber or caution light to at least 30 seconds or more as is actually the case in the city of Boston. This surely would protect the legitimate rights of pedestrians in general, of the lame, blind or otherwise crippled in particular and materially cut down the amount of totally unwarranted klaxon tyranny. At night there is absolutely no excuse for blowing horns at every corner, when traffic is so light and reasonable slowing down could avert almost every chance of a mishap. Another ignominious performance on the part of many autoists is to pull up to the curb of a given home and blow the horn until the awaited party opens the window or steps out of the house. This practice occurs right along, not only during the day but at all hours of the night. Why cannot the driver or some other occupant get out of the car and ring the doorbell? No, he is too lazy to do so and the fact that he disturbs or awakens the neighbors or perhaps a sick or invalid person gives him no concern whatever. Finally, the very quality of the sound emitted by automobile horns could with a little good-will be so modified as to become infinitely less objectionable. It seems that one of the main ambitions of producers is to put on the market ever more piercing and startling types of horns. It should appear obvious to all that low toned, melodious horns are quite as efficacious and reliable as those sounding high pitched and strident notes and surely decidedly less irritating.

Loud playing of musical instruments or the operation of phonographs and loud speakers before open windows not only at all hours of the day but far into the night represents another nuisance that is steadily increasing especially since the advent of the portable type of radio which enthusiasts carry around with them and turn on aboard trains, steamboats and even in hotel rooms. This form of noise is particularly in-

dulged in during the warmer months which actually constitute in our climate the greater half of the year. During this period moreover the Daylight Saving Time measure has succeeded in slashing one hour from the already short night so that it has become practically impossible to find quiet anywhere or at any time. This is simply another instance of selfish and inconsiderate behavior on the part of unneighborly neighbors. I well realize that this particular brand of noise cannot well be stopped by municipal ordinances and that it is largely a matter of developing higher ethical standards among the masses. Legislation can no more enforce good manners and principles of decency than it can the disastrous prohibition law.

I come to another variety of noise that could be suppressed without the slightest difficulty, I believe, by adequate municipal statute. I refer to the totally unwarranted and wanton disturbance occasioned by the hoarse yelling of newsboys parading the streets at all hours of the day and night for the purpose of selling extra editions. Granting that such a rude awakening would be not only pardonable but indeed imperative did it serve the purpose of warning exposed citizens of some possible impending disaster such as a hurricane, an earthquake or a rapidly spreading fire of colossal proportions, it assumes an entirely different complexion when one realizes that peaceful citizens are routed out of their sleep night after night by thunderous shouts of "extra, extra," almost invariably designed merely to acquaint us with the details of a raid on a speak-easy or disorderly house, a murder or criminal assault of some kind or heroic exploits of the Jack Legs Diamond variety. Surely we can well afford to wait until morning to be feasted with such degenerate and gruesome news at the breakfast table. Even the distressing Lindbergh incident that has brought sorrow to the heart of the entire nation provides no legitimate excuse for further victimizing our people. That such an unwholesome and ruthless practice should exist in a civilized community would be totally inexplicable were it not for two reasons, both of them very bad reasons, namely the greed of the newspapers on the one hand, the morbid curiosity of a very small contingent of the population on the other. That supplementary editions be peddled around during the day is bad enough but certainly no such privileges should be granted the newspapers between the hours of 10 P. M. and 7 A. M. From this standpoint the present freedom and immunity of the public press is a disgrace. In a circular recently issued by the Albany County Mental Hygiene Association, of which Dr. Lloyd H. Ziegler is president, a special section is devoted to abatement of unnecessary noise and mention is made of the desirability of enlisting the support of newspapers encourag-

ing them to discuss the noise evil. Before calling on the newspapers for help in educating the public, it is perfectly evident that the first logical step in our campaign would be to educate the newspapers themselves as they are among the very worst offenders. In the city of Paris all street shouting and loud signals are forbidden after 10 o'clock at night. Why cannot Albany Albany pursue a similar policy?

The latest addition to the organized noise producing forces is the airplane. This is not the place to discuss the unquestioned and manifold merits of this modern vehicle of transportation but the roaring, deafening noise it leaves in its wake is a most objectionable component of its activities. Why should not the airplane restrict its operations along established lanes of travel and why is it permitted to fly and manoeuvre mercilessly day in and day out over cities, towns and villages?

Finally come the exasperating and perfectly preventable orchestral performances of dogs and cats. The traditional feud between the dog and the cat, old as the world itself, requires no additional emphasis, and it is well known that the cat is largely responsible for the dog's bad behavior. It is probably true that owing to the cat's arboreal and acrobatic agility we cannot absolutely control the range of its migrations nor entirely escape from its nocturnal serenades and wrathful dialogues although much of the discordant symphony could be hushed if the average housewife, possessed of sufficient charity of mind, took the trouble to call the cat indoors at a reasonable hour of the evening. As to the dog, probably the most intellectual of all animals and certainly a most faithful friend of man, he has in recent years become almost the idol of our good people who have gone neither more nor less than dog mad. I hold no brief against the dog but I have a case against the owners of dogs who allow their animals to race about the streets and bark during hours after every passing automobile, carriage or individual, and those who deliberately run away on automobile trips or attend theatres and parties, leaving the dog for hours in the backyard not only during the day but until midnight and sometimes later. The result is incessant whining, howling and barking which renders all intellectual pursuit extremely difficult or impossible, awakens sleeping children and adults, tortures invalid or sick neighbors and injects poison into the life of a whole city block. Particularly obnoxious in this respect are police dogs with their wolf-like, terrifying notes. It is practically impossible to obtain any redress in such instances. The dog owners are entirely secure, they have a license to which in reality they are not entitled; they are totally indifferent to the suffering that they inflict on their neighbors and even on their own animals. The city is no

place to keep police dogs or other large dogs, they are confined within narrow quarters instead of being kept in the country where they could roam and ramble in peace. There is, in our community, the Mohawk and Hudson River Humane Society for the prevention of cruelty to animals, an organization to which I have given my support for many years, but we have no society for the prevention of cruelty to human beings. It is actually impossible to secure any lasting relief from this particular source of noise. I will not burden you with the recital of my own experience but will simply state that I have waged a losing battle for the last eight years and inform you briefly how the problem stands. You may seek help at the hands of the City Health Department or at police headquarters, you will be received most courteously and promised that something will be done. The barking ceases in large part for a week or so and then a relapse occurs. You again apply to the police who will tell you that it is a public health problem, which is quite correct, and the health authorities will contend that the matter pertains to the police and thus you are amiably rocked between the two departments. You then seek the opinion of a competent attorney who informs you that the only sure way of obtaining results is to have the situation aired in police court. If you actually attempt to carry out this suggestion, you will soon find out that it is practically impossible to get even a few witnesses to help you. People are afraid to go to court, afraid of reprisal on the part of the accused neighbor or held back by some influence or other. They prefer to endure the nuisance, no matter how bitterly they complain of it, than to face the ordeal of telling the truth before the properly appointed magistrate. Thus it is that the citizen's license to own a dog, even though the animal is seriously annoying any number of people, takes precedence over the word of reputable citizens. I know a dog fancier in Albany, a well-known and respected citizen, who told me that any dog could be trained and broken of its barking habit within a week. If such be the case it would be well for the City to stipulate certain conditions before issuing licenses right, left and center to dog owners or prospective dog owners and to see to it that such conditions are fully complied with. It should be a simple matter not to grant a license unless the owner can prove that the dog already is trained or agrees properly to train it at once and further agrees so to manage and care for the animal that it will not be a source of annoyance and disturbance to others. In Berlin police regulations on this particular point are very stringent; dogs are prevented from running around the streets between 11 P. M. and 7 A. M. and further must at all times be so managed that they do not disturb persons in the vicinity by their barking. Failure to observe these rulings results in removal

of the animal from the owner's premises to the control of the municipality.

I am well aware that the designing of a window to exclude as far as possible the noises of the street has received considerable attention abroad. Mr. E. T. Fisk, managing director of the Amalgamated Wireless, Ltd., of Australasia, has designed a new type of window which he asserts has an efficiency of 75 per cent or over in deflecting street noises. A number of these windows have been fitted to offices in Sydney and Melbourne and the device has been scientifically tested in Great Britain. Its construction is described in the *Journal of the A.M.A.*, 1932, March, 19th, p. 1004. Light and air are not obstructed but rain and dust are excluded. Obviously it will be a long time before this invention, provided it accomplishes all that is claimed for it, will have reached the phase in its history when it is both easily available and within the reach of everyone's financial means. In the meantime something will have to be done to remedy a situation which is steadily becoming more and more intolerable.

It is believed that sufficient evidence has been adduced to convince the medical profession that the noise evil constitutes a serious menace to the physical and mental integrity and consequently to the working efficiency of the individual, that a very considerable proportion of the noise is totally unwarranted and therefore preventable, and that it is the duty of the medical man to assume the task of presenting the problem to the local government and urgently request that suitable measures be instituted in order efficiently to remedy the situation.

As it is the capital of New York State, the City of Albany should welcome the opportunity of taking the lead in a State-wide noise abatement campaign. It should gladly accept the rôle of standard bearer in a movement designed to promote the physical well being, mental stability, and the industrial and intellectual efficiency of its inhabitants, thus giving powerful assistance to the public health department and tremendously increasing the range and importance of the latter's accomplishment. By judiciously enacting certain simple laws or modifying those already in existence and pledging itself adequately to enforce such statutes, our city government could give an example of courage, sagacity and humaneness which not only would redound to its credit but go a long way toward focusing the attention of the entire nation on its accomplishment and automatically start a spreading wave of reform in the interest of mankind.

To this end, I would respectfully suggest to the President of the County Medical Society that he forthwith appoint a committee of 3 or 5 members for the purpose of conferring with his Honor, the Mayor of Albany, regarding this vital problem of

noise abatement and submitting to him the main facts embodied and discussed in this communication or else a copy of the same so that he may have the opportunity of studying the problem in its entirety.*

Discussion by Dr. Lloyd H. Ziegler:

Dr. Archambault has presented in his lucid and convincing paper both the scientific and humanitarian reasons for noise abatement. I agree with everything he has said, and in my discussion can do little to add to the weight of his arguments.

That unnecessary noise has been regarded as a nuisance and a menace to health, especially mental health, is not new. Anti-noise societies existing for years in many European countries have obtained results. Most European cities are much quieter than our own. It is not entirely due to the greater number of automobiles which we have. Their street cars are built with quiet in mind. One hears no raucous, noisy newsboys on the streets. There are no loud-speaking radios blaring into their open streets. They have restrictions in many cities about auto-horns. Helsingfors, Finland, has reduced auto-horn blowing to almost nil. Children are not allowed to make all the noise they wish at any time of day or night.

There are very few hospitals even in the United States that are not protected by a quiet zone. If it is deemed essential for sick patients, it must be desirable for those that are well.

Noise abatement is a public health problem of vast magnitude. As our country got richer and richer in its orgy of mass production, it got noisier and noisier. Freight that used to go over railways now goes down our residence districts, carried by noisy, lumbering, and, many times, unserviced trucks, often at night so as not to be interfered with by daily traffic. It used to be the pride of an automobile manufacturer to make cars more and more quiet. This has given way to another craze for superlatives, but in recent years power and speed have been the chief ends. Power and speed have been attained at low cost by high revolution engines which hum and vibrate. The Klaxon has been brought out to keep the already mounting death rate (90 per day, due to automobile accidents) from going even higher.

In a recent survey of 25 of the largest cities of the United States, relative to public health measures to control noise, the officials of all realized the import of the growing noise problem. None

had a legal program anything like adequate. A few have educational programs which are inadequate.

From a scientific standpoint, I wish to add only one bit of evidence to the many given by Dr. Archambault in favor of noise abatement. It is the work of Watson¹ on conditioned reflexes in infants.

I. Watson maintains that the elemental stimuli which will bring out fear responses are:

1. Sudden removal of support.
2. Sudden loud sounds.

II. For a subject he used a child 11 months old that had lived in a sheltered environment.

III. The child on repeated tests was not afraid of a black cat, a white cat, a pigeon, a rabbit, or any of these including a dog presented in a very dark room.

IV. A white rat was presented to the child at the time a bar of steel was struck a loud blow behind its head. This was repeated several times. Later the child showed typical fear reaction when the rat alone was presented.

V. In subsequent trials it was found that the child showed fear reactions to a rabbit, a dog, a fur coat, cotton wool, and a man's hairy head.

An engineer² has said that "within a generation noise will vie with disease unless the same mechanical ingenuity that has called the mechanical robot of the age into existence shall also be able to endow it with a soul of quiet."

To further bring out the extent to which noise has grown in our cities, the Noise Commission of the City of New York has learned that there are many places in New York where a Bengal tiger could roar without being heard at a distance of twenty feet.

The timely suggestions of Dr. Archambault outline for Albany an opportunity to pioneer in this aspect of the public health movement. Physicians everywhere should do what they can to defend the sick and well from unnecessary noises. Of engineers much technical skill will be required in noise prevention. Newspapers may do a great deal to educate the public about the significance of this unsanitary condition. It has been suggested that manufacturing devoted in one way or another to noise reduction and abatement may be the next great stimulus to prosperity. The time has come when it will undoubtedly pay to be less noisy.

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A STUDY OF PRIMIPAROUS PATIENTS IN ACTIVE LABOR WITH UNENGAGED HEADS

By LOCKE L. MACKENZIE, M.D., NEW YORK, N. Y.

Some of the clinical material used in this study was obtained from the Second (Cornell) Division of Obstetrics at Bellevue Hospital, from the Manhattan Maternity and Dispensary, from the obstetrical service at the New York Polyclinic Hospital, and from the John E. Berwind Maternity Clinic.

Read before the Section of Obstetrics and Gynecology at the New York Academy of Medicine.

PPRIMIPAROUS labor usually begins with the head engaged in the pelvis. If it is not so engaged, one is always faced with the problem of determining the reason and subsequent treatment for this lack of engagement.

Most text books state merely that disproportion or deflexion is the reason for this condition, and that the head normally descends into the pelvis before the onset of labor. Actually, this is not always true, and it was with a desire to clarify this point that the present study was begun about four years ago. Since that time it has been possible to collect this series of 50 patients both in clinic and in private practice. The exact incidence is unknown but it is very small, these patients having been seen personally during the observation of several thousand deliveries. This paper does not concern itself with the treatment of unengagement, but is rather confined to the ætiology and the results.

It is necessary to define as exactly as possible what is meant by an unengaged head, and by active labor. By the former is meant a head that is floating—that is, it is freely movable by abdominal palpation above the pelvic brim, and not merely fixed in the inlet and a little movable by bimanual palpation or by Pawlik's grip. The definition of active labor is more difficult, as it is always subject to personal interpretation. However, it is understood that the patient is having hard, rhythmic pains of no greater periodicity than five minutes. False labor was excluded by progressive cervical dilatation and thinning of the lower uterine segment.

Each patient was studied from 8 points of view to be taken up in detail in the next section. The information was tabulated, and, when amenable, averaged.

1. Age.

The average age was $23\frac{1}{2}$ years. The oldest was 35 years of age and the youngest 16. One (2%) was 35, while 7 (14%) were between 30 and 35 years old.

2. Gestation.

The term was calculated by the menstrual history. The lowest term of gestation in this series was 36 weeks (2 cases), and the highest was 44 weeks (1 case). The average was $40\frac{1}{3}$ weeks. The slight prolongation of gestation may be accounted for by the fact that the head was not in close contact with the cervix and therefore did not materially aid in effacing the lower segment.

3. Duration of Labor.

The average duration of labor was $22\frac{3}{4}$ hours. The longest labor was 47 hours, and the shortest 5. Nineteen patients (38%) were in labor 24 hours or more.

4. Condition of the Membranes.

In each case intact or ruptured membranes were noted. In 1 case this information was unknown. Thirty-five (70%) had intact membranes, and 14 (28%) had ruptured membranes.

5. Delivery.

The method of delivery was by Cæsarian section in 12 instances (24%), and from below in 38 (76%). Of the latter 30 (78%) were spontaneous, 2 (5%) by low forceps, 5 (12%) by mid-forceps, 1 by version and breech extraction, and 1 by craniotomy. As this series includes almost all the cases of badly contracted pelvis, the Cæsarian incidence is low.

6. Weight of the Baby.

The average weight of all the babies was almost exactly 7 pounds (3175.7 Gms.). The largest baby was 9 pounds 4 ounces (4195.7 Gms.), while the smallest weighed 3 pounds 6 ounces (1540 Gm.). Three babies were lost—one a macerated stillbirth delivered spontaneously; one a dead baby delivered by craniotomy; and the third a baby delivered by version and breech extraction. The third baby had been dead in utero for about 3 days, the cord being found 4 times around the neck causing a posterior face presentation.

7. The Pelvis.

Pelvic measurements varied greatly. The type of pelvis was estimated by both external and internal measurements. Seventeen patients had ample pelves. Of these 14 babies were delivered spontaneously, 1 by low forceps, 2 by mid-forceps, and 1 by Cæsarian section, there being 1 case of twins. Thirteen women had simple flat pelves. Of these 9 were delivered spontaneously, 1 by version and breech extraction, 1 by mid-forceps, and 2 by Cæsarian section. Three patients had a flat rachitic pelvis, and all were delivered by the abdominal route. Generally contracted pelvis was noted 11 times, and here 5 babies were delivered spontaneously, and 1 each by craniotomy, low forceps, and mid-forceps, and 3 by abdominal section. One woman had an absolute contraction (D. C. 7 cm.) and a generally contracted rachitic pelvis and was delivered by Cæsarian section. Finally, in 5 patients who had funnel pelves, delivery was spontaneous in 2, accomplished by mid-

forceps in 1, and by Caesarian section in 2. Some type of pelvic contraction was present in 60% of the cases.

8. Race and Nationality of the Patient.

As race and national characteristics might influence this study, these factors were investigated. It was found that 28 patients were American born—among them 8 negroes, while 22 were foreign born, these coming from 8 different countries. Of the 8 negroes the incidence of Caesarian section was 50%, but 7 of these women had contracted pelvis.

Discussion.

It should again be emphasized that this study was not undertaken in order to suggest any specific treatment for unengaged heads, as this obviously varies with the cause. The most frequent cause in this series seemed to be intact membranes with copious fore-waters. Often the head did not engage until the membranes were ruptured and then it immediately descended into the pelvis.

In a smaller number flattening of the inlet was a factor preventing engagement, and here it made no difference whether or not the membranes were intact. A few cases were encountered where an unusually large head did not engage in an otherwise normal inlet. X-rays might be valuable in such instances.

Posterior position has previously been thought to contribute toward the frequency of non-engagement of the head. However, it is felt that many heads engage in otherwise normal deliveries with the occiput posterior, and while this may be a factor in delaying descent in the mid-pelvis, it was not believed to play any part in the head entering the superior strait.

Deflexion and asynclitism may readily cause floating heads and in this series 2 face presentations were encountered. Neoplasms impinging on the pelvic inlet may also prevent engagement; none were found in this group. Placenta prævia—another factor—was noted 3 times. Weak abdominal musculature with pendulous abdomen may be one of the few reasons for this finding which is at times amenable to antepartum correction by the proper use of support and exercise.

Whether or not the cervix per se plays a fre-

quent role in the causation of floating heads may well be considered. Except in those cases where there is scar tissue due to previous operation or disease or where there is a malposition or presentation it was not believed that the cervix prevented the head from engaging.

Among other causes short cord should be mentioned. This may be an actual shortening or an apparent one as was the case in 1 patient in this series where the cord was wound about the neck 4 times, converting the presentation into a face.

The unengaged head in a primipara, even though she be in active labor, does not necessarily call for operative intervention. The majority of such patients deliver, or can be delivered, from below. The rationale of therapy depends in each case upon the causative agent and this must be found by studying a number of widely divergent factors.

If it is possible to indicate the type of patient in which this syndrome is likely to be found, this study seems to show the following: She is usually in the early twenties, only a few elderly primiparae having been noted; the term of gestation is a little prolonged; generally the membranes are intact; labor is prolonged beyond the average time; measurements indicate that the pelvis tends to be of the simple flat type, although there were a notable number having no contraction whatsoever; the weight of the baby is generally less than average.

Summary.

A group of 50 primiparae in active labor with floating heads has been reported, and various facts as to each patient, her labor, the delivery, and the baby are detailed.

When this condition presents itself it is necessary to estimate carefully the type of pelvis, the condition of the membranes, the presence or absence of some accidental factor preventing engagement, and to be sure that there is no malpresentation.

Conclusion.

Primiparae in active labor with unengaged heads, even though no reason may be found for lack of engagement, can often be delivered from below.

ANCIENT HEBREW MEDICINE

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THE Talmud of the Hebrews consists of extensive literature faithfully describing the knowledge, laws and customs of the Hebrews from Ezra to the sixth century of the present era. Basically, this work has two major divisions: The Mishna (text) and Gamara (commentary). The

commentary best known today had its origin in the Babylonian rabbinical academies at Sora, Nehardea and Pumbedetha. The collection and subsequent publication of this commentary is attributed to R. Ashi, Rabina and Jose in the sixth century.

The commentary consists of lengthy interper-

tations and rabbinical arguments concerning statements in the Mishna which seem to require clarification. Many of these discussions digress far from the topic under consideration and entail reference to medicine, law, botany and astronomy.

In the Middle Ages, several efforts were made to systematize and abbreviate the Talmud for purpose of popular reference. The most successful attempt resulted in the appearance in 1567 of the Shulchan Aruch (Code of Hebrew Law). The tone of the code on a whole is conservative, in striking contrast to the occasionally fantastic opinions registered in the Babylonian commentary.

The Bible itself was the primary authority, and a relevant reference to the Old Testament was the most conclusive argument in Talmudical discussion.

Privileges of the Physician

The Kitzur Shulchan Aruch (Code of Jewish Law, Chapt. CXII) leaves no doubt as to the importance of the Physician: "The law has granted the doctor the privilege of healing. . . . Therefore the sick person should not rely upon a miracle, but is in duty bound to act according to worldly custom and call in a doctor to heal him. . . . He who avoids calling the doctor is guilty of two faults: In the first instance of transgressing the rule forbidding one who is in danger to rely upon miracles; and the other is that he manifests presumption and pride in depending upon his righteousness to cause him to be healed in a miraculous manner. It is the religious duty of the doctor to heal. . . . If he avoids doing so, he is guilty of bloodshed."

Further, writes Joshua, son of Siroch: "Honor the physician with the honor due him, for the uses ye may have of him. . . . In the sight of great men he shall be in admiration. . . . The Lord hath created medicines out of the earth and the wise will not abhor them. Give place for the physician. . . . let him not go from thee, for thou hast need of him."

Reference to therapeutic abortion is found in CLXXXIV of the Code: "When a woman is in parturition with great travail, the doctor is permitted (in a critical case) prior to birth, to sever the embryo with instruments or with medicine, for if it had not come forth, it is not accounted as a living soul; and it is permissible to save the mother by sacrifice of the embryo. . . . but if it protrudes its head, then it must not be touched, for one living soul must not be sacrificed for another."

False modesty is deprecated (Code CXCI): "A physician is permitted to let blood and to feel the pulse or any other place of a woman, even if she be married, even the pudenda, as is customary with physicians, since he does not do so in a sensual and immoral spirit, but is merely following his profession."

Miscellany

Health and disease were of heavenly origin ("I kill and I make alive; I have wounded and I heal"—Deut. 32, 39). Hebrew laws were to be followed implicitly, but could be set aside when illness demanded it (with the exception of the laws dealing with idolatry, adultery and murder). The Biblical text sanctioning deviation from the law in the interest of the sick was the following: "Live through them (the laws), but do not die through them (Lev. 18, 15).

Tanneries and cemeteries could not be built within 50 cubits of a city. Military sanitation is discussed in Deuteronomy (23, 9-14). The presence of diphtheria was announced by the warning blast of the shofar (ram's horn).

Leprosy is discussed in Leviticus 13, 23: "When a man shall have in the skin of his flesh a rising or a scab or a bright spot . . . and if the bright spot be white and not deeper than the skin . . . and the skin be not turned white . . . then the priest shall shut up him that hath the plague for fourteen days, and behold if the plague be diminished, . . . and if not spread in the skin . . . it is a scab, and he shall wash his clothes and be clean. But if the scab spread abroad in the skin, . . . it is leprosy."

And in 13, 45-6 (ibid) we read: "The leper in whom the plague is, his clothes shall be rent, and the hair of his head shall go loose . . . and he shall cry: 'Unclean, unclean!' . . . and he shall dwell alone without the camp."

The birth stool is mentioned in Exodus, 1, 16, and bandaging in Ezekiah 30, 22. The medicinal value of figs is described in Isaiah 38 (1-8): "For Isaiah had said: Let them take a lump of figs and lay it for a plaster upon the boil and he shall recover."

Sweating, sneezing and movement of the bowels were regarded as favorable omens in the progress of a disease. Baas tells of onions in the treatment of worms, milk sucked directly from the teat of a goat for the relief of dyspnea, wine and pepper for stomach disease, massage with broth for the relief of sciatica.

Perspiration was considered toxic in character, and hands which had come in contact with sweating parts were to be scrubbed thoroughly. Leeching and cupping were employed generally. Venesection was exceedingly popular and Mar Samuel Yarhevai is said to have advocated routine venesection once in 30 days (Shab. 129b.).

Sleeping potions were advocated for anesthesia. Crutches are mentioned (Shab. 65a.); edges of old wounds were freshened to facilitate union; artificial teeth were fashioned of hard wood, gold or silver, Shab. 65a.).

Some of the common drugs were acacia, wormwood, myrrh, saffron, cumen, aloes, citron, henbane, juniper, lettuce, flax, mandrake, olives, cas-

tor oil plant, pomegranate, antimony, charcoal, lead, bronze, copper and lapis lazuli.

From the Shulchan Aruch (Chapt. XXXII) we quote a few rules of health: "He who is desirous of preserving his health must recognize the emotions and take care of them and these are: Joy, worry, anger, fright. . . . One should be in good spirits and joyous to a moderate extent, because this state causes increase of natural warmth, improved digestion and excretion, strengthening of vision and the power of reason."

"Moderate sleep is good for physical health, from the viewpoint of rest and improved digestion. Too much sleep is injurious, because the head becomes filled with gases . . . and causes a great deal of injury to the body. . . . When one sleeps, his head should be higher, because it helps the food come down from the stomach and the gases that come up in the head will be diminished."

"One should take a bath regularly every week . . . one should wash his entire body with hot water, then with tepid water and finally with cold water."

Food and Digestion

The physiology of digestion is covered in most interesting fashion in the Shulchan Aruch (Chap. XXXII). Some of the most fascinating passages follow: "The Creator granted man and all living beings the natural warmth which is life itself, because if the natural fire of the body should be quenched, then life ceases. This warmth is maintained by the food which man eats; just as in the case of a burning fire, if wood is not added continually, it will be quenched entirely. . . ."

"The food is ground between the teeth and becomes mixed with the juice of the saliva and is reduced to slags. From that point it goes down into the stomach where it is likewise ground and mixed with the other juices, the juice of the stomach and the juice of the gall. . . . It is boiled by means of the heat and the juices and thus becomes digested."

"Out of the pure parts (of the food) the limbs are nourished and life of man is sustained, and the impure (elements), which are unnecessary are driven to the outside. . . ."

"Easy digestion is possible when the food is not too excessive in amount, and not too indigestible in quality. For when too much food is eaten and the stomach is full, digestion is difficult for the reason the stomach cannot spread out and shrink properly and naturally, and ground the food as it should be. It is very much like fire, if too much wood be placed on it, it will not burn well. . . . Therefore the man who is desirous of preserving his physical health must take care to adopt the golden mean in eating depending on the nature of his body. . . ."

"On hot days the digestive system is weaker on

account of the heat, therefore it is proper that the portion of food on hot days should be less than on cold days . . . and the limit has been established that in the summer one should eat only two-thirds of the amount he eats in the winter. . . ."

"Before a meal one should have some exercise by walking or at work until his body becomes warm, concerning which is written, 'With the sweat of thy brow shalt thou eat bread' (Gen. 3. 14), and one should loosen his belt before eating and while eating should be seated or recline on the left side, and after the meal he should not move about too much. He should not promenade or tire himself out after the meal, neither should he take a nap immediately after the meal, before the expiration of two hours, so that the gases should not enter his brain and cause him injury."

"Men different in temperament, some are hot, some cold, some medium. Food differs also, and he whose temperament is medium should also partake of food which is medium. But one whose temperament is not medium should eat food which is a trifle reverse to his temperament. For example, he whose temperament is hot should avoid hot foods, such as spices and balsam plants and eat only food which is cool and somewhat fermented. . . . Food should be prepared in accordance with season and locality; in summer one should eat cooling foods, and also a little of fermented foods, but in winter one should eat heating foods. Similarly, in a cold climate one should eat heating foods and in a warm climate, cooling foods. . . ."

"In general, a healthy and strong person should eat twice a day, and the feeble and the aged should eat a little at a time and several times a day, because excessive eating at one time weakens the stomach. He who is desirous of preserving his physical condition should not eat before the stomach is absolutely empty of previous foods. The ordinary time for the digestion of food for people who are healthy and eat moderate foods and have moderate exercise is six hours. It is best to omit one meal during the week in order that the stomach may rest and its digestive powers strengthened. . . . One should first eat light foods which are easily digested; for instance, fowl meat should be eaten before beef. . . . Since digestion begins by grinding the food with the teeth and by intermixing it with the juice of the saliva, one should not swallow food without mastication, because digestion is difficult when left to the stomach alone. . . ."

"Regarding liquids, water is the natural drink and is healthful. . . . It preserves the moisture of the body and hastens the expulsion of waste matter. . . . Cool water should be preferred, because it aids digestion more than water which is not cold. . . . One should be careful not to drink cold water when tired and weary, because the fat of the heart

is hot and likely to become dissolved. . . . One should not drink water before a meal because the stomach becomes cooled off and will not digest the food properly. . . ."

"A man should endeavor to keep his bowels lax. . . . serious disease is more likely to ensue when an individual is constipated."

Commentary Medicine

Passages of medical interest are only occasional in incidence in the *Gamara* (Talmudical Commentary) and occur where their mention seemed necessary to elucidate or expand the *Mishna* (Text).

The following abstracts are quoted from the *En Jacob* (Agada of the Babylonian Talmud):

R. Juda quotes Rab: "The Holy One . . . created not one single thing in vain. He created the snail as a remedy for the scab of a camel; the fly for the sting of the wasp; the gnat for the bite of a serpent; the serpent itself for curing sores of the head. The remedy is prepared by boiling together a black and a white member of each species for application to the affected part."

Raba ben Samuel quotes R. Chiya: "Avoid harm by eating salt after each meal and drink water after every drink."

Baratha continues: "If a man drank every drink but water and ate every food but salt, he would be afflicted with a foul mouth odor during the day and croup during the night."

R. Mari quotes R. Jocha: "He is who is accustomed to eat lentils once in 30 days will be free from sickness; but daily use is undesirable because it is productive of a foul mouth odor. . . . Further, mustard taken once in 30 days prevents illness, but daily use is likely to affect the heart."

R. Chiya ben Ashi quotes Rab: "The man who accustoms himself to small fish will be free from a stomach sickness; moreover, his entire body will be strengthened."

R. Janai quotes Rab: "The egg exceeds in food value anything its size." Rabbin adds that a soft boiled egg is better than six ounces of fine flour. R. Dimi states that a soft fried egg is better than six ounces of flour and a hard fried one is better than four ounces of flour.

The Rabbis taught the following: "A milt is good for the teeth but not for the stomach; vetch is bad for the teeth but good for the stomach. All raw vegetables make the face green and all unripe things affect men. Every living thing eaten alive strengthens life; cabbage is a nourishing food. Beetroot is good for use in medicine, but woe unto the house where the turnip enters!"

"If one eats and does not walk four cubits, his food rots away, and causes a foul odor from the mouth. He who must ease himself and eats before doing so is like a stone which was heated upon its ashes; this is likely to produce a foul odor from the body. Washing without oiling one-

self is like pouring water upon a barrel. Washing in warm water and not drinking anything hot is like heating a stove from without and not from within. Washing in warm water and not having gushed with cold water is like an iron which was put into the fire but not plunged into water afterwards (to harden it)."

Medical Superstitions

No Hebrew literary work reveals popular ancient superstitions as well as the *Haggadah*. The question naturally lends itself—What is the scope and status of the *Haggadah*? Darmesteter answers it as follows: "In the immense field of the *Haggadah* (embracing history, legend and varied information of scientific character) the Oriental mind unfolds in all its wealth and fullness the beliefs, ideas and sentiments that animated the (ancient) Jewish, indeed the Asiatic world. . . . In this treasury lie heaped up the noblest . . . as well as the most fantastic thoughts that ever have crossed human brain. . . ." The *Haggadah* lacked legal and religious significance and many of its teachings were denounced.

The prolific imaginative Oriental mind found it quite easy to attribute the ills and misfortunes of mankind to the mischievous and malevolent designs of invisible spirits.

The *Haggadah* relates bizarre accounts of demons who have wings and fly from one end of the world to the other, eating, propagating and perishing, even as men do (Hag. 166).

Among the demons responsible for disease were the following: *Shabriri* (demon of blindness; *ruah Zeradah* (spirit of catalepsy); *ruah Palgah* (head-ache); *ben Nefilin* (epilepsy); *ruah Kardeyakos* (melancholia); *ruah Eshata* (fever).

An interesting description is given of the death-inflicting *Keleb Meriri*: He has the head of a calf with one revolving horn in the middle and an eye on his breast and his whole body is covered with scales and hair. Whoever sees him during the period of his reign (from mid-summer noon the 17th of Tammuz to the 9th of Ab) falls down and expires.

Shabriri, the demon of blindness, hides himself in water at night, hence the following warning: Do not drink water at night. The demon *Shabriri* is to be feared; he blinds those who drink. If, however, you are thirsty and must drink, awaken your companion and say, "Let us drink together." The demon will then remain quiet. But if you are alone and must drink make considerable noise with your pillow and repeat a magic formula (supplying your own name): Thou so-and-so, son of so-and-so thy mother has told thee: "Beware of *Shabriri*, *briri*, *riri*, *iri*, *ri*, *i*." The similarity of the latter part of the incantation to the *Abracadabra* of the Romans is noteworthy.

The Bible tells us of another method of driving

forth a demon (Samuel 16, 14-23): "But the spirit of the Lord departed from Saul and an evil spirit . . . troubled him . . . and it came to pass . . . that David took a harp and played with his hand so Saul was refreshed and well and the evil spirit departed from him."

Superstition probably prompted R. Huna to require the following in his treatment of malaria. Seven thorns from seven pine trees, seven splinters from seven beams, seven pegs from seven bridges, seven cinders from seven ovens, seven grains of dust from seven door pivots, seven kinds of pitch from seven ships, seven caraway seeds and seven hairs from seven old dogs.

R. Jochanan relates the following: "Against a burning fever take a knife made entirely of iron and tie a white hair to it and on the first day cut a notch into a thorn while saying the following verse from Exodus: 'The Angel of the Lord appeared unto Moses. . . .' The next day incise the thorn again and say: 'The Lord saw that Moses turned

aside to see.' The third day return to say: 'God said to Moses: "Draw not night hither." That done, bend to the ground and say 'Bush! It is . . . because thou art the humblest of the trees that the Holy One . . . has made His glory descend before thee. So may the fever which is in me flee before thee. . . .'"

Abajia offers an unique remedy in his statement that three madder-colored threads worn about one's neck are sufficient to halt the progress of disease, five possess distinct curative effect and seven safeguard the wearer from spells. "Yes," responds contemporary R. Aha bar Jacob, drily, "this is true, provided that the wearer of the threads sees neither sun, nor moon, nor rain, and hears not the sound of iron, nor that of the forge, nor the crowing of the cock."

The latter statement, as well as many others readily available, clearly indicates that in ancient times, as well as now, superstitions failed to gain general acceptance.

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ADVANTAGES OF USING 16 MM. CINE-KODAK SUPER-SENSITIVE PANCHROMATIC FILM IN MAKING SURGICAL MOTION PICTURES

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Read before the Society of Motion Picture Engineers, Tuesday, October 6, 1931.

THE application of motion pictures to the general field of education is already receiving thoughtful consideration. The introduction of motion pictures as a method revealing operative procedures for the training of doctors is not expected ever to become of commercial importance. It is believed that this is an instance where values greater than economic assets must be considered. Human life, personal comfort, and familial advantages are all dependent on the results of any major surgical operation. No one of us is immune from these hazards.

Not all branches of surgery lend themselves readily to the use of motion pictures in the teaching of surgical technique. It follows, therefore, that care should be taken in the selection of the field chosen for our initial efforts, lest moving pictures be censured when

in reality the fault lay in the mind selecting the subject.

Individual patients present wide variation in the same condition which requires surgical treatment. Each surgeon may agree in principles governing operative procedures but differ in methods of execution. The method by which moving pictures are to be made available for the teaching of surgery cannot, therefore, be the same as that which is represented by Hollywood in the field of entertainment. Honest effort in this direction has already failed at the cost of several hundred thousands of dollars, chiefly because these two facts were not considered of great importance in relation to the outcome of the undertaking.

Because of these prevailing conditions our course is, for the present, well defined. It should be directed toward the solution of the

problems confronting the individual surgeon interested in the application of moving pictures to the problems of surgery.

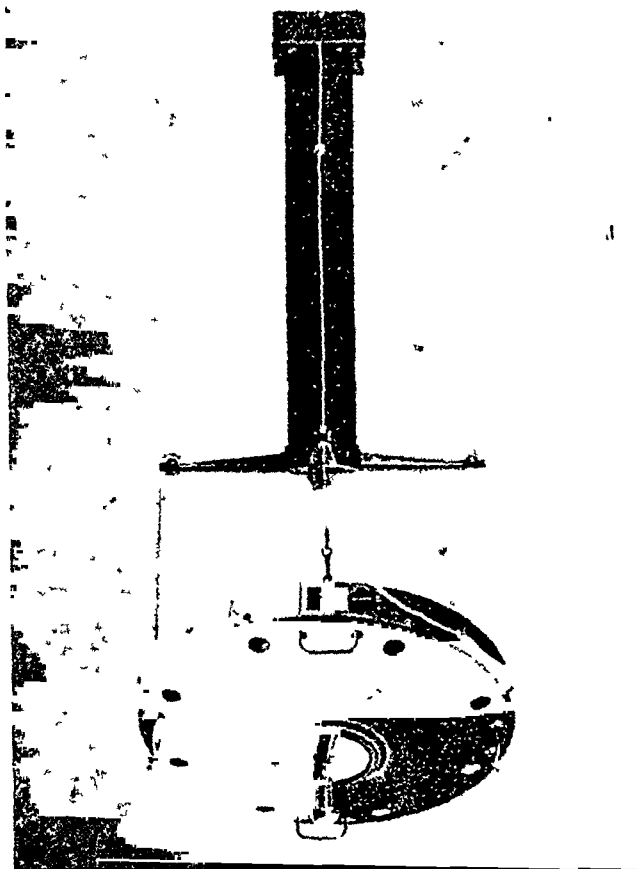


FIGURE 1.

Bausch & Lomb Operating Room Lamp.

In this branch of motion picture photography, expense and essential technical skill at one time combined to retard progress. The advent of 16 mm. film and the reversal process relieved the first of these. The simplification of 16 mm. cameras, lenses, and the development of compact and efficient lighting equipment lessened the necessity for special training.

With these advantages embraced, other objections were made most evident. Chiefly among these was the reproduction of the operative field, which was always reddish in color. Panchromatic film offered an improvement, being slightly more sensitive to blue and green than to red, as compared to old regular film which was less sensitive throughout this range. While the red areas were rendered more accurately than before, there was still considerable difference between the operative field and the photographic reproduction on the screen.

The second important difficulty in making such pictures was the size and inconvenience

of using artificial lighting equipment. Lighting units consisting of three 500 watt bulbs were not readily accepted by the average surgeon, and the necessity of having an $f:1.9$ lens camera limited somewhat the field of surgical moving pictures. For those few who had lighting units available, the heat, together with the danger involved in meeting the demands of asepsis, prevented the close proximity of these lamps, camera and operator to the operative field to make clear, well-defined motion pictures.

Recently a new emulsion for amateur use, called Ciné Kodak supersensitive panchromatic film, has been placed on the market. While this

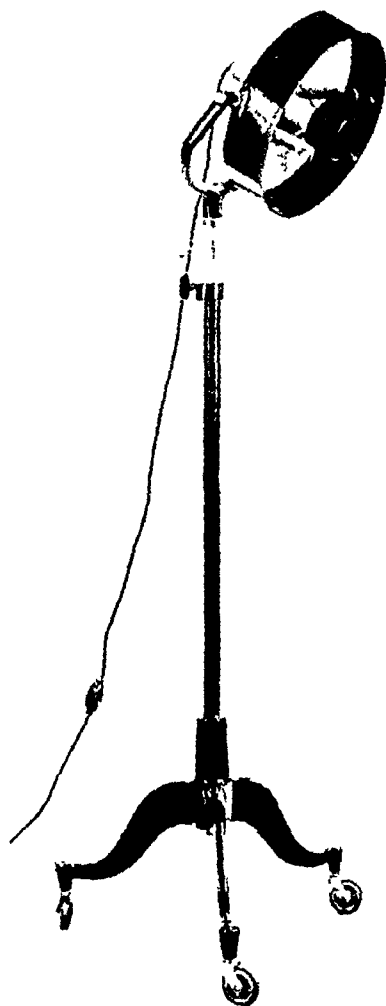


FIGURE 2.

Bausch & Lomb Floor Lamp.

film is twice as fast to daylight as panchromatic film, its chief advantage lies in its great speed when exposed to artificial light, to which it is three to four times faster than is the regular panchromatic film. Super-Sensitive film

is especially sensitized in the red portion of the spectrum so that most of its speed lies in the area in which artificial light is richest.

While this emulsion was designed for high speed work in motion picture studios where artificial lights are used almost exclusively, it was later adapted to the 16 mm. reversal process to enable amateurs to make pictures with low intensity lamps. It so happens that its characteristics are ideal for the making of surgical motion pictures.

Probably the most important advantage of this film from an economic point of view is the fact that it is no longer necessary to use any additional artificial light. The lights which are installed over most operating tables are sufficient for the making of good motion pictures. With the light found in most hospitals, it is possible with Super-Sensitive film to expose at diaphragms $f:3.5$ or $f:4.0$.

It is also possible with fast film and regular operating room lighting to use telephoto lenses. It can readily be seen that this is a very important factor, as heretofore with a one inch lens it has been necessary for the operator to hold the camera from three to four feet from the operative field in order to get an image the same size as could be obtained an image size which would show sufficient detail to be recognizable on the projection screen. With a three inch lens six feet from the operative field, it is now possible to get an image the same size as could be obtained with the one inch lens at two feet from the subject.

When using the 3 or $4\frac{1}{2}$ inch telephoto lens, it has been found advisable to use a tripod. It is almost impossible to hold a camera absolutely steady. While the small amount of body movement which does exist is not objectionable when a one inch lens is used, and the resulting field is fairly large, the long focus lenses magnify this movement many times so that the smaller field is unsteady.

	Camera Distances in Feet	Approximate Field Size in Inches	
1" LENS	2	7	$\times 9\frac{1}{2}$
	3	$10\frac{1}{2}$	$\times 14$
	4	$14\frac{1}{2}$	$\times 19$
	5	18	$\times 24$
	6	$21\frac{1}{2}$	$\times 28\frac{1}{2}$
3" LENS	6	7	$\times 9\frac{1}{2}$
	9	$10\frac{1}{2}$	$\times 14$
	12	$14\frac{1}{2}$	$\times 19$
	15	18	$\times 24$
$4\frac{1}{2}$ " LENS	9	7	$\times 9\frac{1}{2}$
	12	9	$\times 12$
	15	12	$\times 16$
	18	$14\frac{1}{2}$	$\times 19$

The data given above for the use of super-sensitive film is for operating rooms which are illuminated only with artificial light; in other words, pictures made with no daylight present.

A large percentage of all surgical operations are performed in daylight. Because of the diffusion of daylight in most operating rooms, the surgeon requires additional illumination of incisions and cavities by a spot light such as the Bausch & Lomb or Scialytic, 100 watt, 110 volt, floor lamp. This combined use of daylight and tungsten illumination provides advantages for both surgeon and the photographic recording of surgical procedures. A



FIGURE 3.
Scialytic Operating Room Lamp.

diaphragm opening of $f:4.0$ to $f:5.6$ is correct when these two sources of illumination are combined.

Variation in season, weather, and time of day so alters the intensity of daylight that it is impossible to give any precise data on the proper exposure. This variation of daylight in the operating room is a disadvantage to the surgeon. It has become more generally recognized with the development of efficient sources of illumination. For some years past many operations have been regularly performed to advantage in special rooms where no daylight was present. It has been suggested by Dr. J. J. Morton, Professor of Surgery, Rochester University School of Medicine, that in the future design of operating rooms, all daylight should be excluded. It is apparent that such

conditions would be helpful to the surgeon and further the application of moving pictures to the problems of surgery.

On regular panchromatic film, it was some-

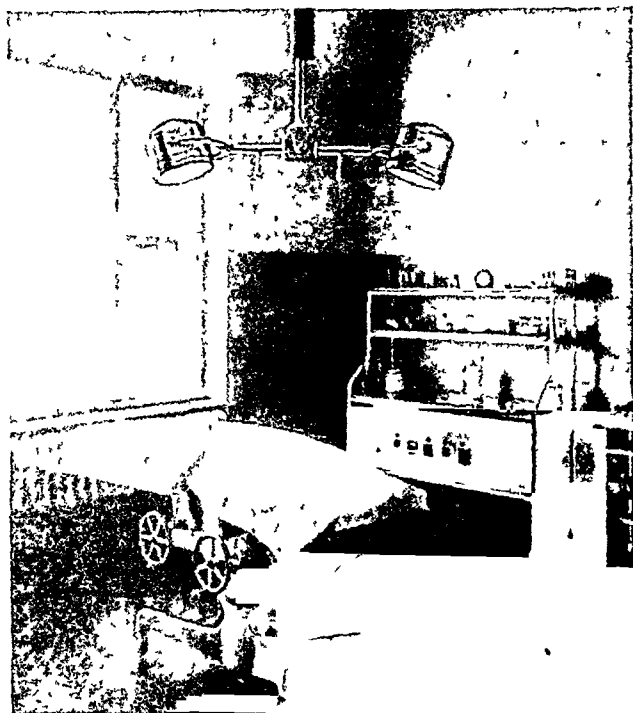


FIGURE 4.
Macbeth Operating Room Lamp.

times advisable to use a K-3 or G filter to render the red area more faithfully. The use of such filters, however, made it necessary to allow two or three stops difference in exposure, thus sacrificing some depth of focus and general definition. Supersensitive panchromatic film is highly self-corrected, making it unnecessary to use filters in operative work.

The first experiments with supersensitive film were carried out at the Strong Memorial Hospital in Rochester, New York. Tests were made with three very different types of operating room lights having 110 volt circuits. All experiments were conducted at night so no daylight or room illumination would cause variations in results.

In order to have a cross-section of results obtainable with other types of 110 volt lamps, similar experiments were made at three other Rochester hospitals.

The summary of these tests showed that in operating rooms having from 400 to 600 watts available, at approximately 40 inches from the operative field, satisfactory exposures could be made at diaphragms $f:5.6$ to $f:8.0$; where 200 to 400 watts were available, diaphragms $f:2.8$ to $f:4.0$; and where only single units of 100 watts were available, diaphragms $f:1.9$ to $f:2.8$.

Strong Memorial Hospital, Bausch & Lomb mirror spot dome lamp, 500 watt, 110 volt lamp, 40 inches from operative field, at diaphragms: $f:1.9$ to $f:5.6$, and telephoto $f:4.5$.

$f:2.8$ — satisfactory exposure

$f:4.0$ — satisfactory exposure

3" telephoto $f:4.5$ — satisfactory

Scialytic, 1—100 watt, 110 volt, mirror reflector, 40 inches from operative field, at diaphragm: $f:1.9$ to $f:5.6$, and telephoto $f:4.5$.

$f:2.8$ — satisfactory exposure

$f:4.0$ — satisfactory exposure

3" telephoto $f:4.5$ — under exposed

A 100 watt, 110 volt auxiliary operating room spot light should be used with a 100 watt, 110 volt Scialytic.



FIGURE 5.
"Mayo" Operating Room Lamp.

Macbeth, twin operating room light, 2—150 watt, 110 volt lamps in twin dome receptacles diffused 40 inches from operative field,

at diaphragms: f:1.9 to f:5.6, and telephoto f:4.5.

f:2 8 — satisfactory exposure

f:4 0 — satisfactory exposure

3" telephoto f:4 5 — satisfactory exposure

Highland Hospital, regular operating room lights. Double dome, 2—150 watt, 110 volts, diffused: f:1.9, f:2.8, f:4.0, f:5.6, and telephoto f:4.5.

f:1 9 — correct exposure

Repeated with Scialytic spot, 100 watt, 110 volts, diffused: f:2.8, f:4.0, f:5.6, and telephoto f:4.5.

f:4 0 — correct exposure

3" telephoto f:4 5 — satisfactory

Genesee Hospital, Scialytic dome lamp, 1—100 watt lamp in center, 3—50 watt lamps in cluster, f:2.8, f:4.0, f:5.6, and telephoto f:4.5.

f:4.0 — correct exposure

f:5 6 — satisfactory

3" telephoto f:4 5 — satisfactory

Repeated with 1—100 vent light spot added, f:2.8, f:4.0, f:5.6, and telephoto f:4.5.

f:4 0 — correct exposure

f:5 6 — satisfactory

3" telephoto f:4 5 — satisfactory

General Hospital, "Mayo"* lamps, 8 single, 60 watt, 120 volt: f:2.8, f:4.0, f:5.6, and telephoto f:4.5.

f:4 0 — correct exposure

3" telephoto f:4 5 — satisfactory

Repeated with 100 watt Bausch & Lomb lamp added: f:2.8, f:4.0, f:5.6, and f:8.0; telephoto f:4.5, f:5.6, and f:8.0.

f:5.6 — correct exposure

f:8.0 — satisfactory

3" telephoto f:5 6 — correct exposure

f:8 0 — satisfactory

Bausch & Lomb, 100 watt, 120 volt, lamp alone: f:2.8, f:4.0, f:5.6.

f:4 0 — correct

f:5 6 — satisfactory

Hospital	Lamp	Wattage	Distance	Best Exposure
Strong Memorial.....	Bausch & Lomb	1-500 W 110 V	40 inches	f:2 8 or f:4 0
Strong Memorial...	Scialytic	1-100 W 110 V	40 inches	f:2 8 or f:4.0
Strong Memorial..	Macbeth	2-100 W 110 V	40 inches	f:2 8 or f:4.0
Highland.....	Regular	2-100 W 110 V	60 inches	f:1 9
Highland..	Regular plus Scialytic Spot...	3-100 W 110 V	40 inches	f:4 0
Genesee	Scialytic	1-100 W 3- 50 W 110 V	40 inches	f:4 0 or f:5 6
Genesee.. . . .	Scialytic plus vent light	1-100 W 3- 50 W 1-110 V	40 inches	f:4.0 or f:5 6
General	"Mayo"*	8- 60 W 110 V	72 inches	f:4.0
General	"Mayo"* plus B & L floor spot	8- 60 W 1-100 W	72 inches 40 inches	f:5 6 or f:8 0
	B & L floor spot	1-100 W 110 V	40 inches	f:4.0
In the average hospital .	With average lights	250-300 W	40-45 inches	f:3 5 to f:4 0

* Mayo —Scanlan Morris Company

ELECTRODIAGNOSIS, GALVANIC AND LOW FREQUENCY CURRENTS IN TRAUMATIC CONDITIONS

By RICHARD KOVACS, M.D., NEW YORK, N. Y.

Read as part of a course on Physical Therapy in Traumatic Conditions, arranged by the Committee on Public Health and Medical Education of the Medical Society of the State of New York, for the New York and Bronx County Medical Societies.

THE knowledge of the principle of action and of correct technique of employment of the currents of low tension and low frequency augments the physician's armamentarium with invaluable aids in the diagnosis and treatment of traumatic conditions, especially those of muscles and nerves.

THE GALVANIC CURRENT

The time honored galvanic or direct current, when employed in uninterrupted flow through electrodes of equal size and within the limits of comfortable toleration ("medical galvanism") causes marked hyperæmia at the site of application and mild heat, better nutrition, and an acceleration of metabolism in the area between the electrodes. These effects parallel somewhat those of the more popular method of diathermy or through and through heating by the high frequency current. There is a distinct place for medical galvanism in promoting the process of reparation and in the relief of pain in both acute and chronic traumatic conditions of soft tissues, such as contusions, sprains, synovitis. In order to be effective, treatments of one-half hour to one hour duration must be employed at a current strength of pleasant toleration, which usually amounts to about one milliamperere per square inch of active electrode surface.

Ionic medication consists of the driving of ions into the superficial tissues by the polarity effects of the galvanic current. The positive pole when applied as the active one repels metals and hardens tissue; the negative pole repels and softens tissue. These effects may be used to advantage for loosening adherent scars and in sterilizing and stimulating sluggish wounds and chronic ulcers. Chlorine ionization serves to loosen scars; a pad electrode soaked in saline solution and connected to the negative pole of the galvanic generator is applied over the scar; a large dispersive electrode connected to the positive pole is placed over a remote part of the body. A current of 2 to 20 milliamperes, its strength regulated according to the size of the electrode and the comfortable toleration of the patient, is made to flow for one-half to one hour. Dense superficial scars, if not too extensive, are being made pliable and thus readily amenable to subsequent mechanical stretching by massage or other means. Lighter scars and the discomfort caused by them can often be entirely relieved.

Copper ionization of sluggish wounds consists of packing the ulcerated surface or sinus with

small pledgets of cotton soaked in one per cent copper sulphate solution. An electrode of appropriate size is placed on top of this layer and connected to the positive pole while a large dispersive electrode is placed over a remote part of the body and connected to the negative pole. The repelling effect of the positive pole drives the copper ions into all interstices of the wound; ten minutes to half an hour treatments, always within comfortable tolerance, applied in frequent succession, will advance the healing in properly selected ulcers and wounds with surprising rapidity. This treatment is often the last resort in stubborn varicose ulcers.

Interrupted or surging currents of low tension and low frequency, such as the interrupted galvanic current, the faradic current, the slow sinusoidal and modulated alternating current, serve as stimulants of motor nerves and muscles. The classical method of electrodiagnosis and the treatment of various degrees of muscular weakness and paralysis is based on the chemico-physical effects of these currents. A bewildering variety of current modifications offered by eager manufacturers of apparatus, and a lack of generally accepted nomenclature and of unbiased research work have created at present some confusion in this potent field of electro medicine. There is, however, enough definite knowledge available to enable the efficient use of these currents.

ELECTRODIAGNOSIS

Electrodiagnosis signifies the application of a suitable electrical stimulus to motor nerves and muscles in order to bring about a contraction. This procedure serves to amplify or to corroborate clinical findings, notably for the differential diagnosis between organic (central or peripheral) and functional or hysterical cases of paralysis. It is an indispensable help in prognosis, and forms the basis for selecting the appropriate form of electrotherapy in peripheral nerve lesions.

The simple test by the faradic and the interrupted galvanic current is quite satisfactory for general purposes. The more accurate testing by condenser discharges requires more complicated apparatus and belongs to the laboratory or high type clinic. The fact that two forms of current are used for ordinary testing is somewhat bewildering to the beginner. The faradic current furnishes a series of rapidly recurring stimuli, each rising to a maximum in about 1/1000 of a second and recurring about 100 times in a second. The rapid recurrence of these stimuli keeps a

normal muscle in tetanic contraction during the entire time of flow, thus making observation of the response very easy. The galvanic current, while flowing steadily, furnishes no stimulus for muscular contraction; only when its flow is suddenly started (made) at sufficient strength, or is interrupted (broken) while flowing at sufficient strength, does a muscular response occur. The contractions are single contractions. It has been estimated that the impulse of the make and break of the galvanic current lasts about $\frac{1}{2}$ second. We have thus, for ordinary testing, a stimulus of very brief duration (the faradic current) and one of relatively long duration (the "make" of the galvanic current). Normal muscle and nerve respond to both of these equally well, but once the nerve supply is damaged the muscle will not respond to the brief faradic stimulus, but still responds to the longer impulse of the galvanic current.

The classical reaction of degeneration (abbreviated RD) consists of the following signs: The nerve does not respond to either faradic or galvanic stimulation; the muscle does not respond to faradism, but shows sluggish response to the interrupted galvanic current. It takes about ten days after an injury or disease for the RD to develop; the muscle ceases to respond to faradism between the fourth and seventh day, and sluggish galvanic response becomes evident about the tenth day. Partial RD signifies a feeble response to faradism and sluggish response to galvanism.

The importance of the RD in the prognosis lies in the fact that, when present ten days after an injury or disease, it indicates changes in nerve and muscle substance which will take considerable time—several months at least—to recover. The finding of an RD by no means indicates irreparable damage. If, ten days after an injury, accompanied by paralysis, there is no RD present, the diagnosis is "contusion" of the nerve, with only temporary disturbance of nerve conduction, and a prognosis of an early recovery can be made. The same significance prevails in cases of facial paralysis with no RD present, as compared with facial paralysis with RD, due to compression or severe degeneration of the nerve.

The occurrence of the RD proves a lesion of the lower motor neuron of the nervous system, consisting of the anterior horn cell, anterior root and nerve plexuses, and peripheral nerve. Clinically, such a lesion is always accompanied by flaccid paralysis and loss of tendon reflexes.

Functional, hysterical paralysis or cerebral origin are never accompanied by important disturbances of the electrical reactions. At most there is slight electric hyperexcitability, while in the later stages there is usually hypoexcitability, from muscular disuse. The presence of normal response can be demonstrated before a jury and thus malingering effectively disproven.

The presence of an RD may be a deciding factor in diagnosis, but it is not infallible. It must always be considered in conjunction with other clinical evidence. For instance, in the case of multiple injuries of the extremities, especially of the forearm, one cannot make a diagnosis on the basis of electrical testing alone. There may be loss of response of several muscles, following extensive scar formation after longitudinal incisions or infectious processes, and a nerve lesion imitated. The coexistence of adhesions binding down tendons may exaggerate a nerve lesion or may make it appear more extensive. In paralysis of traumatic origin electrical testing cannot determine, without a thorough clinical examination, whether the paralysis is caused by the original trauma or secondarily by contracting scars or pressure of callus. Neither can it determine whether the nerve is torn or cut or simply bruised or stretched.

The technique of electrical muscle and nerve testing can be fairly easily acquired. A set of testing charts is indispensable for the beginner, because it shows the location of the motor points, the areas where the least amount of stimulation will bring about response in the easiest manner. One must remember that in the presence of the reaction of degeneration, the motor points of muscles are displaced distally—toward the tendon—and at the same time the motor point of the nerve disappears entirely, i.e., no response can be elicited through stimulating the nerve.

Every physician who has occasion to treat nerve injuries must be familiar with the faradic and galvanic test. Unrecognized and unskillfully treated nerve injuries are responsible for permanent maiming following many industrial accidents, and therefore there ought to be no delay in the early recognition and appropriate treatment of such injuries. It is similarly important to recognize simulated cases of paralysis following accidents. A physician skilled in the simple method of electrodiagnosis can testify as an expert and, when necessary, demonstrate his findings in court.

LOW FREQUENCY CURRENTS

The principal employment of the currents of low tension and low frequency in traumatic conditions consists in the treatment of the various degrees of muscular weakness and paralysis following simple disuse or peripheral nerve injuries.

Muscle when not used atrophies; exercise, on the other hand, leads to increase in size, strength and tone. Atrophy of disuse is due to alteration in character or intensity of normal metabolism. In the absence of RD and in simple muscular atrophy the problem of treatment is comparatively simple and resolves itself mainly in providing suitable exercise, voluntary or artificial, to restore the strength and tone of muscles. The surging

faradic or the interrupted or surging sinusoidal current appear to be equally effective when active voluntary exercise is not convenient. It is essential that any form of electrical stimulation be used with periods of alternating flow and rest, so as to allow alternate play and relaxation of the muscles. Experiment and clinical evidence shows that rhythmically varying currents are most effective. For all these reasons neither the ordinary faradic nor the interrupted galvanic current are to be used as routine measures in treatment, because the first causes tetanus, the second single shocks. No electrical treatment should be given at a strength or duration which is painful or leaves the muscles in an exhausted state. Best results are achieved by carefully individualized technique.

Technique—If the muscles of an extremity are all nearly evenly affected, the bipolar technique or treatment en masse can conveniently be employed. Two electrodes of suitable size are placed at the opposite ends of the extremity; for instance: one electrode under the buttocks, the other under the sole of the foot. The surging current passing along the entirely extremity results in a fairly even contraction of all muscles, provided that their response is about equal. Due to the alternation of the surge, the polarity effect is usually more prevalent on one side of the extremity, and hence the almost uncanny alternating contraction of the flexor and extensor groups. Treatment is started at five to ten minutes and gradually increased according to response. There never should be more current used than is necessary to bring about a perceptible contraction.

The unipolar or motor point technique of muscular stimulation is the method of choice when only a few muscles need artificial stimulation; it allows regulating the current strength in accordance with the needs of each individual muscle. A small active electrode about one inch in diameter is placed over the motor point of each muscle to be treated, while a large dispersive electrode is placed over the sternum or the spine. One should start with a few contractions to each muscle and increase it to a maximum of two to three minutes treatment. This technique takes more time and requires the individual attention of a trained operator.

Electrical treatment for simple muscular weak-

ness or in functional paralysis resulting from trauma must always be combined with active voluntary exercise and abandoned in favor of the latter as soon as there is sufficient active response. It is advisable to have the patient attempt voluntary contraction while the current is on, and it will be often possible to cut down gradually on the current and let the patient do all the work. Proper support of the weakened muscles in a relaxed position, avoidance of overstretching by the healthy antagonists is essential.

In real paralysis with a full RD the situation is much more complicated and it is not possible to go into all its aspects in the limited space of this paper. So far as electrical stimulation is concerned, its object is to cause movements similar to normal ones, thus helping to preserve part of the functional properties of the muscles until normal nerve impulse returns. Contractions of any sort exert massage effects and help to prevent fibrous formation within the degenerated muscle. If only part of the muscle is fully paralyzed, contractions exercise and strengthen the non-paralyzed part and may enable it to do compensatory work.

The slow (galvanic) sinusoidal is the current of choice to which paralyzed muscles respond best. The unipolar or motor point technique is preferable and a current strength just enough to bring about a flicker of the tendon is all that is necessary. The danger of over-exercise and the tiring out of the affected muscles is always present, especially when the muscle is just about to regain active power. Previous to treatment, the muscles should be warmed up by luminous heat or diathermy, and during treatment they must be relaxed. Proper splinting from the very beginning is most important for the prevention of overstretching by the antagonists. It shows an appalling lack of the elementary principles of muscle treatment when one sees a patient with a radial paralysis going around for weeks with the hand dangling down from the wrist. A few minutes of electrical treatment, even if given daily, cannot make up for the damaging effect of continuous overstretching by the powerful flexors.

The correct technique of the application of the enumerated can only be acquired by actual clinical work under an experienced medical teacher.

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For list of officers of County Medical Societies see this issue, advertising page xxx

THE FALL JOURNAL

The Summer season is vacation time for the Medical Society of the State of New York and its constituent Societies, as well as for their individual members. It has always been the policy of this Journal to record Society activities as soon as possible after they occur. The result has

been that the News Department of this Journal has had little to record during the Summer months; but the news in this issue fills six pages as the department resumes its normal size and interest and thereby reflects the renewed activities of the Societies.

THE COMITIA MINORA

Why are some county medical societies progressive and influential, while others are conservative and inactive? The answer involves two conditions:

1. The temperament of the individual members.
2. The methods of conducting the work of the organization.

A county medical society is a group of doctors brought together by the accident of their geographic location. When ten, or fifty, or five hundred doctors are brought together there will be many types of temperaments,—the theoretical and the practical; the public-spirited and the individualistic; the extrovert and the introvert. These temperaments have nothing to do with the character of a physician, although they are often the basis of personal quarrels in the county societies. The most upright doctor, for example, may be an innocent cause of a division in a county society by insisting on a perfectly proper line of action which is opposed by his less informed brethren.

Temperaments become evident when a disputed subject is debated in a county society meeting. The subject of free clinics, for example, is sure to promote a contest between some young progressive member and an older conservative. One member takes a progressive attitude because it is his temperament with which he was born; the other member may be conservative because his thyroid gland is small. Suppose, for example, a popular lecture on cancer is proposed, the progressives will be for it and the conservatives against it; and a great deal of evidence will be needed to convince either party of the merits of the other.

How can a county society conduct a discussion or debate so that the progressives and the conservatives will work together in harmony? Every

new activity is an evolution or a growth for which the soil must be prepared, the seed sown, and the tender shoots nurtured before it becomes self-sustaining. If the proposal for a new activity is thrown into a formal meeting of a county medical society, it will be torn to pieces by debaters who speak off-hand in the light of their inherited temperaments and experiences. The medical examination of school children, for example, is a subject that often brings to light the specter of State medicine to frighten both the progressives and the conservatives.

The larger county medical societies are demonstrating a practical way of getting work done which will avoid ill feelings, by the method of discussion and decision by a committee before the subject is debated in a meeting of the society as a whole. A half dozen members, both proponents and opponents of a measure, conversing informally and considering actual conditions and needs, will be sure to reach a unanimous agreement; and when the committee reports, the society will support its recommendations, for it will feel that all phases of the subject have been considered.

The smaller county societies sometimes fail to appoint the necessary committees on the ground of the lack of personnel, but there is one committee,—the *Comitia Minora*,—that is the executive committee of the whole society. That committee can secure harmony and promote progressive activities if it will meet frequently, and will take a definite stand on every proposition that is brought before the society. The members of the *Comitia Minora* can investigate and discuss a condition without prejudice or fear, and can take time to formulate a plan of action which has been evolved by careful consideration and thought.

LOOKING BACKWARD

This Journal Twenty-Five Years Ago

Medical Legislators:—The suggestion is often made that more physicians should seek election to legislatures and the national Congress. This Journal of October, 1907 describes conditions in France as follows:

"There are ninety-two physicians in the present French Congress, while there were four physicians in the two houses of the last Congress of the United States. The population of France is 38,228,969, while that of the United States is 85,000,000. The number of physicians in the United States is 122,167. The French Congress, like the American Congress, is composed of two houses. The upper house in France, like that in this country, is called the Senate, while the lower

house, corresponding to our House of Representatives, is called the Chamber of Deputies. The French Senate has 300 members, of which forty are physicians; the American Senate consists of ninety members, of which one is a physician. The French Chamber of Deputies has 595 members, of which 52 are physicians; the American House of Representatives has 386 members, of which, in the Fifty-ninth Congress, three were physicians. The interest which medical men in France display in matters of state cannot be accounted for on the basis of compensation. The pay, or the 'indemnity,' is only about \$1,800 for both senators and deputies, while the pay in the United States is \$7,500, in both branches of Congress."



MEDICAL PROGRESS



Experimental Articular Rheumatism — F Gudzent says that in 1926 he first called attention to the fact that, just as in gout, so in a certain group of cases of rheumatism, the clinical signs suggested an allergic reaction to certain components of the diet. Later he reported on a number of rheumatic patients in whom tests revealed a sensitiveness to eggs and fish and who showed great improvement when these foods were excluded. Doubt having been cast upon his conclusions regarding the relationship of allergy to rheumatism, the writer instituted a number of experiments upon rabbits to prove or disprove his theory. He first prepared a number of strongly albuminous extracts of a great variety of foodstuffs, and then injected from 2 to 4 cc of these extracts into the rabbits (of course only one into each rabbit) and repeated the injection in a week or ten days. Then after an incubation period of 3 to 4 weeks each rabbit received an injection into a joint of $\frac{1}{2}$ to 1 cc of the extract to which it had been sensitized. In about 24 hours the joint became swollen and presented inflammatory symptoms. Control animals showed no reaction. The extracts were thoroughly sterilized before injection. The inflammatory swelling subsided after a few days but reappeared whenever the injection was repeated, and often returned after a while even when no injection was given. The symptoms were very similar to those of acute inflammatory rheumatism. The author believes the results of these injections would warrant further experiments to determine what relationship, if any, exists between allergy and articular or muscular rheumatism.—*Deutsche medizinische Wochenschrift* July 22, 1932

Treatment of Megacolon by Parathormone — Luther Sheldon, Richard A. Keen, and Eric G. Hakansson report in the *American Journal of the Medical Sciences*, July, 1932, three cases of which the following are summaries:

CASE I A man, 32 years old, had developed at the age of 18 chronic constipation. The trouble increased constantly in severity and examination at the age of 27 years revealed the presence of a hugely dilated colon. He had had no bowel movements for 10 years without large doses of laxatives and enemata. Treatment with parathormone and calcium lactate was begun, in the second week the man had one natural passage and in the third week his bowels began to move daily without laxatives or enemata. Several courses of treatment were given, the con-

stipation returning when they were discontinued but bowel movements becoming normal in two or three weeks after the resumption of treatment.

CASE II A woman, 59 years old, had had increasing constipation, abdominal distention, an cramps for about two years. A sudden increase of trouble led to a diagnosis of acute colonic obstruction and an emergency cecostomy was performed. The laparotomy showed a greatly dilated colon. Parathormone injections resulted in a return of normal bowel movements, but when the dosage was greatly reduced at the end of three months the symptoms recurred. However, under increased parathormone dosage normal bowel movements were reestablished and a week later the entire large bowel was shown to have been reduced to practically normal size.

CASE III A man, 65 years old, developed in 5 weeks an adynamic ileus of unknown origin. The chief findings were abdominal distention, a capacious atonic colon, and a lowered serum calcium level. Parathormone injections were followed by a return of normal bowel movements with relief of symptoms and a return to normal of the serum calcium.

In review the authors discuss the possible relation of abnormal parathyroid function to disorders of intestinal motility and to megacolon. Further studies are suggested to determine the possible danger to the patient from prolonged parathormone administration.

The Tannic-acid Treatment of Burns and Scalds — W. C. Wilson gives his experience of over two hundred cases of burns treated by applications of tannin as advocated by Davidson. All burns, if more than superficial or of slight extent, should be treated in hospital. The burned area is cleansed under general anesthesia, preferably nitrous oxide and oxygen. All loose epithelium, especially at the edges, is carefully removed and then the raw surface is gently swabbed with ether or alcohol followed with a 1:1000 solution of bichloride of mercury. A coagulating solution is then sprayed, every hour for seven to twelve hours, over the surface and dried by a current of hot air. This consists of an aqueous solution of 2.5 per cent tannic acid in 1:1000 acriflavine. No subsequent local treatment is necessary, the part being protected by a cage in which are hung some electric light bulbs for warmth. In cases of deep burns, if signs of sepsis appear it will be necessary to remove the coagulum preferably by cutting it away with scissors, possibly under general anesthesia. The area is then treated as an infected wound. If the temperature rises it will be advisable, and sometimes

imperative, to stop the application of external heat by the electric bulbs under the cage. Throughout the treatment a copious supply of fluids is called for, if necessary by the intravenous injection of saline solution in addition to the fluid given by the mouth or rectum.

When, in the absence of hospital facilities, home treatment is obligatory, the burned area is to be cleansed in the above-described manner and then gauze soaked in the coagulating solution applied to the raw surface and covered with cotton-wool and a bandage. After 12 to 24 hours the dressing is removed and the coagulum dried by exposure to the air and then covered with a protective dressing of dry gauze and a bandage.—*The Practitioner*, July, 1932.

The Development of the Cardiovascular-Renal Syndrome.—R. E. Horsfall says that, included in the exorbitant price mankind pays for the doubtful blessings of civilization, prominent is the symptom-complex of raised blood-pressure, arterial and myocardial degeneration, and renal inadequacy. In analyzing the etiology and chronology of this syndrome, we have to ask ourselves: "Is the arteriosclerosis the cause or the sequel of the nephritis? Is the myocardial damage secondary to the arteriosclerosis, or are they both due to a common causal factor?" Assuming the presence of a circulating toxin, either endogenous or exogenous, (1) arterial hypertrophy and subsequent degeneration may result from direct action of the toxin on the vessel walls or from prolonged toxic vaso-constriction. This causes a rise in blood pressure leading in some cases to renal sclerosis with albuminuria, casts, and perhaps nitrogen retention. (2) Chronic interstitial nephritis may occur first with compensatory rise of blood pressure leading to arteriosclerosis, or with an accumulation of toxic metabolites in the circulation causing arteriosclerosis and rise of blood pressure. The hyperpiesis may affect the heart in three ways: (1) It may cause aortic atheroma leading to stenosis of the openings of the coronary arteries with reduced blood supply and fibrosis of the myocardium. (2) It may cause chronic endocarditis of the aortic valves with stenosis of the coronary orifices. (3) There may result a compensatory hypertrophy of the myocardium with eventual degeneration. Finally, the circulating toxin may damage the cardiac muscle directly, or indirectly, by sclerosing the coronary arteries.—*The Practitioner*, August, 1932.

Symptomless Coronary Thrombosis.—Frewen Moor and Herbert Rogers report an unusual case of a man 70 years old who died suddenly while sitting at a table writing. One of the reporters was his family physician but had seen him seldom and he had never complained of any illness. Careful inquiry from his relatives and

friends had failed to elicit any symptomatic history. He never complained of pain and what moderate shortness of breath he had was attributed to his age. His appetite was good and his wife had never thought him to be below par in any way. His habits were good except that he was an immoderate cigarette smoker, never being without a cigarette in his mouth. (The writers quote Levine, parenthetically, as mentioning smoking as one of the possible causes of coronary thrombosis.) At the autopsy the pericardium was found to contain about an ounce of clotted blood. The heart was normal in size, but there was an aneurysmal dilatation, half an inch across, on the posterior surface of the left ventricle, over which there was some patchy thickening of the pericardium, rupture at this point being the cause of death. The coronary arteries showed gross senile degenerative changes. The anterior descending branch of the left coronary was converted into a rigid calcified tube with the lumen irregularly diminished in size but nowhere completely occluded. The circumflex branch passing down the posterior aspect of the left ventricle, was almost occluded at a point one inch from the auriculoventricular groove, just below which thrombosis had taken place and had resulted in infarction of the myocardium. The right coronary artery displayed patches of atheroma. The aortic and mitral valves were slightly thickened. Microscopic examination confirmed the naked-eye appearances but raised the probability that some months must have elapsed between the initial thrombosis and the fatal termination. Such a condition might have existed without causing pain, but it was remarkable that there were no symptoms, local or general, to arouse suspicion of any cardiac disorder.—*British Medical Journal*, August 6, 1932.

Infranodal Heart Rhythm Produced by Exercise.—Harald A. Salvesen reports a case of this nature in *Acta Medica Scandinavica*, July 23, 1932. The patient was a man, 52 years of age, with a rather poor previous history (coxitis at 5 years of age, operated upon, the patient being kept in bed for several years; albuminuria, lasting for several years, at 15; and left-sided pleurisy at 30 years). He began to be troubled with occasional palpitation and irregularity of the heart beat three years ago. The electrocardiogram at rest showed a slow sinus rhythm without any sign of block, but after a certain amount of exercise there was always an infranodal rhythm. As the ventricles slowed down the auricles kept up their former speed; there being for a short time complete dissociation between auricles and ventricles; this dissociation always occurred when the ventricular rate fell below 70, there being then for a very short period an interference between the sinus and the atrioventricular rhythms. Quinine and quinidine had no effect

on the abnormal rhythm. The author regarded the condition as one of partial sinoauricular block made complete by the increased heart beat after exercise.

The Role of Fatigue in Digestive Disorders.

—Frederick G. Speidel says that the first question arising in a discussion of this subject is the cause of fatigue. It may be said confidently that it is not a result of the depletion of available stores of glycogen or other combustible material in the muscles. The results of attempts to circumvent fatigue by the administration of sugar were not encouraging enough to warrant a general adoption of the method. The accumulation of the waste products of metabolism has been advanced as a cause of fatigue. Such an accumulation might conceivably cause a decrease in the responsiveness of muscles to stimulation but the theory has yielded no therapeutic results. Studies of the fatigue of the reflex arc have, however, had important results. That the sensory receptors can be experimentally fatigued has been demonstrated repeatedly. The cell body of the neuron shows definite alteration in staining characteristics as a result of severe muscular fatigue and it may be argued that such alteration indicates a temporary inhibition of function of the affected cells. The effect of tonic doses of strychnine in relieving the sense of fatigue, coupled with the known fact that strychnine lowers the synaptic resistance, justifies the belief that at the synapse is the point of the neuromuscular system where fatigue first occurs. The bodily changes accompanying fatigue are similar whether the fatigue be due to overactivity of the somatic or of the mental functions. These changes are adjustments which are necessary if it become imperative that activity continue. They consist in general of abolishing all functions that are not concerned in the movements of the limbs or in transporting the body from place to place. The intellectual functions are inhibited, the sex functions are held in abeyance, the secretion of saliva, of gastric, intestinal, and pancreatic juices, and of bile ceases and the motility of the stomach and intestines is abolished. The significance of this sequence of events becomes apparent when it is recalled that it is just at this particular time that the tired individual eats his evening meal, the largest of the day, and it is hardly conceivable that the meal can be properly digested under these conditions. The association of fatigue and digestive disturbances is observed often enough to indicate a causal relationship. Physician and patient often attribute the weariness felt at this time to absorption from the digestive tract of toxic products of incomplete digestion, but it is more rational to attribute the faulty digestion to an underlying fatigue of psychogenic origin. That the remedy for this fatigue does not consist in more rest is evident. Change of scene, varying

one's occupation, and diversification of interests all suggest themselves and all are in many cases impossible of realization. The most generally applicable and effective method of ameliorating fatigue in these cases, the author holds, is to induce the tired individual to allow himself to be actuated in the performance of his daily tasks from hour to hour by a number of different, appropriate, consciously aroused, dynamogenic motives. In this manner an almost infinite number and variety of synaptic connections must be utilized and no circumscribed area will reach that degree of resistance that induces the feeling of fatigue. —*Southern Medical Journal*, September, 1932.

A Non-operative Treatment of Carbuncles.

—William A. White, Jr., and Edward A. Cooney, writing in the *New England Journal of Medicine*, September 1, 1932, give an account of a non-operative treatment of carbuncles employed with most gratifying success in 20 per cent. of over 500 cases treated at the Boston City Hospital during the four years ending in November, 1931. The method is essentially one of permitting the lesion to run its course aided by non-specific foreign protein therapy. Sir James Paget, over 60 years ago, made a plea for the non-operative treatment of carbuncles, after an experience with more than 200 cases, from which he drew the following conclusions: (1) Incision does not prevent extension; (2) it fails to allay pain in most cases; (3) the process of healing is not hastened. Various forms of conservative treatment have been practised: heterovaccination, specific and autogenous vaccines, autogenous blood injections, roentgen-rays, violet rays, Bier's vacuum hyperemia, ionization, the high frequency current, etc. The authors regard a carbuncle as a kind of cellulitis eventuating in central necrosis and slough. The first stage is one of subcutaneous cellulitis (the first evidence of which is a small pustule surrounded by a painful red induration) with edema of the edges. After a few days the pain subsides and there is central necrosis followed by liquefaction and discharge of slough and pus. The third stage is one of cicatrization and healing. The writers employ a nonspecific protein therapy which favorably activates cell stimulation and increases the specific protective bodies. The spread of infection is thereby checked, pain is relieved within two to eight hours, and healing is hastened. They report four cases in which this simple technique was used with most satisfactory results. The local treatment consisted in the application of hot chlorinated dressings and flaxseed dressings. Aolan, activin, and ommadin were variously selected for the daily nonspecific protein injections.

Atheroma in Rheumatic Heart Disease.

—Pearl Zeek, writing in *The American Journal of the Medical Sciences* for September, 1932, reports

on the results of 3,372 autopsies in cases of rheumatic fever. Of these, atherosclerotic lesions were found in 62—36 males and 26 females—ranging in age from 7 to 66 years, but most of them under 40 years. Generalized sclerosis was found in only 15 cases. Questions which are left open are: "Why do atheromatous changes occur particularly in mesodermic tissues?" and "What does rheumatic disease have in common with the relatively few other conditions which are found to predispose to the early development of atherosclerosis?" In conclusion it is stated that rheumatic heart disease predisposes to the early development of atheromatous lesions in the aorta, pulmonary artery and coronary arteries, and in the valvular and left atrial endocardium. Lipoid deposits have also been found, in some cases, in the inflamed serous membranes and in certain renal tubules. Lipoid deposition seems to begin soon after the onset of cardiac disease, and in a very general way seems to parallel in degree the cardiac lesions. The atheromatous changes in many cases are progressive, leading to calcification and, when in the valvular endocardium, to accentuated stenosis.

Differential Arterial Tension.—E. J. Stieglitz and D. W. Probst accept for this term the definition of Cyriax that it is the difference in readings of the arterial tension on the two sides of the body. Because of the meagerness of the available data regarding the incidence of asymmetry of the arterial tension the authors studied it in six hundred cases. In these asymmetry was found in slightly over 15 per cent. They think it probable that in the majority of cases it is essentially transient, but it tends to be recurrent. When persistent it is likely to be due to some organic lesion such as aortitis, cervical rib, atrophy or some other trophic disorder. Asymmetry of the arterial tension is more frequently encountered in patients with hypertensive disease than in those with normal blood pressure, but there is no sex predominance. Elevation of systolic and diastolic tension is somewhat more frequent on the right side than on the left. It has in most cases a distinct clinical significance and failure to determine the blood pressure on both sides may result in serious diagnostic error. Arteriolar spasticity, cervical rib, aortitis, injury of an extremity with atrophy, arteriovenous aneurysm, and central trophic disturbances, such as occur in tabes dorsalis, are all factors to be considered in evaluating the causation of persistent asymmetry.—*American Journal of the Medical Sciences*, September, 1932.

The Clinical Significance of Heart Murmurs in Hyperpiesis.—Max Hochrein says that all writers on high blood pressure mention the occasional occurrence of cardiac murmurs at the apex or base, but very little attention has been given to the mechanism or the clinical significance of

those sounds. A basal murmur at the beginning of the diastole is an early symptom of insufficiency and is of service as an indication of the condition of the general circulation, upon the realization of which the success of treatment may depend. Mitral murmurs in cases of hypertension are not, as were formerly generally thought, merely accidental and of no special significance, for in 20 per cent. of the 162 cases studied by the author they were found at autopsy to have been an expression of organic mitral lesions. These constitute a special group of high tension cases of which the following are characteristic signs: Mitral murmurs, lessened vital capacity, absolute arrhythmia, lengthening of the P Q event and duplication of P. As a result of energetic treatment, which is to be instituted when there are no decompensation symptoms, the pressure falls quickly to normal. The mode of origin of the hypertension is not always clear in these cases but probably it is a reflex process. An early recognition of this symptom complex is important, for by treatment with strophanthin and digitalis the prognostically unfavorable secondary stage of the high blood pressure may be lessened or avoided altogether.—*Münchener medizinische Wochenschrift*, August 12, 1932.

Allergic Anginoid Pains.—Paul Veil writing in *Archives des Maladies du Cœur*, etc., July, 1932, refers to two cases of this nature reported in the March issue of this same journal, and adds the histories of two additional cases in the present article. The first of these was that of a woman 60 years old, prematurely aged, short of breath, with a chronic cough, and complaining of a violent parasternal pain. The only event in the previous history was a non-traumatic hydrarthrosis of the left knee which disappeared in time leaving a painful joint which the patient was obliged to keep bandaged. In 1929 she began to experience oppression in the chest at night and difficult breathing in the day, made worse by walking and especially stair climbing. This was followed by severe attacks of coughing resembling pertussis. Still later very severe pain was felt in the precordial region radiating to the left arm. Auscultation of the lungs gave no information and that of the heart was also negative. More careful questioning elicited the information that the patient suffered from indigestion and could not tolerate eggs or milk. The blood pressure was found to be high, especially during the crises of anginoid pain. A desensitizing diet (abstention from milk and eggs) was ordered, and when the patient was seen a year later she was in perfect health, with normal blood pressure, no cough nor dyspnea, and free from parasternal pain. The case was evidently allergic in character for, as in the others reported, relief followed promptly on the exclusion of the offending materials from the diet.



LEGAL



ACTIONS FOR DEATH BY WRONGFUL ACT—RIGHT OF ADVERSE PARTY TO PARTICIPATE IN AUTOPSY

By LORENZ J. BROSNAN, Esq.

Counsel, Medical Society of the State of New York

Has a person who is or has reason to believe that he will be a defendant in a personal injury action based upon death by claimed wrongful act, the right to be present at a private autopsy performed upon the deceased person by request of those who have or who are about to commence such action, where it can be shown that the findings and conclusions upon such autopsy are material to the pending or contemplated litigation? The answer to this interesting and important question was furnished by a decision of one of our Appellate Courts some years ago. Before reviewing the facts in that case and ruling of the court, let us examine Section 5-a of the Public Health Law. This Section provides as follows:

"*Regulation and control of autopsies.* The commissioner of health shall prescribe and prepare the necessary methods and forms for obtaining and preserving records and statistics of autopsies which are conducted by the coroner or by his order within the state of New York, and shall require all those performing such autopsies, for the purpose of determining the cause of death, to enter upon such record the pathological appearances and findings embodying such information as may be prescribed, and to append thereto the diagnosis of the cause of death, and a copy thereof shall be duly filed, within ten days, with the coroner of the county in which such autopsy shall be held, and a transcript thereof shall be filed, within ten days thereafter, by the coroner, with the state commissioner of health, and it shall thereupon become a matter of public record which shall be open to the inspection and transcription of and by one affected or likely to be affected, in a civil or criminal action, by its contents, upon an order of a court of record or of a justice of the supreme court. It shall be the duty of any surgeon performing such an autopsy, under the provisions of this section, to permit the attendance, as a matter of right, of a person, or the medical representative of such person, likely to be the defendant or representative of such deceased person in a civil or criminal action, of which such autopsy and its findings and conclusions may prove to become a part, or in any way affected thereby."

It will be noted that under this Section the physician performing the autopsy on behalf of the coroner must permit, as a matter of right,

the attendance of a person or the medical representative of such person who is likely to be the defendant or representative of such deceased person in a civil or criminal action in which the autopsy and its findings and conclusions may prove to become a part or in any way affected thereby.

In the case under review, a woman during her lifetime commenced an action to recover damages for personal injuries which she claimed to have received in an automobile accident alleged to have been caused by the negligence of the defendant. While the action was pending, the plaintiff died. Several days later a petition was presented to the Supreme Court on behalf of the defendant alleging, in addition to the facts already stated, that an action was about to be brought against the petitioner by the representatives of the deceased woman for damages for her death, based upon the claim that her death was caused by the negligence of the petitioner in such automobile accident. The petition further stated that a physician employed by the petitioner had examined the woman during her lifetime and had reported a complete recovery of any injury she might have received in the automobile accident. The petition further stated that the woman's death was caused by inflammation of the liver, and that on the day of her death an autopsy had been performed which showed that death was due to such disease, and that to ascertain the cause of death an examination of that organ was necessary. It was further stated that that organ had been removed from the body at the autopsy and was in the possession of either the attorney for the plaintiff or the surgeon who performed the autopsy, and that the petitioner had been informed by the attorney for the woman that an examination was to be made of the organ, but permission was refused the petitioner or his representative to participate in the examination, and the attorney for the deceased woman also refused to disclose the findings or results on such examination.

Upon this petition an order was secured from the Supreme Court calling upon the personal representatives of the deceased woman to produce forthwith for examination by the defendant the portions of the body of the deceased woman desired to be examined, and more particularly the liver, for the purpose of having the same ex-

amined by the medical representative of the defendant. A motion made by the representatives of the deceased woman to vacate this order was denied, whereupon an appeal was taken to the Appellate Division. Upon appeal the order below was reversed, the court holding that the Section of the Public Health Law above quoted related solely to official autopsies; that is, those performed by or under the direction of the coroner, and were not applicable to private autopsies, and hence neither the defendant nor his medical representative was entitled to participate in the autopsy or permitted to see the findings or conclusions. The court made the additional point that the order below related mainly not to the autopsy, but to an examination of the viscera. In its opinion of reversal the court said:

"The provisions of section 5-a of the Public Health Law (as added by Laws of 1913, Chap. 620), relied upon by the respondent as a basis for the order, which allow the medical representatives of a person likely to be a defendant in a civil action to be present at certain autopsies,

has no application to this case. That section relates to what may be termed official autopsies, that is, those performed by or under the direction of the coroner. This autopsy was private and not performed or ordered by a public officer. Further the order in this case in no way relates to an autopsy but to an examination of a portion of the viscera, a matter not covered by the statute. Neither is the order justified by section 803 of the Code of Civil Procedure (Civil Practice Act, Sec. 324) as the discovery there provided for can only be required at the instance of a party to an action, while in this case no action was pending. Nor has the respondent cited any other authority supporting the original order. Although in this instance, the organ seems to have been removed from the body at least temporarily, it was still a part of the human remains and as such was to be decently disposed of as the family might desire. In the absence of clear right or statutory command, the courts should not interfere with the relatives' possession or control of the remains or any part of them."

SUN-RAY BURN

A middle-aged woman consulted a general practitioner, complaining of a cold, cough and pains in her back. The doctor took her pulse, temperature and blood pressure and examined her chest and back with a stethoscope. He diagnosed a cold with a slight condition of bronchitis. He told the patient that he would either give her medical treatment or treatment with the sun-ray lamp. The patient decided upon the sun-ray lamp and the doctor seated the patient on a treatment chair and administered to her a treatment with his mercury vapor lamp. The apparatus was fixed at a distance of twenty-four inches from the plaintiff's chest which was exposed to the rays for about ten minutes. He then similarly exposed her back to the lamp for about fifteen minutes.

At the end of the treatment the doctor explained to the patient that some people show an idiosyncrasy to such treatment, depending upon the sensitiveness of the skin, and that the reaction to the treatment would probably vary from a slight redness to a redness similar to a sun-burn, and he warned the patient that she should not be surprised if such a reaction developed in her case. The patient was of a dark complexion

and showed no evidence of having a sensitive skin.

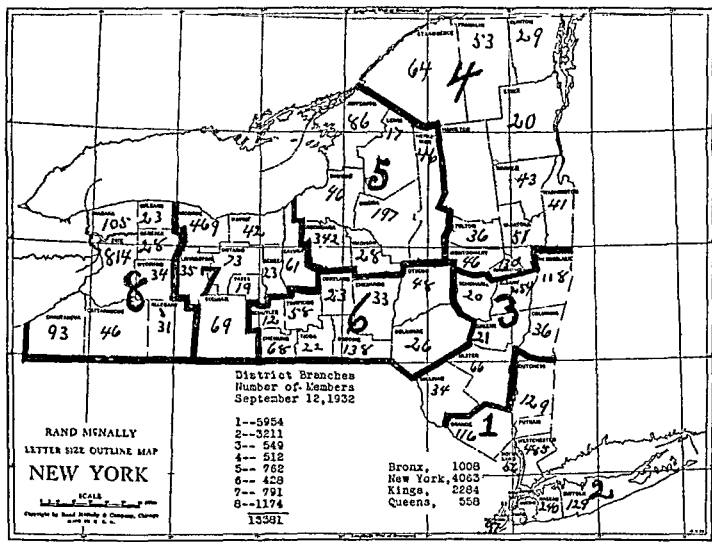
A few days later the patient returned to the doctor's office with a reaction from the sun-ray on her back, a large area having the appearance of a sun-burn with a few blisters. The doctor prescribed an ointment to be applied to the burn. The patient never returned to him for other treatment.

The patient sued the doctor to recover damages based upon alleged malpractice. The charge of negligence contained in the complaint was that the defendant was unskillful in treating the plaintiff by exposing her bare back to the strong rays of an electric current and leaving her unattended for a period of about one-half hour, and failing to supply a nurse's services while the plaintiff was exposed to the electric current, as a result of which it was claimed that the plaintiff's entire back was caused to become blistered.

The action was called for trial in its regular order on the calendar and no one appearing to prosecute the matter on behalf of the plaintiff, and on motion of defendant's attorney the action was dismissed and the case terminated in favor of the defendant.



NEWS NOTES



MAP OF THE DISTRICT BRANCHES OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.

The figures indicate the number of members of the County Medical Societies on September 12, 1932

THIRD DISTRICT BRANCH

The first of the meetings of the District Branches of the Medical Society of the State of New York, of the year, was that of the Third District, composed of seven counties stretching from Albany diagonally across the State to Sullivan County on the southern border. These county societies have a total of 549 members. The meeting was held on Wednesday, September 21, 1932, from 10 a.m. to 3 p.m. in the Loomis Sanatorium in Liberty, Sullivan County. The president, Dr. H. L. Odell of Sharon Springs, presided, and 65 doctors were in attendance. A noon luncheon was served by the courtesy of the Sanatorium.

The scientific program consisted of six addresses given simply and briefly, and in a conversational manner. The speakers and their subjects were as follows:

Bronchoscopy in the Diagnosis of Thoracic Disease, by Arthur F. Holding, M.D., Albany.

Trends in Modern Treatment of Tuberculosis, by J. Burns Amberson, Jr., M.D., formerly Superintendent of Loomis Sanatorium, and now

Assistant Professor of Clinical Medicine, College of Physicians and Surgeons, New York.

A Clinical Study of Tuberculosis Cavities, by B. T. McMahon, M.D., Associate Physician, Loomis Sanatorium, and E. H. Kerper, M.D., Roentgenologist.

The County Health Unit, by Thomas Parran, Jr., M.D., Commissioner of Health, State of New York.

The Endocrinological Problems in the General Practice of Medicine, by Max A. Goldzieher, M.D., Brooklyn, N. Y.

Officers were elected as follows:

President: Clark G. Rossman, M.D., Hudson, N. Y.

First Vice-President: Luther C. Payne, M.D., Liberty, N. Y.

Second Vice-President: A. J. Hambrook, M.D., Troy, N. Y.

Secretary: William M. Rapp, M.D., Catskill, N. Y.

Treasurer: Ernest E. Billings, M.D., Kingston, N. Y.

After the noon luncheon President Odell introduced representatives of the State Medical Society. Dr. Frederick H. Flaherty, President-elect, brought the greetings of the officers of the State Society, and complimented the speakers on the morning program.

Dr. J. N. Vander Veer made a plea that the County Medical Societies give serious attention to the activities promoted by the State Society.

Dr. Frank Overton, Executive Editor, called attention to the function of the NEW YORK STATE JOURNAL OF MEDICINE as the repository of the records of the State and County Societies, and the means by which the officers and committee-

men inform the officers and members of the County Medical Societies of the activities and policies of the State Society.

After the meeting the physicians were conducted through the Loomis Sanatorium by members of the staff of physicians. The Sanatorium was founded in 1906 as a memorial to Dr. Alfred Lee Loomis, Professor of Medicine in the Medical School of the New York University, who was a leader in the care of tuberculosis patients in New York City. It has a capacity of 225 beds, and while it is a private institution, it does research work of the highest type, and its methods are accepted as standards for the diagnosis and treatment of all forms of pulmonary tuberculosis.

SECRETARIES' CONFERENCE

The sixth annual conference of the secretaries of the County Medical Societies of New York State was held in the Hotel Ten Eyck, Albany, N. Y., on Tuesday, September 13, 1932, beginning at 10 A. M., with Dr. Peter Irving, Assistant Secretary of the Medical Society of the State of New York, presiding. The members lunched together at noon, and adjourned soon after 3 o'clock. Thirty county societies were represented, as follows:

Albany.....	H. L. Nelms
Bronx.....	I. J. Landsman
Broome.....	L. H. Quackenbush
Chautauqua.....	E. Bieber
Clinton.....	A. S. Schneider
Columbia.....	L. Van Hoesen
Cortland.....	A. E. White
Delaware.....	W. M. Thomson
Erie.....	L. W. Beamis
Genesee.....	P. J. Di Natale
Herkimer.....	W. B. Brooks
Jefferson.....	C. A. Prudhon
Livingston.....	G. M. Doolittle
Monroe.....	W. A. MacVay
Montgomery.....	W. R. Pierce
New York.....	D. S. Dougherty
Oneida.....	W. Hale, Jr.
Onondaga.....	E. E. Mack
Orange.....	H. J. Shelley
Rockland.....	W. J. Ryan
Saratoga.....	H. L. Loop
Schoharie.....	H. L. Odell
Suffolk.....	Frank Overton
Sullivan.....	L. C. Payne
Tioga.....	I. N. Peterson
Ulster.....	F. H. Voss
Washington.....	S. J. Banker
Westchester.....	A. F. Heyl
Wyoming.....	Klostemyer
Yates.....	G. C. Hatch

The following representatives of the State Medical Society were present:

Dr. F. H. Flaherty, President-elect.

Dr. D. S. Dougherty, Secretary.

Dr. T. P. Farmer, Chairman, Committee on Public Health and Medical Education.

Dr. Harry Aranow, Chairman, Committee on Legislation.

Dr. Frederic E. Sondern, Chairman Committee on Medical Research.

Dr. James Vander Veer, Past-President and Liaison Officer with the State Department of Health.

Dr. James Rooney, Trustee.

Dr. W. H. Ross, Past-President and member of the Committee on Public Relations.

Dr. J. S. Lawrence, Executive Officer.

Dr. Frank Overton, Executive Editor.

The State Department of Health was represented at the Conference by Dr. R. E. Plunkett, Director of the Division of Tuberculosis; and the Department of Education by Dr. W. A. Howe, Director of Medical Examinations of School Children, and Dr. W. P. Brown, his assistant in tuberculosis.

Fourteen topics were discussed briefly and concisely, and the conference ranked among the best in interest and practical value.

Object of the Conference: Dr. F. H. Flaherty, President-Elect of the State Society, explained that the object of the Conference was to clarify and unify the attitude of the county secretaries toward the standard activities which are promoted by the State Society and carried on by all up-to-date county societies. The expectation is that the secretaries will acquire the point of view of other societies, and be able to advise and direct their brother members in the light of the common experience throughout the State.

State Medicine Dr J S Lawrence described the methods of European countries in their administration of medical services by the government, and listed the following medical activities now administered by the State of New York

- Old age pensions
- Disability compensation
- Tuberculosis sanatoria
- Mental hospitals
- Subsidies to health officers
- Care of ex-soldiers
- Examination of school children
- Care of crippled children

Most medical activities controlled by New York State were conducted with the approval and co-operation of private practitioners, and are not in the class of compulsory socialized medicine as administered by European governments

Dr D S Dougherty, Secretary of the Medical Society of the State of New York, told of the controversy within the medical profession when health insurance of workmen was proposed, the cost to be divided between the employers, the workmen, and the State. The Medical Society of the State of New York opposed the scheme, and defeated it, although many public health leaders upheld the plan

Fireworks in Syracuse Dr Earle E Mack, Secretary of the Onondaga County Medical Society, told of the leadership of the Society in securing an ordinance prohibiting the sale of fireworks in the city of Syracuse on account of the serious accidents which occurred in 1931, from explosions and burns. The story of ordinance is told in this Journal of August 15, 1932, page 982

On motion of Dr Dougherty, the Conference approved the action of the Onondaga County Society, and a proposal to sponsor a State-wide law prohibiting the sale or use of fireworks except for public celebrations, under police control

Veneral Disease Clinics Dr W B Brooks, Secretary of the Herkimer County Medical Society, told of the opposition of the Society to any form of free public clinics, venereal or any other kind

Dr J N Vander Veer, Liaison Officer of the State Society in cooperation with the State Department of Health, outlined plans for instructing physicians in the modern treatment of venereal disease. He also emphasized the great need of instructing members of Boards of Supervisors in the economic phases of the treatment of venereal diseases in their early stages. The cost of curing a case of syphilis taken early is about \$200, while the cost of caring for in advanced case, crippled physically or mentally, is over \$1 000 annually

Dr Vander Veer said that the State Society would sponsor a graduate course of instruction in venereal diseases in any county that desired it. Talks on venereal diseases had already been given in 28 counties

Dr W H Ross told of the success of the Suffolk County Health Department in treating indigent venereal patients by paying the family doctors to give the treatments. During the last eight months the County Department of Health had approved the bills for 23 patients, at a cost of \$1,850

Health Lectures in Utica Dr William Hale, Jr, Secretary of the Oneida County Medical Society, described a series of health talks given to workmen in industrial plants in Utica during the noon hour. The project was first proposed by the Secretary of the Utica Y M C A, who secured the active support and leadership of the Oneida County Medical Society and acted as its agent in attending to the details of the lectures. The series was begun in 1929 in eight plants, while this year sixteen plants are opened to the doctors to lecture

The lecturers are appointed by the county medical society, and their names and subjects are announced in the newspapers. The subjects include such common conditions as colds, cinders in the eye, feet, teeth, periodic health examinations, minor accidents, and infections

There was some discussion on the subject of announcing the names of the speakers, on the ground of advertising them. But Dr Dougherty explained that the newspapers, the radio, and all other promoters of publicity demanded the announcement of the names of the speakers and writers. He said that the agreement in New York City is to announce the name of the doctor and one title, such, for example, as that he is the secretary of the county society

Dr T P Farmer, referring to the post-graduate lectures, said that in all the years that the courses had been given he had heard of only one complaint about the aggrandizement of a speaker

Tuberculosis Control in Monroe County Dr W A MacVay described the cooperation of the Monroe County Tuberculosis and Health Association with the County Medical Society, and told particularly of a joint meeting of the two organizations

On motion of Dr. Dougherty, the plan of a joint meeting was recommended to the organizations in other counties

Medical Examination of School Children Dr W P Brown, of the State Department of Education, described a study of tuberculosis among school children by the tuberculin test and the ray. This method disclosed tuberculosis a year or two before its presence was shown by symptoms

Dr William A Howe State Director of Medical Examinations of School Children, conducted a round-table discussion of the part to be taken by family doctors in examining pupils

Dr L W Beamis, Secretary of the Erie County Society described the "squad" system of

examining the school children of Buffalo, in which a group of specialists visited a school, and each child received the attention of each specialist.

Reporting Cases of Tuberculosis: Dr. R. E. Plunkett, Director of the Division of Tuberculosis of the State Department of Health, gave confidential information regarding the unsatisfactory attitude of some doctors toward reporting cases of tuberculosis, especially those of a mild type. Ignorance, fear and prejudice on the part of the patients lead them to resent the efforts of the doctors to treat them properly and to protect others from infection.

Anti-Vivisection: Dr. Frederic E. Sondern spoke of the growing strength of the anti-vivisectionists, and of the fear of research workers in universities that their work will be seriously hindered by law if the anti-vivisectionists adopt the method of securing a long list of names of petitioners, as they can do because of the financial endowments of their organizations. He asked the secretaries to be alert to calls for aid from the Research Committee.

Legislation: Dr. Harry Aranow, Chairman of the Committee on Legislation, said that the committee had two practical suggestions:

1. Secure a group of intelligent citizens to oppose unscientific health legislation.
2. Appoint a member of the county legislative committee from the town in which the legislator lives, in order to keep in easy contact with him.

Dr. E. E. Mack described a method adopted by the Onondaga County Society that each letter to a doctor requesting his action in legislation shall contain a stub to be returned to the chairman, showing that the member had complied with the request.

Maternal Mortality Study: Dr. Thomas P. Farmer, Chairman of the Committee on Public

Health and Medical Education, urged the secretaries to support the investigation into maternal mortality conducted by the State Department of Health, with the approval of the committee of the State Medical Society. He suggested that the public health committee of the county society be ready to arbitrate any dispute which may arise between an investigator and a family doctor.

Dr. Farmer said that his extensive contacts with officers of county societies had demonstrated the great desirability of retaining secretaries and committee members after they have become familiar with their work.

Cooperation With Governmental Officials: Dr. James E. Rooney, Past-President of the State Society, and now a Trustee, called attention to the evidence of progress shown by the number of State officials on the program of the Conference, —a condition unknown twenty-five years ago.

State Sanitary Code: Dr. Lawrence called attention to two amendments which have recently been made to the State Sanitary Code:

1. Requiring the examination of pathological specimens removed at operation, by approved pathologists.

2. Blood transfusions to be reported, with full data regarding both the donors and the patients.
- On motion, both amendments were approved.

Overlapping Investigations: Dr. W. R. Pierce, Secretary of the Montgomery County Society, made a protest against the number of medical investigations being made by lay organizations. Dr. J. N. Vander Veer reported that the Albany County Society had found fifty-one organizations engaged in health work in the county, with a resulting duplication of effort.

It was voted to suggest to the Committee on Public Relations the desirability of investigating overlapping public health efforts.

NEW REGULATIONS FOR CHANCROID, GONORRHEA AND SYPHILIS

Physicians may, after September 1, 1932, when reporting chancroid, gonorrhea or syphilis use numbers rather than names for identification of the patient. Numbers are permissible also on laboratory slips. However, physicians are required to keep a record giving the name and address corresponding to each number, which will be available to the local health officer. This radical change has been made in order to assure the physician and the patient of the sincerity of the Department of Health in keeping all information confidential.

The Social Hygiene Division of the New York State Department of Health is not interested in knowing who has these diseases,

provided that they are under medical supervision and are not conducting themselves so as to spread the infections. Physicians are requested to report all information including the name and address of any person discontinuing treatment while potentially infectious in the opinion of the attending physician. The Division of Social Hygiene will investigate, or cause to be investigated, all such cases; and if the patients can continue to pay for treatment, it will endeavor to have them return to their former physician; and if they cannot continue to pay, it will arrange for the treatment at the expense of the health district in which they reside.

The use of state nurses to follow up phy-

sicians delinquent cases, investigate sources, and arrange for examination of contacts, under the immediate supervision of the attending physician, should increase physicians' practices, assure the infected person of receiving sufficient treatment to arrest the ravages of the disease, and from a public health point of view reduce to a minimum the foci of infection and the number of diseased persons becoming state charges

Formerly when a physician suspected a person to be afflicted with gonorrhea he was required to submit an appropriate specimen to an approved laboratory for examination. This regulation has now been withdrawn because it caused unnecessary work on the part of physicians who make their own microscopical examinations, but gonorrhea is still classified

with the reportable diseases and special form SH 12 should be used for this purpose

A number of these changes have been made with the thought of making the routine work less onerous to the physician, and also of assuring the physician and patient that the identity of the patient is absolutely confidential, with the hope of securing the simplified reports for every case under a physician's supervision. If universal reporting could be achieved, it would be possible to keep the medical profession informed at all times regarding the prevalence and trend of these diseases

ALBERT PFEIFFER,

Director Division of Social Hygiene,
New York State Department of Health

THE GRADUATE FORTNIGHT OF THE NEW YORK ACADEMY OF MEDICINE

The Fifth Graduate Fortnight of the New York Academy of Medicine will be conducted from October 17th to 28th, 1932. The four previous fortnights have been highly popular and successful and have been graduate courses of instruction in their particular fields. The subjects have been as follows:

- 1928 Old Age
- 1929 Functional and Nervous Problems
- 1930 Acute Bacterial Infections
- 1931 Disorders of the Circulation

The subject this year will be "Tumors," and the instruction will cover all phases of the subject.

The daily program will include four features:

1 Morning clinics in six hospitals. These clinics will be free and no ticket of admission will be required.

2 Afternoon clinics in nineteen hospitals. Tickets to these clinics will be required simply because experience has shown that otherwise the rooms would be over-crowded.

3 Evening lectures in the building of the Academy of Medicine, at 2 East 103rd Street, New York City. These lectures will be given in the large amphitheatre and will be free to physicians.

4 A scientific exhibit of anatomy, pathology, research, radiology, biopsy, statistics, and books. This exhibit will be open every day and evening throughout the fortnight, and admission will be free.

Programs and invitations have been sent to every doctor in Greater New York and vicinity. Up State doctors will be made welcome. Any doctor may obtain information and tickets by writing to the New York Academy of Medicine.

INDEX OF ACTIVITIES OF MEDICAL SOCIETIES OF COUNTIES AND STATES RECORDED IN THE NEW YORK STATE JOURNAL OF MEDICINE DURING THE THIRD QUARTER OF 1932

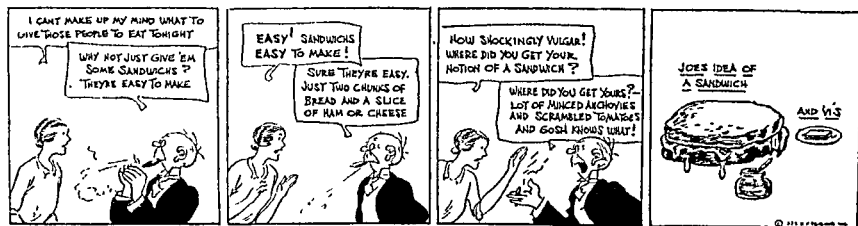
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THE DAILY PRESS

Mr. and Mrs.—

Just a Simple Sandwich



From New York Herald Tribune, August 15, 1932

TEA ROOM DIET

EUGENICS AND GENETICS

The meetings of the Third International Congress of Eugenics, held in the American Museum of Natural History, New York, August 21-23, 1932, elicited newspaper comments on the rivalry between that organization and that of the Genetics, which held its Sixth International Congress in Ithaca immediately after that on Eugenics had adjourned. The *New York Times* of August 24, said editorially:

"In a single week we are thus granted the opportunity of comparing the theories and methods of two schools. On the one hand, much loose talk about sterilizing the feeble-minded and restricting marriages of undesirables; on the other earnest experiments in shuffling genes, the ill-understood atoms of life, to learn how idiocy and genius may arise in the same family."

It is unfortunate that the objects of the two organizations should be confused. The Eugenicians deal with human beings—the Geneticists, with plants and animals; but the two organizations have an overlapping membership. The writer in the *Times* concludes his editorial with the remark:

"Although it is not likely that the highly technical addresses on breeding plants, mice and fruit-flies to be read at Ithaca will provide as much popular material as, for example, Professor Osborn's argument on the curbing of birth control and the encouraging of birth selection, they will indicate clearly enough that eugenics can become a practical creed only when the geneticist has discovered how the defective genes in all of us can be identified."

SPECIALISTS AS SEEN BY LAYMEN

Lay opinion of specialists is shown in the following editorial from the *New York Sun* of September 8:

"One exhaustive survey does not establish a fact, any more than one swallow makes a summer, but it is nevertheless encouraging to learn from the Committee on the Costs of Medical Care that data gathered by Dr. H. G. Weiskotten, dean of the Syracuse University College of Medicine, indicate that the tendency of medical school graduates to seek to become specialists has reached its zenith. As a matter of fact, Dr. Weiskotten's figures show merely that no greater proportion of the graduates of sixty-nine medical schools in 1925 limited their practice to a specialty than did the graduates of the same colleges in 1920. But because the tendency

up to 1920 was altogether in the direction of an increasing concentration on specialization, Dr. Weiskotten believes that in the future fewer medical school graduates will deliberately plan to become specialists.

"This is encouraging to laymen, not because they distrust the specialist but because they trust the general practitioner. Physicians themselves would be the first to admit that division of labor in the field of medicine has been carried too far in the United States. The family doctor of old often had incomplete knowledge, but his wisdom was unsurpassed; the family doctor of today is not so common and familiar a figure, not so picturesque or eccentric, perhaps, but his knowledge is greater and his experience as enriching. It is good to learn that the breed is not dying out."

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BOOKS RECEIVED

Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits or in the interests of our readers.

NURSING IN NERVOUS DISEASES By JAMES W MC-COYNE, M D Octavo of 153 pages, illustrated Philadelphia, F A Davis Company, 1932 Cloth, \$1 50

DIABETES IN CHILDHOOD AND ADOLESCENCE By PRISCILLA WHITE, M D Octavo of 236 pages, illustrated Philadelphia, Lea & Febiger, 1932 Cloth, \$3 75

THE PRACTICAL MEDICINE SERIES Comprising Eight Volumes on the Year's Progress in Medicine and Surgery Series 1931 Chicago, The Year Book Publishers 1931 Dermatology and Syphilis Edited by FRED WISE, M D, and MARION B SULZBERGER, M D, and Urology Edited by JOHN H CUNNINGHAM, M D 12 mo of 472 pages, illustrated Cloth, \$2 25

THE PRACTICAL MEDICINE SERIES Comprising Eight Volumes on the Year's Progress in Medicine and Surgery Series 1931 Chicago, The Year Book Publishers, 1931 General Surgery Edited by EVARTS A GRAHAM, M D 12 mo of 804 pages, illustrated Cloth, \$3 00

THE PRACTICAL MEDICINE SERIES Comprising Eight Volumes on the Year's Progress in Medicine and Surgery Series 1931 Chicago, The Year Book Publishers, 1931 General Therapeutics By BERNARD I ANTUS, M D and LOUIS B KARTOON M D 12 mo of 467 pages, illustrated Cloth, \$2 25

THE PRACTICAL MEDICINE SERIES Comprising Eight Volumes on the Year's Progress in Medicine and Surgery Series 1931 Chicago The Year Book Publishers, 1931 Neurology Edited by PETER BASOUE, M D, and Psychiatry Edited by FRANKLIN G LBAUGH, M D 12 mo of 471 pages, illustrated Cloth, \$2 25

THE PRACTICAL MEDICINE SERIES Comprising Eight Volumes on the Year's Progress in Medicine and Surgery Series 1931 Chicago, The Year Book Publishers, 1931 Obstetrics Edited by JOSEPH B DELEE, M D, and Gynecology Edited by J P GREENHILL, M D 12 mo of 665 pages, illustrated Cloth, \$2 50

COMMUNITY HEALTH ORGANIZATION A Manual of Administration and Procedure for Cities of 100,000 with Suggested Modifications for Larger and Smaller Urban Units Edited by IRA V HISCOCK Octavo of 261 pages, New York The Commonwealth Fund 1932 Cloth \$2 50

HANDBOOK OF THE VACCINE TREATMENT OF CHRONIC RHEUMATIC DISEASES By H WARREN CROWE 2nd edition Octavo of 79 pages New York, Oxford University Press, 1932 Fabrikoid, 80¢

CLINICAL ENDOCRINOLOGY OF THE FEMALE By CHARLES MAZER M D, and LEOPOLD GOLDSTEIN M D Octavo of 518 pages, illustrated Philadelphia W B Saunders Company, 1932 Cloth, \$6 00

SURGICAL CLINICS OF NORTH AMERICA Vol 12 No 4 August, 1932 (Mayo Clinic Number) Published every other month by the W B Saunders Company,

Philadelphia and London Per Clinic Year (6 issues) Cloth, \$16 00 net, paper, \$12 00 net

PHYSICAL THERAPEUTIC TECHNIC. By FRANK BUTLER GRANGER, M D Second edition, revised by WILLIAM D MCFEE, M D Octavo of 436 pages, illustrated Philadelphia, W B Saunders Company, 1932 Cloth, \$6 50

THE AMERICAN ILLUSTRATED MEDICAL DICTIONARY. By W A NEWMAN DORLAND, M D Sixteenth edition Octavo of 1493 pages, illustrated Philadelphia, W B Saunders Company, 1932 Flexible and stiff binding, plain \$7 00 Thumb index, \$7 50

MINOR SURGERY By FREDERICK CHRISTOPHER, M D Second edition Octavo of 998 pages, illustrated Philadelphia, W B Saunders Company, 1932 Cloth, \$10 00

PREVENTIVE MEDICINE By MARK F BOYD, M D Fourth edition Octavo of 532 pages, illustrated Philadelphia, W B Saunders Company, 1932 Cloth, \$4 50

THE SPOTUM Its Examination and Clinical Significance By RANDALL CLIFFORD, M D Octavo of 167 pages, illustrated New York, The Macmillan Company, 1932 Cloth, \$4 00

MENTAL DEFICIENCY DUE TO BIRTH INJURIES By EDGAR A DOLL, Ph D, WINTHROP M PHELPS, M D and RUTH TAYLOR MELCHER, M A Octavo of 289 pages, illustrated New York, The Macmillan Company, 1932 Cloth, \$4 50

NURSES ON HORSEBACK By ERNEST POOLE, Octavo of 168 pages, illustrated New York, The Macmillan Company, 1932 Cloth, \$1 50

BAILEY'S TEXT BOOK OF HISTOLOGY Eighth edition Revised and rewritten by ADOLPH ELWYN, A M, and OLIVER S STRONG, A M and Ph D Octavo of 746 pages, illustrated Baltimore, William Wood & Company, 1932 Cloth, \$7 00

A TEXT BOOK OF PATHOLOGY An Introduction to Medicine By WILLIAM BOYD, M D Octavo of 946 pages, illustrated Philadelphia, Lea & Febiger, 1932 Cloth, \$10 00

ESSENTIALS OF PEDIATRIC NURSING By RUTH ALICE PERKINS, R N, B S Second edition, revised and enlarged Octavo of 467 pages illustrated Philadelphia, F A Davis Company, 1932

DIET PRESCRIPTIONS Compiled by OSCAR BAER, M D, from accepted authorities Quarto of 75 forms Niagara Falls, N Y, Arnsen's Service and Supplies, 1932

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY of the American Medical Association for 1931, with the comments that have appeared in the Journal 12 mo of 100 pages Chicago American Medical Association, 1932 Cloth, \$1 00



BOOK REVIEWS



MIDWIVES, CHIROPODISTS, AND OPTOMETRISTS. Their Place in Medical Care. By LOUIS S. REED, Ph.D. Octavo of 70 pages. Chicago, The University of Chicago Press [c. 1932]. Paper, \$1.00. (Publications of the Committee on the Costs of Medical Care: No. 15.)

This is a small pamphlet of three major sections; one dealing with midwifery, one with chiropody and the other with optometry. Each section first presents a poorly established and largely inferential statistical statement of importance of the respective fraternities. Each section then proceeds with a more or less stereotyped formula dealing with history and the isolated activities and variously expressed opinions on the justification of the incidence of these neo-medical services. One finds many bits of interesting information but a lack of a scholarly orientation of the civics and economics of these things.

It is interesting to note that in the section on midwives, the author, in comparing the mortality record of physicians with that of midwives, quotes a certain oft-named public health doctor (who has never practised medicine) as follows: "... From some personal familiarity with the situation in Philadelphia, New Jersey and New York I think we must recognize that there is sufficiently valid evidence that the trained midwife has a superior record in cases appropriate for her care than the cases trusted to physicians exclusively."

"... (The experience) in Philadelphia, of Pennsylvania as a whole under its admirable system of state supervision, the experience of New York City over perhaps the longest period of supervision of midwives, and that of New Jersey has convinced all people in the field of public health that if they are concerned with reducing maternal and neo-natal mortality, the midwife is the answer..."

The section on chiropody deals with an explanation of its organization into a fraternity, of its schools and the legal status. As we read the last of the author's conclusions we wonder how long it will be before a committee will be knocking at the legislative chamber demanding the right to practice medicine.

The chapter on optometry follows the usual formula and brings out the interesting fact that in at least one state there has been an effort to restrict the legally qualified physicians from attempting to refract or otherwise treat disorders of vision until certified by the Optometry Board. The general tone of this chapter is not unfriendly to that point of view.

The general summary of the pamphlet is an attack upon the present individualized practice of medicine and unqualified condemnation of the present status of medical practice.

Surveys made in the medical field by people who do not practice medicine are commonly incompetent in the fundamental of the point of view. This is no exception to that generalization. F. E. ELLIOTT.

SURGICAL ERRORS AND SAFEGUARDS. By MAX THOREK, M.D. Quarto of 696 pages, illustrated. Philadelphia, J. B. Lippincott Company (c.1932). Cloth, \$10.00.

This treatise is the product of an active surgeon and teacher based upon over twenty-five years of experience. The pedagogic ability of the author is manifested in page after page of the contents. The value of the text is thereby enhanced for the reader.

These errors and safeguards are considered first in connection with surgical procedures in general. There

then follows chapter by chapter similar considerations in operations on the various regions of the body.

Every page is replete with meaty suggestions. Methods of correcting accidents at operations and after operations and the dangers to be avoided are stressed. There is appended to every chapter a very adequate bibliography.

Both the novitiate and the master surgeon can benefit much from the reading of this text.

ROBERT F. BARBER.

INTERNATIONAL STUDIES on the Relation Between the Private and Official Practice of Medicine with Special Reference to the Prevention of Disease, conducted for the Milbank Memorial Fund. By SIR ARTHUR NEWSHOLME, K.C.B., M.D. Volume 3. Octavo of 558 pages. Baltimore, The Williams & Wilkins Company (c.1931). Cloth, \$5.00.

The third volume of Sir Arthur Newsholme's studies on the relation between the private and official practice of medicine is largely devoted to England, Scotland and Wales are well studied, and Ireland incompletely. An immense amount of valuable information has been collected and made available to those interested in Community health.

Although the work is essentially a Survey, here and there Sir Arthur finds room for his own opinion. Apparently he thinks that Great Britain closely approaches adequate treatment of the problem. More time might well have been given to discussion of the income and living conditions of the average doctor. The practicing physician deserves more attention than he has received. His importance in any plan of operation is evident.

CHARLES A. GORDON.

KORYZA: der Schnupfen und seine Bekämpfung. By HERMANN ERNST. 16mo of 104 pages, illustrated. (Wien, Druck der Vernay A.-G., 1931.)

This is a curious pamphlet, published by the author in his own printing establishment, in which he describes what appears to be a purely mechanical method of curing coryza by cleaning out the pharynx, posterior nares and tonsils by means of his own tongue. He goes into the anatomy of the parts and describes the method by means of which he inserts his tongue back of the uvula. His motive for offering the work to the medical and lay public, of which latter he is a member, is found in the preface. Here he states that, as a young man, having suffered the tortures of the condemned from coryza for many years, he desires to impart to others how by accident he discovered the successful cure described in his pamphlet. It is difficult to understand just how he manages the technic of his treatment; but to the curious, the work may appeal and may lead to added knowledge of a practical nature. J. M. V. C.

A CHILD'S BOOK OF THE TEETH. By HARRISON WADER FERGUSON, D.D.S. Second edition revised. 12mo of 106 pages, illustrated. Yonkers-on-Hudson, N. Y. World Book Co. (c.1932). Cloth, 68c.

This book, designed to give good advice in an amusing manner fulfills its purpose well.

The verbal advice without the very well done pictures would have but a tithe of its value with this reinforcement; although the parents will do the reading one can cheerfully recommend this small book.

WALTER D. LUDLUM.

APPLIED PHARMACOLOGY By A J CLARK, M.C., M.D
Fourth edition Octavo of 590 pages, illustrated
Philadelphia, P Blakiston's Son & Co, Inc, 1932
Cloth, \$4 00

This fourth edition of this work on pharmacology and therapeutics proves the value of the volume. So little time is devoted to the study of drugs and their actions in the curricula of medical colleges that an accurate presentation such as this work is of estimable value. In presenting the subject the author has written of a few specific drugs and their action. He gives clearly the action of drugs upon the central nervous system, then the pharmacology of the various other systems in the body. The physiological actions are accurately presented and the therapeutic results of medication. In this volume are included a study of the action of the endocrine glands and of the importance of the vitamins. This publication is a most valuable addition to the literature of drugs and therapeutics. The subject matter is clearly expressed, logical, accurate, and instructive. From the publishers' viewpoint the presentation is excellent, large, clear type, good illustrations and upon the best paper. This work is up to date and is valuable for reference and information.

HENRY M MOSES

A TEXT-BOOK OF X RAY THERAPEUTICS By ROBERT KNOX, M.D., C.M. Fourth edition completed and edited by WALTER M LEVITT. Quarto of 250 pages, illustrated. New York, The Macmillan Company, 1932. Cloth, \$7 00. (The Edinburgh Medical Series.)

This book is a revision of former editions by Dr Knox and also includes several chapters from the pen of Dr Levitt who completed the work after Dr Knox's death. The entire work appeals to the reviewer as a most satisfactory and intelligent treatment of the subject, presented in a clear and concise manner in such a way that it is understandable by the roentgen physician as well as by the trained physicist. It is rather odd that the chapters which appeal to the reviewer in particular are those contributed by Dr Levitt. Chapter two dealing with the physiological action of the x-ray together with the measurements of irradiation are excellent and is about the most complete which exists. It was a happy idea to limit the description of apparatus to the outfits which are now useful rather than following the usual course of presenting a full historical resumé of the development of roentgen equipment. Chapter eight, also by Dr Levitt, dealing with the particulars of technique, considering the physical and biological aspects with a discussion on "dosage" is most commendable. Various methods of dosage are given with the indications of each and the writer in dealing with controversial subjects has presented both sides of the problem without attempting to be in the least dogmatic.

The chapter dealing with the treatment of carcinoma is a delightful discussion of the relative merits of surgery vs radiology. The views presented are extremely liberal and therefore sane.

The second half of the book is devoted to the treatment procedures for various conditions. This is very complete and intelligent and the technique for the measurement of each condition is given in a lucid manner.

The entire work is most praiseworthy and probably the best work of its kind that has yet been produced. The publishers are to be congratulated upon their splendid press work and the clarity of the illustrations which are numerous and beautifully executed.

CHARLES EASTMOND

PRIMARY CARCINOMA OF THE LUNG Bronchiogenic Cancer. A Clinical and Pathological Study in Two Parts. By B M FRIED, M.D. Octavo of 247 pages, illustrated. Baltimore, The Williams and Wilkins Company, 1932. Cloth \$5 00. (Medicine Monograph XIX.)

This is an excellent study of primary carcinoma in the lung, in which the author deduces the fact that he is not dealing with a new, unusual and increasing condition, but with one recognized more frequently because of better methods of diagnosis, and because of better instruction and information concerning the condition. The author is led to believe by his studies that the usual pathologic classification is erroneous and that all primary carcinoma of the lungs are bronchiogenic in origin. This belief will no doubt lead to some discussion. The incidence, etiology, histogenesis, the classification, the metastasis together with the methods of diagnosis are all carefully presented. Many cases are reported in detail illustrating the various manifestations of this disease. For anyone interested in malignancy in the lung or else where this volume presents every aspect of the subject. The publishers have given us an excellent volume with many illustrations clearly and accurately presented.

HENRY MONROE MOSES

THE RHEUMATIC INFECTION IN CHILDHOOD By LEONARD FINDLAY, M.D., D.Sc. Octavo of 187 pages, illustrated. New York, William Wood & Company, 1932. Cloth, \$3 50.

This monograph is based on the study of 693 cases of rheumatic infection in childhood, which the author has observed at the Royal Hospital for sick children in Glasgow between the years 1914 and 1930.

It is an interesting and important study not only because there is so much to learn about this disease but also because of the remarkably long period of follow up, averaging five years, during which the observation of the patients has been carried out.

The Author's presentation is largely clinical in nature and is accompanied by a number of statistical tables and graphs, upon which he justly bases his conclusions which he freely expresses relative to many points in etiology and symptomatology.

The chapter on treatment confirms the value of salicylates if used in sufficiently high dosage. The author is not optimistic about the cure of this condition once the heart has been involved and believes that our goal lies in prophylaxis, drawing the very important conclusion thereof that it is the poorer classes who live under unsanitary conditions of housing who suffer most and that therefore the keystone of prophylaxis should be the provision of healthy houses for this class of the community by housing reform.

JOSEPH C REGAN

PATHOLOGY FOR NURSES By EUGENE C PIETTE, M.D. Octavo of 251 pages illustrated. Philadelphia, F A Davis Company, 1932. Cloth, \$1 75.

Nurses completing their crowded medical curriculum frequently enter their duties viewing medicine as a crossword puzzle which gradually will untangle itself into concrete facts. The reviewer's experience in teaching nurses has caused him to appreciate their need for a text book on the nature of disease so as to provide them with a ready source of reference. This book fulfills this requirement. It teaches the nurse enough pathology to make her a better practical nurse in the handling of specimens and in understanding the patient's needs. In brief, it gives the nurse a better perspective of disease.

S H POLAYES



OUR NEIGHBORS



THE JOURNAL OF KANSAS

The August issue of the *Journal of the Kansas Medical Society* contains the annual reports of the officers. The financial report of the Journal may be summarized as follows:

Receipts

Journal advertising	\$1,239.66
Sales and subscriptions.....	312.56
Kansas Medical Society.....	2,000.00
Other sources	12.48
	<hr/>
	\$6,564.70

Expenditures

Journal printing	\$2,539.25
Stock and stationery.....	833.55
Salaries and wages.....	2,364.00
Postage	153.77
Electrotypes	78.40
Office rent	225.00
Drayage	7.75
Telephone	62.93
Insurance	9.74
A.M.A. directory	12.00
Office equipment and supplies.....	50.82
	<hr/>
	\$6,337.21

Salary due Dr. Brown.....	500.00
Salary due Miss Carlson.....	90.00
Deficit May 1, 1931.....	218.83
	<hr/>

Total deficit May 1, 1932.....	\$ 581.34
Bills payable	61.50
	<hr/>
	\$7.207.54

Commenting on the report, the editor says:

"The amount of our advertising receipts, sales and subscriptions and other sources, is \$190.74 less than in 1931. This is due to the difficulty we are having in retaining our old advertisers and in securing new accounts. Several large manufacturers, sanitariums and hospitals have discontinued their advertising temporarily. However, we are encouraged at the present time because new accounts have been received. The General Baking Company are using a one-half page advertisement; The National Drug Company have ordered a page advertisement, every other month, beginning with the May number; the S.M.A. Corporation have increased their advertisement from a quarter-page to a half-page, and E. R. Squibb and Sons are continuing their advertisement of one page a month, preferred space. This is interesting due to the fact that they had ordered us to change their advertisement to one page every other month for the year 1932.

"The Journal printing, stock and stationery are less. We have a new contract with our printer, obtained in March, 1932, which will reduce this item very much, if we can keep our mailing list up to standard and near the 1800 mark.

"Our salary item is more because it was imperative that we have more help in the office. Our postage and electrotypes are considerably less than in 1931. Our rent is \$75.00 less due to the fact that we crowded the Bureau and Journal equipment into one room last fall to reduce expenses as much as possible.

EX-PRESIDENTS IN NEBRASKA

To find a place for honorable service for ex-presidents of the Medical Societies of some States seems to be a problem which the New York State Society does not have to meet, as was shown in an editorial on page 1024 of this Journal of September first. Concerning the continued service of the ex-presidents of the Nebraska State Medical Association, the *Nebraska State Medical Journal* for September says:

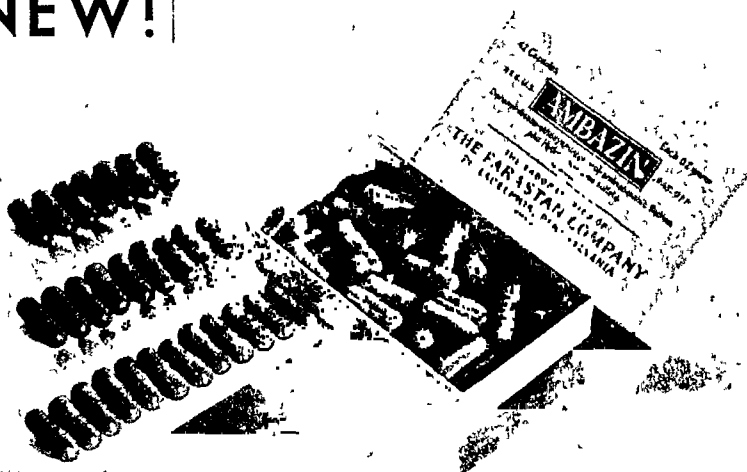
"Under the By-Laws of the Nebraska State Medical Association a past president becomes a member of the house of delegates for life on the

theory that the special knowledge gained while president should make the individual a valuable member of the councils of the house of delegates and also by a later enactment the recent past president is a member of the Council for one year immediately succeeding his term as president.

"At this time there are living twenty-four former presidents of the Nebraska State Medical Association, twenty-one of whom live within this state. The roll call of the house of dele-

(Continued on page 1150—adv. xiv)

NEW!



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Diphenyl disazo-ethoxyaminophenol aminobenzoic Sodium plus Hydroxyquoline sulfate

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Affords a valuable adjunct to local treatment in infections of the urinary tract.

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(Continued from page 1148)

gates reveals a lamentable lack of apparent interest of most past presidents in medical organization. At the annual session of the past five years but three past presidents consistently attended all the meetings of the house of delegates, took an interest in all the proceedings and participated in the discussions. In 1928, six attended one or two meetings; in 1929, seven; in 1930, eight; in 1931, seven; in 1932, nine. In most instances, of those who attended but one or two roll calls, the interest may be said to have been perfunctory.

"On a previous occasion we stated that no physician is so proud of position in life and of his attainments as to despise the honor of the presidency of the State Medical Association. The honor of the presidency can come to but a few men. A man is picked for the presidency, because he is an outstanding man in scientific attainments, or because his activities in medical organization have seemed to fit him for the place.

"These men owe something to the organization that has so signally honored them. Can it be that all they care for is the honor, and after that has been bestowed they are content to rest on their laurels and let the organization drift whither it may?

"Certain it is that a lamentable lack of in-

terest is evidenced by many former presidents in a work that should call forth their best efforts during their active years."

The NEW YORK STATE JOURNAL OF MEDICINE for May 1, 1928, page 552, printed an abstract showing how well the ex-presidents of the South Carolina Medical Association continue their interest in organized medicine.

WOMAN'S AUXILIARY IN ARKANSAS

The leading article in the August number of the Journal of the Arkansas Medical Society is the address of Dr. D. A. Rhinehard, President of the Society, at the Annual Meeting of the Woman's Auxiliary, in which he describes the perfect wife of a practising physician as follows:

"You can encourage your husband in attending the meetings of the different medical societies to which he belongs because he will learn something at the society meeting and he will become friends with the other physicians in the community in which you live. The quality of medical service is better in those that have active medical societies than in those that do not.

"You can be of help to your husband in
(Continued on page 1152—adv. xviii)

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Ease of administration
Sensible economy*



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(Continued from page 1150—adv. xiv)

getting the correct mental slant on his competitors. You can adroitly help him put the most kindly interpretation on events and occurrences of which he has heard; you can remind him that the layman's ideas about medical affairs are apt to be quite nebulous and more often incorrect than correct.

"One of the gravest mistakes that you can make in your Auxiliary work is to permit your opinion of some doctor's wife to be influenced by what your husband may think of her's. You should carefully guard against such, and base your opinions entirely on the true worth of the other woman as an individual. Should you find her worthy, your friendship with her may be a means of ending the antipathies your husbands have for each other.

"You can also help liberalize your husband's ideas on a great many subjects, for instance, take such a simple thing as the examination of children of pre-school age for the presence of remedial physical defects.

"Again, consider the matter of public health instruction, whether in the schools or elsewhere. The object of such instruction is to teach people how to keep themselves well. It would be more pleasant to deal with well patients than it would with sick ones. You, therefore, not restrained by the old conventions that affect your husband, may help by showing him wherein something that will happen in the future will more than offset something to which he objects in the present.

"Perhaps the most important function of all that you may perform for your husbands is to represent them and the medical profession at times and places where they cannot be present themselves.

"It may be assumed that the physicians themselves are amply able to counteract that part of this unfavorable notice they meet, but in the course of the day's activities, it is quite probable that physicians' wives have more occasions than they. To deliver the report courteous so that it may be effective, you must be informed on these subjects. This information you will obtain from "Hygeia," from the "Propaganda for Reform" department of the *Journal of the American Medical Association*, from the *Bulletin of the American Medical Association*, and from the various special publications of the Association. These latter can either be obtained gratis or for a very nominal sum.

"Having become informed, it is then necessary for you to make associations such that you will be able to disseminate this information. As set forth in the purposes of the

(Continued on page 1154—adv. xv)

THE SECRET OF EFFECTIVE SALICYLATE MEDICATION



MASSIVE DOSAGE AND THOROUGH ALKALINIZATION

- Every physician realizes the importance of pushing the dosage of salicylates at the outset of treatment, in order to effect the desired rapid salicylization of the patient.
- The difficulty has been to give adequate dosage without at the same time setting up objectionable side effects. This difficulty has now been overcome with the introduction of

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- Special attention is directed to the balanced alkali formula which permits large dosage without disturbing the mineral balance, or producing alkalosis.
- Let us send you a bottle of Alycin and complete information so that you can make a thorough clinical test of this modern form of salicylate medication.

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Dr.

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8 oz. sample can to physicians on request.
Merckens Chocolate Co., Inc., Buffalo, N. Y.

Maltcao
BUILDS FOR THE YEARS AHEAD

(Continued from page 1152—adv. xviii)

Auxiliaries, this can be done through the various woman's organizations, particularly through the Parent-Teacher groups, for a more serious purpose will be found there than elsewhere."

ACTIVITIES OF THE NEW HAMPSHIRE MEDICAL SOCIETY

The New Hampshire Medical Society does not publish its own Journal, but utilizes the first issue of each month of the *New England Journal of Medicine*, and purchases a sufficient number of that issue to supply each of its 476 members. The August fourth issue of the Journal contains an account of the annual meeting of the New Hampshire Society, held in Manchester on May seventeenth, when the Presidential address was given by Dr. G. C. Wilkins. In closing, Dr. Wilkins discussed society expenses and dues as follows:

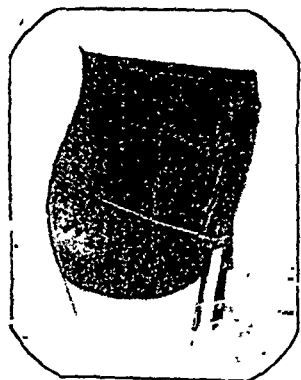
"The financial condition of the society is good, but in order to keep pace with the increasing duties devolving upon the society and its officers, it was found necessary to increase the dues. Even at this present figure one finds that only twelve states have dues as low as ours. (Four dollars. Four Southern States have dues of only three dollars.—Editor's note.) If, and when, the financial depression lifts, we must look forward to a further increase in dues if we wish to carry on effectively. Added expenses have come on account of our participation in the deliberations of the New England Medical Council, the development of the work of the Committee on Jurisprudence, and the distribution of one monthly copy of the *New England Journal of Medicine*. We should gradually increase the salary of the secretary as his duties increase and he should at once receive an increased amount of clerical help. An increase in the activities of our society and its subjective committees automatically increases incidental expenses. If our desire is to keep abreast of contemporary societies, we will need to expend more money, and collect higher dues."

Concerning the New England Medical Council, Dr. Wilkins says:

"The importance and significance of the results of cooperation among the six New England medical societies cannot be estimated by a mere perusal of the minutes of the meetings. The meetings have offered an opportunity for discussions on many subjects of vital importance, by men from widely separated sections of New England. Progressive and constructive legislation has frequently been adopted by the various State societies as a result of policies and ideas developed in the deliberations of the New Eng-

(Continued on page 1155—adv. xxi)

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(Continued from page 1154—adv. xx)

land Medical Council. I am sure our enthusiastic support of the New England Medical Council will continue."

Dr. Wilkins discusses the scope of work of the Advisory Committee on Jurisprudence, as follows:

"This committee has continued its excellent work during the past year, and should receive whole-hearted support from the physicians of the State. Dissatisfaction on the part of patients can be reduced in three ways: first, by refraining from any remark that may be construed by the patient as criticizing the method of treatment of another physician; secondly, by insisting on adequate x-ray examination of all fractures; and thirdly, by not attempting, except in emergency, treatment with which one is not familiar. Always bear in mind the words of Lincoln, spoken by him in a law lecture before he became president, 'Never stir up litigation. A worse man can scarcely be found than one who does this.' Remember that an increasing number of suits are shown in rising insurance premiums. The rise in insurance premiums will be further emphasized if some of our members continue in their attitude of unwillingness toward joining the

larger group, representing the State Society, in cooperation with one insuring body."

MEDICO-POLITICAL PROBLEMS IN TEXAS

The leading editorial in the July issue of the *Texas State Journal of Medicine* discusses the medico-political problems of the State Medical Association of Texas. The editor touches on several debatable subjects including prohibition, the Sheppard-Towner bill, veterans' relief, and antivivisection. Concerning the liquor problem, the editor says:

"The liquor problem is the one which appeals to most thinking people, and physicians, being men of decision and of action, are emphatically pro or anti. We look upon the problem from a dual viewpoint. Alcoholic liquors are with us as they are with other people, a moral issue, and at the same time they constitute a problem in the practice of medicine. Therefore, we are doubly burdened with this particular responsibility: At the same time, there are multiplied thousands with equally as emphatic views if not actuated by the same reasoning; and where we must decide as be-

(Continued on page 1156—adv. xxii)

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OBSTETRICS

A statistical study of a series of over 9000 cases showed a morbidity reduction of over 50% when Mercurochrome was used for routine preparation.

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(Continued from page 1155—adv. xxi)

tween our partisan views on liquor and our obligations to the public health, there can be no question as to our duty. We are hoping that our readers will be a unit in voting for the best interests of medicine and the public health.

"The medical liquor question is continuously a thorn in the side of the medical profession. The American Medical Association insists that the physician be either denied the privilege of prescribing liquor or be permitted to prescribe it in such amounts and at such times as it may accomplish the intended purpose.

"Our congressmen should not be in favor of the formerly so-called Sheppard-Towner Bill and at the present time, we believe, designated as the Maternity, Child Welfare and Rural Health Bill. This measure, in effect, comprises a federal subsidy for the control of state health activities. It is extremely objectionable from several angles, perhaps the most important of which is that it is a step towards the socialization of medicine.

It is the view of the medical profession that the prolific erection of hospitals throughout the country for the care of veterans can have but one end, and that is the establishment of a great organization eventually to be devoted strictly to socialized medicine. In the meantime, it is our view that the government must have a certain number of hospitals in which to care for specialized illnesses, such as tuberculosis and nervous and mental diseases, and such service-connected disabilities as require the compiling of large files and the winding of much red tape. It is our thought that the veteran himself can be best served by caring for the non-service disability cases and the emergency cases, at least such of them as the government desires to assume responsibility for, at home, by home hospitals and by home physicians.

"The ethical medical profession of Texas insists upon it that the present fair, reasonably high and rather practical medical standards be maintained; that no special legislation authorizing the practice of medicine or any part of it, by cults, be enacted. Of equal importance is the necessity of approaching public health understandingly and doing something about it. Among these is the need of revamping our present sanitary code, which is in many respects obsolete. It is possible that the antivivisectionists will reach Texas soon in their general campaign to outlaw animal experimentation, and several movements are on foot looking to the eventual socialization of medicine, any one of which may be heard from at any time.

"Those candidates for the legislature for whom we vote should be willing to counsel with us in regard to these and related matters, whether or not they agree with us, and, of course, those who agree with us should be favored above those who do not, granted moral and personal competence."

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GRADUATE COURSES IN VIRGINIA

The July issue of the *Virginia Medical Monthly* contains the following comments on the clinical instruction sponsored by the Medical Society of Virginia:

"With three of the ten meetings in the first series of post-graduate courses in prenatal and postnatal care completed, the enrollment of physicians has reached a total of seventy-five.

"Almost without exception physicians approve the general plan of post-graduate educational opportunities, but the supreme test comes when the actual presentation of a specific subject must measure up to their needs and demands. Unsolicited notes of appreciation, repeating the terms "interesting and enjoyable," "practical," "valuable," "profitable," show that this program bids fair to fulfill in marked degree the purposes for which it was established.

"In two other respects a favorable start can be reported. Through the cooperation of members of the groups, clinical material, upon which much of the effectiveness of the course depends, has been made available in every case except one. Furthermore, Dr. Lapham, the Field Clinician, is receiving an increasing number of requests for examination of patients at the offices of physicians in his classes. Dr. Lapham sees no patients with-

out the recommendation of a physician and communicates with them only through the physician. His out-of-class hours will be devoted to such consultations for educational purposes without cost.

"In the case of the present program there is probably a premium upon early organization. The expenses for the first year are entirely cared for by the appropriation of \$2,500 made by the Medical Society of Virginia at Roanoke and the grant of \$10,000 from the Commonwealth Fund. The Joint Committee felt it was advisable to establish at the beginning of the courses the principle of partial self-support by the students themselves, and for that reason it has set an enrollment fee of \$5.00 per student for the course during the first year. For the proposed second and third years required to place this educational opportunity in every section of the state where it is desired, the grant of the Commonwealth Fund is tentative and reduced in amount. If an increase in the enrollment fee should become necessary, only the students during the first year will have the advantages of the minimum rate. Officers and members of societies in consideration of this fact are urged to begin arrangements for offering the course to their colleagues as promptly as possible."

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PURE BEECHWOOD CREOSOTE	2 min.
GUAIACOL	1 min.
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LACTOSE AND DEXTROSE	11.3%
CANE SUGAR	2.5%
MINERAL CONSTITUENTS (Ash)	0.95%

It acts as a bronchial sedative and expectorant, exhibiting a peculiar ability to relieve Bronchitis—acute or chronic. It checks as well a persistent winter cough and without harsh or untoward effect. It is agreeable to the palate and acceptable to the stomach—with merit as an intestinal antiseptic. Supplied in 12 oz. bottles.

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BUDGET IN WISCONSIN

The Budget of the State Medical Society of Wisconsin is prepared by a Committee of the Council and adopted by the Council. The budget for the current year of the Society is as follows:

	Amount Per	Total Member
Salaries		
J. G. Crownhart, Secretary Managing Editor. The Secretary receives \$1200 from the Journal which has been self-supporting to this year. His total salary is \$8000 as last set in January 1930	\$6800	\$367½
Ruth Buellbach, Assistant	2100	113½
Florence Ripley, in charge of records mailing and proofreading	1700	92
Ellmore Beck, Stenographer and in charge of subject and investigation files	1700	92
Rent	900	49
Supplies including printing postage telephone, light, telegraph, office supplies, etc.	2400	130
Press Service—furnishing a weekly article on the advances and facilities of medicine to all weekly and daily papers of the State	2200	119
Travel of the Secretary and assistant	1000	54
Special Committee on the Distribution of Medical Services in Wisconsin	1800	97
Editorial Board—Appropriation to meet \$900 anticipated loss in advertising and \$600 honorarium for Medical Editor	1500	81
Annual Meeting—Appropriation in excess of \$1400 exhibit revenue	1800	97
Foundation Fund—Special appropriation to complete legal work in perfecting this trust	250	13
Public Policy, Committee on—For work of this committee in preparing bulletin on poor relief laws and preparatory to legislative session	500	27
Hygiene—Presenting annual subscriptions to state officers legislators editors and prominent and interested laymen	500	27
Delegates to A.M.A.—Rail and Pullman fare for three delegates to New Orleans	360	20
Secretaries Conference—Cost of steno type reporter and expenses out of state speakers at time of annual meeting	300	16
Legal—expenses incurred in securing information for general membership on matters affecting entire profession—see report of secretary	600	32
Committees—expense of committee members in attending meetings rail and Pullman meals at committee sessions and rail expense of Councilors in attending extra session	750	41
County Constitutions—appropriation to provide legal assistance in perfecting a revision and costs of publication	100	05
Special Committee to Investigate Admissions at Wisconsin General Hospital	500	27
	\$27760	\$1500

The Secretary makes the following explanatory comments:

It is to be noted that in the preparation of this (Continued on page 1160—adv xxvi)

Send for this up-to-date vitamin-mineral food chart

"Your Comparative Nutritional Chart is invaluable!" say many nutritionists who are already putting this new chart to good use for reference purposes and in planning diets. Compact, concise (it is only 12" x 10"), it contains more practical information than many a large volume. It shows the relative vitamin potency of all the common foods, the mineral values, and the acid-alkaline reactions. Besides this, there is a printed column of useful, practical nutritional suggestions, including a sensible method of planning the food budget. We will gladly send you a copy of this chart free of charge, on request. Just fill in the coupon below.

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Dear Sirs:

Kindly send me a copy of your Comparative Nutritional Chart

(Continued from page 1159—adv. xxv)

Budget your Council effected the following economies in similar services of a year ago: Rent, \$240; Press Service, \$550; Editorial Board, \$1,000 and Secretaries' Conference, \$500. It appears that current income of the year will be sufficient to balance this budget and to meet any incidental items that may arise in the next six months. It does not appear that the income will be more than sufficient.

"At your session ten years ago it was your decision to increase your dues from \$4 to \$9 to permit the employment of a full-time lay Secretary-Managing Editor. At that time your Secretary had no reserves and was, in fact, meeting No-

vember bills from the next January receipts. In an organization charges with such duties and whose work was of such importance to the economic stability of the profession, it was thought fitting that the Society should have a reasonable surplus. Through the ten-year period this surplus has reached the sum of \$25,000, something less than the budget of the Society for a single year. This surplus of \$25,000 is comparable to those of \$110,000 in Illinois; \$50,000 in Michigan; \$32,000 in Iowa; \$25,000 in Minnesota and \$30,000 in Indiana.

"The annual cash income of the profession of this state is estimated to be in the neighborhood of nineteen millions of dollars. Our annual budget to do all of the work of the Society including that to protect our membership against impositions and injustice is but \$28,000. So long as this income is used wisely and the activities of your Society are carried on efficiently, certainly it would not appear that our budget of one and one-half one thousandth of our income is excessive. On the contrary it seems to be a very small amount."

WOMAN'S AUXILIARY IN PENNSYLVANIA A CENTURY AGO

Mrs. David B. Ludwig, Pittsburgh, Historian of the Woman's Auxiliary of the Medical Society of the State of Pennsylvania, writing in the *August Pennsylvania Medical Journal*, comments on what an Auxiliary Convention would have been one hundred years ago, and said:

"Oh, it would have been an interesting time—that convention of 1832. And if the Auxiliary had come what would it have done? We wonder, for budgets had never been thought about; by-laws were a thing of the far-distant future; there was no need of councilors, and *Hygeia* could not have been sold. Legislation was something which concerned only the dominant male; and as for nominations and periodic health examinations, programs and health education, there was no time for them and they could not have had Public Relations and Publicity, because there wasn't much *public*, and the *relations* consisted of a couple of grandmothers, several maiden aunts, and a Beau Brummel bachelor uncle. The yearbook was the family Bible, and the program of the auxiliary a hundred years ago was the daily care of a husband who had dedicated his life to the art of medicine and the bearing and rearing of sons and daughters to carry on the race, better because she lived.

"There were no impure streams to purify; there were no reports to be read. What an uninteresting time the auxiliary a hundred years ago would have had! But then they possibly would not have come. It was October—they would have stayed home and made apple butter and pickled sickle pears."

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MEDICAL LIBRARY IN KANSAS

The July issue of the Journal of the Kansas Medical Society contains the following report on the Stormont Medical Library which seems to be under the direction of the State Society:

"The Stormont Medical Library is composed of approximately 2,400 accessions, chiefly in the form of books and reports.

"This library is housed in the state library in the state house at Topeka and cared for by the librarians in that library. It is supported by the interest from a sum of money, approximately \$5,000 invested by the state treasurer and bringing in revenue approximating \$300 each year which is spent on new books and on magazine subscriptions. The cost of binding the magazines is stood by the state and there is no charge on the part of the library for indexing the books.

"At the report of this committee last year it was suggested that men over the state be permitted to write in to the library, request a particular journal or book and receive it loaned for a period of two weeks providing they were members of the society to use the library. The suggestion, however, has not been followed, and not a single request has been received all year, and there are very few men who make use of the library.

"At the present time the fund for purchasing books amounts to only \$23.00 and no books have been bought this year. The reasons for this sum in the treasury are accounted for because prior to appointing of a state Library Committee no one had direct charge of the library and the librarians were accustomed to ordering things almost any physician suggested, with the results that there was considerable money promised on periodicals, systems of medicine and the like when this committee took charge, and it was necessary to stop several of

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these general subscriptions as well as pay up the bills owed before we attempted to order any books."

MEDICAL PUBLICITY IN SOUTH CAROLINA

The presidential report of Dr. C. A. Mobley to the House of Delegates of the South Carolina Medical Association, printed in the June issue of the State Journal, suggests the following plans for medical publicity to be conducted by the State Association through bulletins and the newspapers:

"I have two minor matters that I wish to bring up that I think would be of a constructive nature, and I should like them to be considered, though not necessarily acted upon to night, by any means. I think it would be well to have a monthly bulletin mailed by the secretary of the State Association to each of the county medical societies, and also to the district societies, in which he can set forth any points of interest brought out in our state journal, or in the Journal of the American Medical Association, or any point that he comes across in his reading of other journals, or any matter of interest to the medical profession. He could make a mimeographed bulletin and mail one to each of the county medical societies and also to the district societies. I think that this would have a tendency to make our whole state association more cohesive. They would feel each month that the state society was having an interest in them.

"There is another thing which I believe should be done, and I think some time in the near future is the time to start it. I believe that the South Carolina Medical Association should publish informative and educational articles on health, disease, and things medical in the public press, in the newspapers. I think that they should not be signed by any one man, but that they should be published under the auspices of the South Carolina Medical Association."

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AMERICAN COLLEGE OF SURGEONS

The New York and Brooklyn Regional Fracture Committee of the American College of Surgeons will give its annual course on fracture treatment from October 31 to November 5, inclusive.

This course is given by men who are interested in the care of fractures,

the clinics being held at many of the leading hospitals of New York City. The course covers a large scope and, in the past, has been attended by physicians from many of the States.

The clinical lectures to be given will be illustrated by demonstrations of actual cases and will cover the diagnosis and treatment of all types of bone injuries.

In addition to this, there will be symposiums on bone repair, the operative treatment of fractures, the use of local anesthesia in the care of fractures, delayed and non-union in fractures and the care of compound fractures.

Information concerning this course can be obtained from the secretary, Dr. Fenwick Beekman, 121 East 60th Street, New York City. See page xxviii.—Adv.

WHAT IS MALTCOA?

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See page xx.—Adv.

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SOME OF THE PROBLEMS ASSOCIATED WITH PEPTIC ULCER*

By E. STARR JUDD, M.D., ROCHESTER, MINN.

PEPTIC ULCER has rightfully claimed much attention, for this lesion is a threat to life.

Furthermore, its distribution among persons in all walks of life gives it great significance, when one considers the curtailing effect of it on the enjoyment and maintenance of normal activities. Through persistent study, methods of treatment have been developed, which, if properly applied, are usually successful. Yet there is a percentage of cases in which a satisfactory result is not obtained, for some unknown reason.

This problem has been approached experimentally. The following data were obtained from Mann and Bollman of the Institute of Experimental Medicine of The Mayo Clinic. Acute gastric ulcer and acute duodenal ulcer have been produced by numerous methods, but subacute and chronic ulcer rarely have been developed in animals. Multiple and single ulcerative lesions of the gastric and duodenal mucosa have been produced experimentally. The acute ulcerative type, most often secured, does not become chronic. It is usually multiple and is more often found in the mucosa of the fundus than in the mucosa of the pylorus or duodenum. This type of lesion is readily produced by injection of toxins, certain drugs, and bacteria, and it appears in some moribund conditions which follow loss of the suprarenal and parathyroid glands, as well as after section of the splanchnic nerves and other operative procedures. According to the experience of Mann and Bollman, if the animal survives the operation, healing of the ulcer always occurs, and no trace of the lesion remains. The other type of ulcer occurs more often, and under definite and limited conditions. It is usually single, and is situated in the pathway of the outflow of gastric content, never in the fundus. In the beginning the lesion is acute, but if perforation with peritonitis, or fatal hemorrhage does not occur, it quickly becomes chronic. Grossly and microscopically this lesion resembles peptic ulcer as found in man.

Whether either of these two types of lesion

corresponds exactly to the types seen in man has not been definitely determined, owing to the fact that the process of development of the lesion in the gastro-intestinal tract of man is not known. Experience teaches that these typical ulcers occur mainly in the portion of the digestive tract which is exposed to contact with an acid substance, and which appears to be subjected to the greatest mechanical trauma by passage of gastric content. For this reason, practically all of the various methods, both medical and surgical, that have been devised to treat the patient with peptic ulcer have for their main object protection of the lesions from chemical and mechanical injury. And these facts have determined the experimental approach to the problem.

In 20 per cent of animals used in experiments, chronic peptic ulcer develops just distal to the pylorus if the duodenum is removed, if the first portion of the jejunum is anastomosed to the stomach, and if the common bile and pancreatic ducts are transplanted into this loop of jejunum.

In some experiments the secretions that normally are poured into the duodenum by the glands extrinsic to the gastro-intestinal tract, that is, the liver and the pancreas, have been eliminated. The ducts from these glands have been transplanted into the terminal part of the ileum. In about 50 per cent of the animals thus operated on, peptic ulcer developed in the duodenal mucosa, at the usual site of duodenal ulcer in man.

Finally, in a large series of animals, the entire normal mechanism for receiving the acid gastric content was eliminated by functionally resecting the duodenum. The gastric content was diverted directly into the jejunum, without being mixed with the secretions which normally enter the duodenum. The secretions were all drained into the ileum. Various investigators have found that when these conditions are imposed, ulcer will develop in about 95 per cent of experimental animals.

Recently Wu, working in the Institute of Experimental Medicine, showed that the mucosa in which the experimental ulcers were produced was subjected to contact with gastric content of

* Read at the Annual Meeting of the Medical Society of the State of New York, at Buffalo, N. Y., May 24, 1932.

which the hydrogen-ion concentration was on the acid side most of the time, and that, at intervals, acidity was marked.

Studies showed that maintenance of the normal reaction of the duodenal content is highly important in prevention of ulcer. The significant factors in maintaining normal reaction of the content are the duodenal mucosa and its secretion, the pancreatic juice, and the bile. Ulcer occurred much more frequently among animals in which all of these factors were eliminated than among those in which only part of them were eliminated. The significance of acid in the production of ulcer cannot be overestimated. Apparently active neutralization goes on during the course of digestion, and alkalization is more effective in reducing excess acidity during digestion than during fasting. After an ulcer has been produced, the neutralizing power of the stomach toward administration of acid seems to be markedly reduced. Administration of acid in the presence of peptic ulcer creates considerable disturbance: emesis is produced by only a few cubic centimeters of dilute hydrochloric acid. Similar observations have been made in man by Dragstedt and Palmer. Peptic ulcer, produced by administration of acid, will begin to heal in a few days after discontinuance of the acid. Short periods of administration of acid may greatly retard healing, and may produce extension of the ulcer. The mechanical factor must also be of considerable significance, since the ulcer always develops 1 to 2 cm. distal to the point of exit of the gastric content from the stomach. The site of development of the lesion is typical and constant unless the axis of the loop of the intestine is changed. The lesion usually will develop more rapidly, and will be more prone to undergo perforation if the opening at the line of the gastro-intestinal anastomosis is made small, for a small opening causes the gastric content to impinge with greater force on the area of the lesion.

The same agencies which are responsible for production of ulcer prevent its healing, and cause chronicity. Reparative processes can be demonstrated in all ulcers at any stage of their development; repair begins immediately after injury to the mucosa. Destruction and repair go on simultaneously throughout the course of development of the ulcer, except when it is completely protected from the gastric content. Only when the ever present reparative process can take place faster than the destructive process does healing occur. Healing of experimentally produced peptic ulcer takes place spontaneously if continuity of the tract, ducts, and glandular structures is restored. Treatment by diet, alkalization, medicines, and emollients has been studied in the work with experimental animals. There appears to be a somewhat quantitative relationship be-

tween ingestion of food and gastric acidity. Because of the attendant danger of alkalosis, permanent neutralization of gastric content over a period necessary for healing of ulcer is not feasible. The use of certain emollient substances gives promise of helping to solve the problem, but investigative work shows that means must be found of controlling the action of some of the ingredients before any such plan can be adopted as a routine. Harper has produced healing by the use of an emulsion which has little neutralizing ability but which apparently efficiently protects the mucosa from injury. Time is an important factor in successful healing of peptic ulcer; treatment must continuously suppress mechanical and chemical factors during the entire period of healing.

Clinical Features

Diagnosis of duodenal ulcer is usually readily made from the history, and then confirmed by roentgen examination. One of the interesting features is the seasonal nature of the complaint. It is difficult to understand why, in the spring and autumn, a patient will have all of the usual symptoms, not easily controlled by most rigid treatment, and then, within a few days, will have complete freedom from symptoms. During this period of comfort he may be very indiscreet about his living and his diet, and still not have any symptoms. Looking at this from the standpoint of the lesion itself, it certainly is not reasonable to assume that the ulcer healed during the period of remission. It also seems difficult to explain this feature of the complaint on the basis of disturbance in the nervous system.

It seems to me that in the last few years more patients with bleeding ulcer have been seen than formerly. Bleeding from these lesions is often severe, and may place the patient in a serious condition, although loss of life from such bleeding is very unusual.

Rivers and Wilbur recently have completed a study of the diagnostic significance of hematemesis. They reviewed 668 histories of cases. In 236 of the cases, operation was not performed, but the diagnosis was made after careful clinical investigation. In 432 of the 668 cases, surgical exploration was carried out. The investigators noted that duodenal ulcer alone was responsible for hemorrhage in half of the cases, and gastric ulcer was responsible for only 6.4 per cent of them. Carcinoma was the cause in less than 13 per cent. They expressed the belief that the source of the blood usually can be determined with accuracy if data obtainable through a detailed anamnesis, careful general examination, and laboratory studies are evaluated cautiously. They also stated that indigestion and hemorrhage usually mean an intrinsic gastroduodenal lesion. Duodenal lesions occur more frequently

among males than females. The incidence by age is difficult to determine, for in some cases periods of remission of symptoms help to make the history obscure, and encourage delays in seeking treatment. In other cases, rapid onset and severity of symptoms have caused the patient to seek attention early in the course of the disease. Some patients are in their teens, but the majority are in the middle years of life.

Treatment

In the presence of conflicting views regarding the origin of ulcer, different forms of treatment are justified only on the basis of experience. A sharp line must be drawn between gastric and duodenal ulcer. In the first place, in considering the problem of ulcer, it is necessary to keep in mind the high incidence of malignancy in gastric lesions and the predominantly benign nature of those which occur in the duodenum. Barring other considerations, such as hemorrhage, treatment of these conditions should be tempered accordingly. No matter how small a percentage of gastric ulcers is malignant or will become malignant, the possibility that they will become malignant at all adds to the seriousness of the disease. Radical operation is preferable for gastric ulcer if there is considerable associated gastritis.

Many duodenal ulcers heal permanently under medical treatment. Anyone with a duodenal ulcer is entitled to a trial of this type of treatment, and to continue with the regimen as long as it is helpful. It is not a good plan to operate when the lesion is bleeding. If the patient has had one hemorrhage only, and is free from symptoms at the time of the examination, it is not necessary or advisable to operate immediately. If he has recurrent symptoms, then an operation may be indicated. Should surgical treatment become necessary, particularly because of repeated, severe hemorrhage, it is imperative to remove the ulcer, if this can be done thoroughly by excision, taking part of the pyloric sphincter muscle. With this removal of muscle, everything is accomplished that can be expected of gastro-enterostomy, and the ulcer is also removed. The operation of excision was developed for use in those cases in which it was possible to carry it out safely, with the idea of avoiding jejunal ulcer, and possibly of reducing the number of cases in which bleeding continues after gastro-enterostomy for hemorrhagic ulcer. This operation can be performed in about 50 per cent of cases of duodenal ulcer, and in these better immediate and ultimate results will follow than from gastro-enterostomy. A study of files of case histories shows that the local operation

can be done with very little risk. In 1,363 cases there was a mortality of 0.44 per cent. The procedure is limited to those cases in which the duodenum is fairly mobile. As one's experience with these cases increases, however, one realizes that it is not difficult to mobilize a duodenum that initially is fairly firmly fixed, and such mobilization should be effected in cases in which excision of the ulcer is definitely indicated. Should this not be feasible because of local conditions, in cases in which there is severe, repeated hemorrhage, then it is advisable to resect the stomach with the ulcer.

The local operation of excision of the ulcer with the cap of the duodenum and a considerable part of the pyloric sphincter, completing the operation as a gastroduodenostomy, is the operation of choice in all cases of ulcer of the duodenum, or duodenitis, and in cases of ulcer of the stomach in which the lesion is near the pylorus. In cases in which multiple ulcers are encountered, and in which it is not possible to remove all of them, it is probably best to remove the anterior ulcer, close the opening in the duodenum, and then complete the operation as a gastro-enterostomy. In operating on patients who have passed middle age, and who have obstruction of the duodenum, gastro-enterostomy gives satisfactory results. There is almost sure to be complete relief of symptoms, with little probability of the formation of secondary ulcers. This method proves satisfactory in all cases except those in which secondary ulcers develop, hemorrhage occurs, or bleeding continues.

So far as present knowledge is concerned, a person who has once had an ulcer must always be considered to have a potential ulcer. Although it is not necessary for a patient to adhere rigidly to dietary restrictions, nevertheless, at any suggestion of a return of former symptoms, he should be very cautious about his diet and activities. If he is willing to cooperate in this plan of treatment, there is no reason why he cannot be made comfortable and live a useful and active life; if he does not follow the regimen, and symptoms recur, they are likely to be much more difficult to control than the original disturbance.

When the problem of etiology of ulcer of the stomach and duodenum, and duodenitis is solved, possibly it will be necessary to change the methods of treatment in some respects. Already great progress has been made in control of these conditions, and in a large proportion of the cases it is possible to give relief from the symptoms. However, it will not be possible to assure every patient of complete and permanent cure until the exact cause of the lesions is known.

THE PROSTATIC PROBLEM*

By FREDERICK J. PARMENTER, M.D., BUFFALO, N. Y.

THE physician having a patient suffering with prostatic obstruction must assume the responsibility of giving proper advice if the future welfare of the individual is to be best served. To this end, the medical adviser should clearly understand the sequence of events which all forms of lower urinary tract obstruction eventually bring about.

The first effect is to cause hypertrophy of the bladder musculature to facilitate its emptying; and as long as the obstruction is not too great and the bladder muscle strong enough to accomplish this, all is well. This is the period of *compensation*. However, as the obstruction increases, the bladder in time becomes unable to completely empty. Residual urine results, and the period of *decompensation* is ushered in. As the residual urine increases, a back pressure is created which retards the flow of urine from the kidneys, thus preventing the elimination of waste products, and also causing slow destruction of the renal secreting tissue, until uremia and death finally end the picture.

Adenomata:—The remainder of this presentation will deal with only adenomata of the prostate, excluding carcinoma, myoma, sarcoma and all the other forms of lower tract obstruction.

The writer has termed these obstructions as *adenomata* rather than *benign hypertrophy* because in all material removed and submitted to pathological examination the report has invariably read: "Adenoma," or "Adenoma with cystic degeneration," or "Fibro-adenoma," etc., and not in a single instance has "benign hypertrophy" (which means an enlargement of the normal prostate gland) been reported. Gross examination of each specimen has also confirmed the picture of multiple adenomata of various sizes with a variable amount of fibrous tissue-supporting structure. For this reason the term "adenoma" would seem to explain the pathological condition present better than "hypertrophy," the term commonly used.

Randall in his "Surgical Pathology of Prostatic Obstructions," on page 24, refers to Marion's Treatise, in the *Encyclopedic Francaise d'Urologie* (Tome VI) upon the causes of so-called benign hypertrophy of the prostate, and in his (Marion's) summary (No. 3) states: "Those eclectics who recognize that all the glands, peri-urethral and prostatic, are able to give birth to the adenoma that constitutes hypertrophy."

Symptoms: The symptoms may be divided into two groups, namely, the urinary, which are the commoner; and the toxic, which are much more serious.

The symptoms of the urinary group begin with a slowly increasing frequency, urgency and difficulty in voiding which are worse at night, often preventing the securing of proper rest. The difficulty is usually increased by holding the urine, getting chilled, alcoholic and over sexual indulgences. Many patients state that the first voiding in the morning is especially difficult but after being on their feet a short time, it becomes much easier.

These symptoms increase as the obstruction becomes greater, until the patient has an almost constant desire to void, and the stream is thin and feeble and dribbles away. Incontinence is usual and may be constant or present only at night, resulting in the bed being constantly soaked. The final ending is acute retention, catheter relief being imperative.

Toxic Group: The symptoms in this group differ in that urinary complaints are usually conspicuous by their absence, probably due to a marked diminution in the bladder sensorium. These patients accumulate a large residual urine, with accompanying renal impairment causing uremia, which may affect any one of the other great systems of the body, such as:

Cerebral: Mental dullness, confusion, headache, dizziness.

Cardiac: Dyspnoea, especially on exertion. Decompensation with or without edema. The blood pressure may be high or low.

Gastro-Intestinal: Indigestion, anorexia, diarrhoea.

Urine: Is almost colorless, clear, with a low specific gravity.

Secondary anemia is not uncommon and may be severe.

Blood chemistry studies show a retention of nitrogenous products.

As before stated this group is by far the more serious for the reasons that renal damage is severe and may be irreparable; and because of the lack of urinary symptoms the patient has been treated for heart disease, anemia, nephritis, etc., for a long time and the true cause of his trouble missed. The following case being an excellent illustration:

Aged 70. Referred for swelling in the abdomen, pronounced by 4 medical men and one urologist as carcinoma because of its nodular feel. Patient is very weak, feeble, falling asleep when sitting in a chair. Has lost 30 lbs. in weight. Is very anemic. Has no appetite and occasional attacks of nausea and vomiting. Has nocturnal dribbling of urine.

Examination showed an adenoma of the pros-

* Read before the Ontario County Medical Society, January 12, 1932.

tate, and the abdominal swelling proved to be an overdistended bladder, the nodular feel being due to the splitting of the muscle allowing the mucus membrane to herniate through.

This patient completely recovered after a two-stage prostatectomy, re-entered business and lived eight years, then dying of heart disease. The period of drainage was $2\frac{1}{2}$ years before prostatectomy was performed. For over a year the P. S. P. test remained 0 for both hours, though the patient was eating well and regaining his weight and strength. At the time of prostatectomy this test was 32 per cent in two hours. It is interesting to note that not one of the physicians had made a rectal examination.

Diagnosis: Patients in whom the urinary symptoms are prominent offer little difficulty of recognition. Some suprapubic swelling is often present, and a rectal examination will show a typical adenomatous enlargement which is smooth in outline, freely movable, and of soft to moderately firm consistency. If the enlargement is confined to the lateral lobes alone, a deep cleft will separate them. If the median or other glandular elements are involved as well the enlargement will be felt as one mass. If only the median or subcervical or trigonal group are involved the rectal examination will be negative unless palpation is made after a stiff catheter or sound has been passed so that the enlargement can be felt between the sound and finger in the rectum. This type of obstruction must be remembered as it may cause greater retention than the large type, and because the adenoma cannot be felt, often leads to the conclusion that none is present.

These findings, together with the presence of residual urine, determined by palpation of a distended bladder or the passage of a catheter after voiding, makes the diagnosis clear.

The dangers of adenoma are toxemia from renal failure (already mentioned), infection, and carcinomatous change.

Having established the the diagnosis, what advice and treatment should be given?

The patient's condition should be explained to him; its dangers, and what can be done to relieve him. This can best be considered by making three groupings.

Group 1. The elective group. The patient has either no residual or one under 6-8 ozs., with no signs of renal toxemia or infection. If dilatation of the urethra by the catheter used to determine the residual greatly relieves in making urination freer and reduces the residual, nothing more need be done other than frequent observations to note the condition of the prostate and the return of residual urine. If the enlargement is very soft and boggy, therapeutic doses of x-ray have greatly relieved a small group of patients. Massage may also be used to advantage. Finally, the patient may elect prostatectomy before it is absolutely

necessary, to prevent future trouble and damage to his urinary tract.

Group 2. The residual is over 8 ozs., and often much more, the bladder distended, together with evidences of toxemia. Here surgical relief holds the only possibility of cure. Before operation can be safely undertaken certain investigations and preparations must be gone through, as experience has proven that the reduction in mortality from a high to a low one has been due to these factors alone, and to neglect them is just as sensible as putting to sea in a leaky boat.

Group 3. The patient has acute retention and demands immediate relief. This is the only group in which any emergency exists and even here relief can be afforded and proper time for investigation and preparation for operation spent.

Investigation and Preparation: Realizing that we are dealing with patients in the later decades of life whose bodily functions have carried the strain of years, often with its accompanying numerous infections, it seems rational that every means should be employed to determine the exact condition of the patient, thus indicating the degree of operative risk and that each step in our surgical intervention should be planned to inflict as little strain as possible. The immediate dangers of any operation are shock, hemorrhage and infection. The remote ones are non-relief of the condition for which the operation was performed.

The routine studies in our clinic are the following, and while some may consider it too elaborate, yet it has yielded much valuable information at times which could not have been secured in any other way.

First: A careful complete physical examination is made to determine the present condition of the patient and any other associated diseases as lues, diabetes, etc. Special attention is paid to the cardio-vascular system and includes an electrocardiogram. Signs of good omen are a vigorous appearance, clear eye, feeling of well being, good appetite, etc.

The urine is then examined, and if the specific gravity is 1.018 or better, we know the concentrating power of the kidneys is unimpaired. A clear urine indicates freedom from infection. The usual analysis completes this examination. If abnormal substances as sugar are present, proper treatment is instituted. Blood chemistry consists of a urea nitrogen determination, a blood sugar, and a Wassermann.

If the residual is small and the bladder can be safely emptied, a P. S. P. test is made. The dye is placed in the vein and samples are collected every half hour for two hours. Better function is present if the bulk of the dye is eliminated the first half to one hour, rather than in the second hour. A low output of dye does not contra-indicate surgery if the test has been repeated many times and its readings are constant, as in the toxic

case already mentioned. The patient is also typed. Bleeding and clotting time is also determined in case transfusion becomes necessary after operation, because of hemorrhage. We like to have the laboratory findings check with the physical ones as we consider the latter the more important. This is mentioned because the importance which has been given laboratory procedures in the past few years has led to depending upon them too much, valuable as they are.

We now come to the ways and means of reducing residual urine in the toxic group in order that surgery may later be possible. It has been emphasized for a long time that it is extremely dangerous to suddenly upset the renal balance by suddenly emptying a chronically over distended bladder. If this is done it is followed by a polyuria, then suppression and even anuria, associated with a marked increase in toxic symptoms, which may be severe enough to cause the patient to pass into coma and death. Other observers believe it is not the sudden emptying that causes so much trouble, as allowing the bladder, once emptied, to over-distend again. Whichever is right, great harm occurs when either of these things are done. There is a growing disfavor to the use of the indwelling catheter because of the injection of the posterior urethra, which may cause a fatal septicemia, and the fact that its care entails constant supervision day and night to prevent its blocking or coming out, thus causing over-distention, especially if the urine already is, or has become infected since instituting its use. Some are advocating immediate suprapubic drainage and allowing the urine to drain slowly away by partly blocking the drainage tube. These suggestions appeal strongly to the writer, especially since the recent introduction of an instrument which will allow the placing of a suprapubic tube without losing any of the bladder urine, which was practically impossible before.

A number of devices have been suggested to allow the slow escape of urine, but the grooved cork method is the most simple and the materials are always at hand, namely, a cork to fit the catheter with a groove cut lengthwise as in an ether can. This can be fitted to either an indwelling catheter or suprapubic tube and pushed in far enough to cause a steady drop of urine to flow away. This cork is then fastened to the tube at this point by piercing both with a needle and thread so the cork can not come out. Naturally this method can not be used in the presence of blood clots or thick pus. As before stated, it is imperative that drainage once established be maintained day and night regardless of how much inconvenience it may cause those in charge of the patient. The writer has seen weeks of preparation lost and even death occur from letting this condition go unrelieved.

The decompression takes from four to six days, after which the tube or catheter can be allowed

to drain freely. During this time, the toxic symptoms usually increase and must be treated by plenty of fluids, even resorting to salt solution under the skin, a favorite combination being one 20 c.c. ampoule of 50 per cent glucose and 8 c.c. of 1 per cent novocaine added to 1000 c.c. of normal salt solution, which can be given in the thighs painlessly and repeated as often as necessary.

Epididymitis, which is a serious complication and may be fatal in a feeble old man, can be prevented by vas section, with the burying of the end of one of the stumps. Epididymitis is more liable to occur if the catheter is used, and following prostatectomy.

Is cystoscopy necessary?

The writer is restricting its use more and more, especially in the clear, uninfected cases, and then carrying it out just preceding suprapubic drainage if thought necessary. If the urine is bloody or infected, the bladder should be inspected through the cystoscope to rule out stone, tumor, etc. A plain x-ray will also rule out stone, both in the bladder or kidneys. Should a study of the upper urinary tract be necessary, urography by uroselectan has much to commend it and satisfactory results can be obtained by proper technic.

Urinary antiseptics are useful at all times though they will be considerably diluted when large quantities of fluid are given.

After decompensation, an injection of 30 c.c. 1-1,000 neutral acriflavin in the tube or catheter and retained for five minutes every eight hours, helps to diminish bladder infection.

The Surgery of the Prostate.

1. Suprapubic prostatectomy in one or two stages.

2. Perineal prostatectomy.

3. Partial removal by the hot or cold punch, or desiccation as in Colling's method.

Suprapubic Prostatectomy: Suprapubic prostatectomy is employed by the majority of surgeons; and by following pre-operative preparation carefully, the mortality has fallen to about 10% on an average. Some report much lower averages—as low as 2-3%.

In the beginning, the operation was performed in one stage, but because of the high mortality, the two-stage procedure became the accepted one.

Recently there has been a revival of the one-stage method, which its advocates say permits of a visual approach in enucleation, control of hemorrhage by suture, trimming off of ragged capsular edges which may form bands in healing and later obstruction. Some also advocate suturing the mucous membrane to cover the prostatic cavity, thus lessening the chances of infection and scar tissue formation; and lastly, but one operation is necessary, so that the patient's convalescence is shorter, which is a great economic factor.

All of this sounds very plausible, but based upon the experience of many men, is more apparent than real; and also, the advocates of the one-stage operation forget one extremely important consideration, namely, that the mortality is considerably higher in the hands of the average one-stage surgeon. The writer is free to admit that try as he will, he can not be sure of just how much the patient can stand and the factor of safety is in many cases, and his experience still keeps him in the two-stage prostatectomy class, as surgical trauma is not so severe. Indeed, it is usual to have more reaction after suprapubic drainage than after prostatectomy by the two-stage method.

Hemorrhage can nearly always be controlled by a properly placed Pilcher bag; while oozing can be controlled by swabbing the prostatic cavity with Monsell's solution.

The prostatic cavity contracts rapidly after the adenoma has been removed, as the uterus does after labor, thus obliterating itself. If the bag is used, tags are pressed down and will form no obstructing bands.

The writer does not use the bag routinely but always places an indwelling catheter, which is brought out through the incision, to which a bag can be attached if necessary.

Pelvic infection has been eliminated by making an incision not over 2-2½", and not disturbing the bladder by wide stripping of perivesical tissue.

By this method the writer's mortality has been reduced to 5%, and the after results in over 95% of cases absolutely satisfactory to both patient and surgeon, which means the elimination of difficulty and a restoration of health, which is usually much better than has been enjoyed in years. It is needless to say that following each step the patient should be allowed to fully recover before further surgery is undertaken, so that taking short cuts has no place in prostatic surgery.

The time in the hospital need be no longer in the two-stage method used by the writer than the catheter one-stage procedure. In good risk patients, the preliminary catheter is not employed, suprapubic drainage is performed at once and the prostatectomy a week or ten days later, which is the time spent by the one-stage surgeon using preliminary catheter drainage; so both start convalescence after prostatectomy together. This method has the advantage if the patient has not done well, he can be sent home to convalesce. If this is necessary, the tube must be carefully watched, and if it becomes obstructed by phosphates, be cleaned or replaced, otherwise weeks of preparation will be undone. Pain and a desire to void are the symptoms present.

In the toxic cases, the writer is wavering between catheter and suprapubic decompression

with the inclination quite strongly to the latter, which future experience must decide.

Treatment after operation is just as important as before and the patient should be carefully watched for a considerable time, paying special attention to the circulatory system, kidney function, and the clearing up of any existing infection.

Pyuria may persist due to a low grade pyelonephritis, and often does not seem to impair the patient's health or cause him any inconvenience. These infections are best treated by urinary antiseptics, vaccines, etc., bladder and even kidney pelvic lavage not accomplishing much. The writer has had five patients who did not heal and had marked pyuria until infected teeth were removed, when convalescence became astonishingly rapid, going on to complete cure.

Perineal Prostatectomy: Except in a few clinics, perineal prostatectomy is not the operation of choice among surgeons. When properly performed by an experienced operator, the results are excellent. However, the danger of rectal injury, urinary incontinence and the leaving of small intravesical pieces of adenoma are by no means uncommon sequelae, even in the hands of experts.

The Punch or Desiccation Method: The final method of treatment, which will be very popular with the laity, is the partial removal of the adenoma by the punch or desiccation method. The writer uses this method for median bars, fibrous contraction, and as a palliative procedure in certain cases of carcinoma, but does not believe that the majority of patients will be benefited for any great length of time; and if the operation has to be repeated as often as seven times, as one enthusiast reports, and is not free from danger, nearly every one would rather have his trouble eliminated by open operation. Time only can determine its future place.

Anesthesia: The suprapubic drainage and vas ligation can be carried out practically painlessly under local infiltration, using 1/5 of 1% novocain. Next in choice is avertin, supplemented by local infiltration, and finally, nitrous oxide. For prostatectomy, spinal anesthesia, using Pitkin's solution; next avertin and gas; and finally, gas alone are given in order of their preference.

Briefly summarized, the success in dealing with the prostatics consists in careful attention to details, taking plenty of time to prepare the patient and proceeding step by step as indications warrant.

The actual operation is a minor consideration to adequate preparation and careful post-operative care, continuing until the patient has fully recovered, which is usually a considerable time after his discharge from the hospital. Unless the surgeon is willing to assume such responsibility, his results will never compare with the man who does.

CLINICAL ANALYSIS OF PROSTATIC OBSTRUCTION

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PROSTATIC surgery is essentially a modern procedure being developed and popularized in the past 25 years, in spite of the fact that the anatomical knowledge of the prostate dates back two centuries. Historically, too, there are a few records of partial removal of the median lobe during the middle of the last century, but the mortality was usually 100 per cent, the cases isolated, and the technique variable, and the operation has attained wide practicability only in the last few years.

The first suprapubic prostatectomy, as we now understand the term, was done in this country by Eugene Fuller of New York, in 1894, and in 1900 Freyer reported 4 successful cases in the *British Medical Journal*. Young introduced the idea of counterpressure in the rectum in 1898. From this beginning, all our present technique arises.

But for the first decade or two, results were uncertain, in spite of standardized operative technique, and figures of mortality varied widely. Many patients and many surgeons too were rightly afraid of the operation.

Keyes as late as 1923 stated that the mortality of the operation in the hands of the average specialist was 10 per cent, and when done by the general surgeon, 50 per cent. But increasing knowledge of the pre-operative technique, of the importance of estimating the kidney function, of the many details to be covered before the operation itself is performed, have greatly lowered this mortality, and this paper demonstrates what results may be expected in the hands of a general surgeon.

The technique of prostatectomy, therefore, is not so much in the performance of the operation, as it is in adequate preparation in the days and weeks before operation. The pathological physiology of prostatic obstruction shows that the urine held in the bladder backs up in turn on the urine in the kidney pelvis, so that the excretion from the kidney is done at an increasingly higher pressure. This brings about a type of nephritis, with rise of blood pressure, increased nitrogen retention in the blood stream, and decreased kidney function tests.

This condition of back pressure brings about a special difficulty, for if the pressure in the bladder is released too suddenly, the secretory balance may be so quickly thrown out of adjustment, that the kidney will cease to function altogether. Clinically this means that we "decompress" gradually, by intermittent catheterization, at the beginning of treatment, with withdrawal of only a portion of the retained urine, and gradually decreasing the amount of residual over a period of

hours or days. Or we may introduce a constant drainage tube, and so arrange the apparatus that the stream flows up-hill, with the drainage bottle above the level of the patient. This then is gradually lowered to drain in the usual fashion. It is true that the more severe the nephritis due to prostatic obstruction, the greater the chances of sudden collapse following complete emptying of the bladder.

Clinically, these patients show the signs of kidney toxemia coupled with urinary retention, total or partial. This implies difficulty in voiding, difficulty in starting the flow of urine, frequency by day and night, dribbling and even complete retention. These symptoms coming on in an elderly man accompanied by physical signs of urinary toxemia and an enlarged prostate as palpated through the rectum, usually make the diagnosis of prostatic obstruction. Stricture is ordinarily a disease of younger life and in differential may usually be excluded.

Of prognostic value, the general condition of the patient is of greatest importance. Is his myocardium too much involved? Is he losing or gaining weight and strength? Is he able or willing to take adequate fluids and nourishment?

Of specific indices, the range of the blood pressure is of prime importance, and operation should not be performed until the blood pressure is stabilized. After drainage is instituted, the pressure ordinarily falls, sometimes drastically, but is followed in a few days, in the favorable cases, by a secondary rise to a point somewhere near the old level. Operation in this period of hypotension (hypotension, at least, in relation to the pressure before) is fraught with danger, and should be postponed till secondary stabilization occurs.

The old reliable "phthalein" or "red" test, is of value, and after drainage this test often improves remarkably, occasionally coming up from 10 per cent to 40 per cent, rarely reaching the 50 or 60 per cent mentioned as normal in the text books.

The nitrogen retention in the blood stream ordinarily determined as the N P N, or non-protein nitrogen is another common laboratory test of kidney function. A level above 40 mg. per 100 cc. (the theoretical normal being 30) is a sign of difficulty. If it is high and stays high, avoid interference. If it is high and comes down under treatment, then you are enabled to go ahead.

The ordinary tests for albumen, casts, etc., are not of great significance, especially by their absence. A patient with a perfectly negative urine analysis may show all the functional indices markedly impaired.

Drainage of the bladder, to avoid the obstructing prostate is done in one of two ways. Catheter

drainage, with a tube in the urethra, is the simplest and easiest, and often is most satisfactory for the patient. If this is not tolerated well or if the urethra cannot be entered with a catheter, as occasionally occurs, a suprapubic cystotomy is done, with a drainage tube sewed into the bladder above the symphysis.

After satisfactory drainage is instituted by one means or another, the patient is encouraged to drink, so that the total intake per day is above 3000 cc. and as much more as possible. If fluids cannot be taken by mouth, they are administered through the bowel, under the skin, or into a vein. This period of forced fluids is often life saving. In addition, a nephritic regime is instituted, with restriction of the protein intake, etc.

The drainage tube is left in until the kidney function tests have come more nearly to normal, and until the general condition of the patient improves, so that he is able to be up and about, to walk short distances, and to show the cardiac and vasomotor decompensation, which usually accompanies prostatic obstruction, partially restored. This period varies from five days to three months, apparently without changing the ultimate prognosis.

The period of preliminary drainage, testing of the kidney function, and estimating the patient's general condition is of greatest importance. The results of this period determine the prognosis more than does the actual operative technique.

The operation itself that we perform in this clinic is the suprapubic prostatectomy. Perineal prostatectomy may have it advantages, especially in the hands of one accustomed to it, but the suprapubic operation we have found satisfactory and well adapted to the use of the general surgeon.

The anaesthesia for prostatectomy is habitually spinal. Ether we avoid. Sacral is usually not sufficient. Gas-oxygen is efficient for short periods, but raises the blood pressure. Spinal has been satisfactory, and we continue to use it.

For the drug, we like straight novocaine in doses of around 100 mg., giving a low anaesthesia, with care not to force the solution too high; or nupercaine, which gives a longer anaesthesia, lasting five or six hours after operation. Nupercaine is said to be considerably more toxic than novocaine, but has given good results in our hands. On a simple cystotomy, local novocaine may be used.

If the operation is in one stage, the bladder is opened in the mid-line above the symphysis, the mucous membrane grasped with retention sutures or Allis clamps, the urine or boric solution evacuated, and the prostate enucleated manually, with one or two fingers of the right hand in the bladder, and two fingers of the left in the rectum to give counter pressure. Bleeding is usually moderate, but the cavity of the prostatic bed is usually

packed with gauze, and at times a forceps is left in position on the gauze to give pressure if needed. In the ordinary case, this packing is probably unnecessary, though usually we have not the courage to omit it. It seems to do no harm, and is removed with little difficulty in 24 or 48 hours, and the surgeon sleeps better the first night. In the two-stage operation, the enucleation of the gland is carried out several days or weeks after the preliminary cystotomy.

Sutures of the prostatic bed, visualization of the field of operation, and removal with cutting instruments are usually unnecessary, give additional trauma without aiding the end results, and we depend more and more on manual dexterity.

Tabulating our own cases over the past few years, we find 56 patients admitted to the hospital with the diagnosis of prostatic obstruction. Of these, ten were clinically or pathologically carcinoma, that is, 18.2 per cent. This ratio agrees approximately with reports elsewhere. Approximately one obstructing prostate in five is malignant. The clinical texture of a carcinomatous prostate felt through the rectum is usually unmistakably firm or hard. These patients often have pain out of all proportion to the urinary obstruction. They frequently have metastases to bone. They rarely have hematuria. The average age of our ten was 69 years, varying from two at 53 to one at 79. Of these, three were in for diagnosis only, two were treated with radium only and five have suprapubic removal of at least the obstructing portion of the gland with radium post-operative, either in the prostatic bed or through the perineum. Of these patients, one died in the hospital, two died shortly after, and several have been well over three years.

Of the others, six had nothing done; were admitted only for diagnosis, had only slight or partial obstruction, or did not prefer to be operated on. None of these died.

Six others had catheter drainage only; were obstructed, but in no condition according to the clinical tests, to undergo operation. Three of these died; three went home with catheters in place or at least intermittently inserted.

Of the remaining, three had suprapubic cystotomy only; that is, the bladder could not be emptied with a catheter and an opening was made above the symphysis. These three were all old men, averaging 83 years, had an average N P N of 104 and all died after intervals of 4 to 56 days. Removal of the gland itself was not attempted in any of these groups. This mortality, of course, justified our decision to avoid radical interference.

This leaves 31 who had a prostatectomy, 14 with one-stage and 17 with the two-stage operation. One died post-operative in each group, that is a mortality of 2 out of 31 or 6.4 per cent. One was a death from embolism, which may follow any

major operation. The other was questionably malignant, and the operation technically difficult.

The average age of this group was 69.3 years, varying from 56 to 83. The fact that these old men, almost 70 years of age, can go through a major procedure such as this in any fashion at all, is interesting and almost spectacular. No patients are more grateful than prostatics when relieved of their symptoms.

The average blood pressure was 155 systolic. This does not seem too high for men of 70, but it is the stability and not the actual level that seems to be of importance. The average N P N on admission was 47.5 mg. per 1000 cc. of blood, but this was reduced below 40 in most cases before operation.

The average preoperative stay in the hospital was 26.7 days. This is the time when the kidney function is built up. It varied from 6 to 69 days, and, we repeat, operation was postponed until the clinical tests were favorable.

The post-operative stay averaged 42 days, this average being increased by a few slow healing cases, many leaving the hospital in two or three weeks. These patients were allowed out of bed very quickly after operation, often long before the wounds healed. We ordinarily use no indwelling or retention catheter post-operative, simply allowing the suprapubic wound to close by granulation, coincident with the establishment of the ordinary urinary flow.

We append the following case to illustrate some of the complications which must be considered in prostatic disease.

J. S., age 75, was admitted to the Mary McClellan Hospital, August 9, 1931, referred by Dr. W. A. Leonard of Cambridge, New York.

The patient, on the morning of admission, was in acute cardiac distress, breathing with great difficulty, and complaining of pain in the right side of the chest, in the precordial region, and in the left arm. The pain was so severe that it was only partially relieved by large doses of morphine and nitroglycerine. The pulse was between 110 and 130, and of poor quality. Blood pressure upon admission to the hospital was 184 systolic and 90 diastolic, and in the course of the next twenty-four hours fell rapidly to 110 systolic 60 diastolic. For thirty-six hours after his admission to the hospital, he ran a fever of 101 to 102. Leucocyte count was 17,200. His pulse showed the irregularity of auricular fibrillation. The first sound at the apex was of a peculiar scratchy character suggestive of a friction rub. There were numerous rales through the chest, especially at the left base. For this cardiac condition, he was seen in consultation, by Dr. L. W. Gorham of Albany, New York, and a diagnosis of coronary thrombosis made. In the course of the next few weeks he gradually improved.

About a month after his admission he had a partial hemiplegia, involving the right arm and leg and the power of speech. This cleared up rather rapidly in the next twenty-four hours.

The genito-urinary history dates back ten years, when he first began to notice nocturia, frequency, and some difficulty in passing his urine. This gave him moderate trouble up to the time of his admission for angina pectoris.

Rectal examination showed a diffusely enlarged prostate of benign hypertrophy. His kidney function was fairly good, his Non-Protein Nitrogen being 58.82 mg. per 100 cc., his blood chlorides 429.04 mg. per 100 cc. His blood Non-Protein Nitrogen gradually came down until it reached a level of 40.64 mg. per 100 cc. The output of phenolsulphonephthalein in two hours was 40 per cent. Residual was 1000 cc.

A permanent catheter was introduced into his bladder through the urethra and kept in place, being occasionally changed.

He was kept in the hospital, in bed, practically all of the time from his admission on August 9th, until the first of December. The entire situation was then carefully explained to the patient, telling him that unless the prostate was removed he would have to use a catheter continually or have a suprapubic drainage done. The dangers, also, of operation, in view of his past cardiac history were gently explained to him, but he decided that he would rather take the risk than go on the rest of his life with a catheter.

He was, therefore, operated on, under spinal anaesthesia, the prostate being removed in a one-stage operation, through the suprapubic route. The prostate was adherent to the neighboring structures by bands of scar tissue. He stood the operation better than was expected and in the course of a few weeks was beginning to void normally.

He has been seen on several occasions since. His wound is entirely healed. He voids in the normal way without difficulty, showing a good stream of urine. He has nocturia about one a night. Otherwise he shows no urinary disturbance of any kind. His heart action is good. Occasional extrasystoles are noted, but his blood pressure is well sustained at about 135. He is walking around, going out of doors, taking short automobile rides, and is very comfortable and happy.

SUMMARY

	No. of Cases	Deaths
Benign Hypertrophy:		
One Stage Operations	14	1
Two Stage Operations	17	1
	—	—
Total Complete Operations	31	2
Cystotomy only	3	3
Catheter Drainage only	6	3
No Operation	6	0
	—	—
Totals	15	6

Carcinoma of Prostate:		
Removal and Radium	5	
Radium only	2	
Diagnosis only	3	
	10	1
	<hr/> 56	<hr/> 9
Totals		

Of the patients in this series, with benign hypertrophy of the prostate, the mortality in those

having the complete operation was 6.4 per cent.

From this group of operatives, we excluded a number with poor functional tests, and did a simple cystostomy or established catheter drainage. The mortality in this small non-operative group was 67 per cent. This shows the need for careful selection of cases.

In our series, 18.2 per cent of obstructing prostates were clinically or pathologically malignant.

TREATMENT OF THE AMBULATORY DIABETIC PATIENT*

By EDWARD TOLSTOI, M.D., NEW YORK, N. Y.

From the department of Metabolism of the Cornell Clinic and the department of Medicine of Cornell University Medical College.

EVEN though the management of the diabetic patient is always changing, the basic therapeutic principle remains the same. This foundation upon which all successful treatment of diabetes rests is *undernutrition*. It matters little what particular method in use one adopts to obtain satisfactory results, the restriction of the total caloric intake compatible with the patient's requirements, is of paramount importance. This fact was not generally appreciated until Guelpa² and Allen¹ introduced the *undernutrition* treatment. For the first few days of the treatment Allen reduced the intake of utilizable food to such a low level that the patient practically starved. To allay the pangs of hunger, so-called "fillers" were used. These consisted of bran, agar jellies and thrice-cooked vegetables. After a few days of this regime the urine became free of sugar and ketone bodies, and the distressing clinical symptoms such as thirst, urinary frequency, fatigue, sleepiness, visual disturbances and pruritus decreased in severity or disappeared entirely. The patient was then given a diet so low in calories that a steady reduction in weight ensued. The results were most gratifying at first. As the treatment progressed, the patient began to rebel. True, there were no symptoms to annoy him, but the progressive emaciation and hunger proved too much for even the more cooperative individuals. Their bodies were reduced to skin and bones, their ankles became puffy and their loss of strength was distressing. The urine, however, remained free of sugar and ketone bodies and the blood sugar dropped and remained close to a normal level. All of this was grand for the diabetes, but what about the poor patient? One could always point with pride to the records but even a casual glance at the patient failed to impress the most open-minded observer too favorably. Allen's method, though demanding, established beyond doubt that it had merits. During its period there

was a reduction in the number of severe cases, the frequency of coma was decreased, and also the life or existence of the diabetic patient was prolonged.

In spite of the promising results obtained by the extreme undernutrition method, physicians began to wonder whether the result justified the means. Wasn't there some alternative to starvation? Couldn't something be done to make the patient more comfortable? Most men felt that the patient should be given a more liberal diet, but what kind of a diet? At that time all agreed that carbohydrates were to be limited. Warnings against too much protein were sounded by Joslin³ who noted that much protein made a mild diabetes more severe. His clinical observations were substantiated by experiments at DuBois⁴ laboratory and by Wilder, Boothby and Beeler⁵ at the Mayo Clinic. Both groups noted that their subjects exhibited the severest diabetes when on a high protein diet.

What about fat? Didn't physiologists state that the combustion of fat was incomplete in diabetes, so that ketone bodies were produced and these may have been responsible for the resulting coma? That dictum was accepted. Newburgh and Marsh⁶ of Ann Arbor argued, however, that it was no more harmful for a diabetic patient to burn, or attempt to burn fat supplied to him than use his own. And, consequently, they devised a diet *high in fat*, but low in protein and carbohydrate. They were wise enough, however, to keep the total caloric intake below the basal level so that the principle of undernutrition was maintained. They placed their patients on an initial diet of 10 grams of protein, 90 of fat, 14 of carbohydrate, a total of 900 calories. They claim that this diet enabled the patient to "lead at least a moderately active, comfortable life." As the glycosuria subsided and no evidence of ketosis appeared the diet was increased to 1400 and 1800 calories keeping the protein and carbohydrate at a maximum of 30 and 40 grams re-

* Read before the Cornell Clinic Staff, Department of Medicine.

spectively. A similar diet has been used by Petren⁷ of Lund, who was also enthusiastic over its success.

At this stage of developments came the discovery of insulin by Banting and Best.⁸ The diabetic patients were overjoyed. Now they could eat more, perhaps as much as other people. Their bodies would take on flesh and they would regain their strength. While the knowledge of the use of insulin was being developed they patiently waited. It was then that a group of observers from California under the leadership of Sansum⁹ published an account of experiences with a high carbohydrate diet with the use of insulin. In this city Geyelin¹⁰ used similar procedures and was quite pleased with the results. It was their belief that a diabetic patient's dietary should approach the normal one as closely as possible, enough insulin being given to insure the use of the food above the patient's tolerance. In some cases as much as 200 units were used daily. Such diets containing often 100 grams of protein, 125 of fat, and 250 of carbohydrate, certainly appealed to the diabetic who for years had been dragging out his existence on 50 to 60 grams of carbohydrate.

Most patients might have enjoyed this regime but it proved rather expensive and somehow the method did not have the same appeal to physicians. It did encourage the use of more liberal amounts of carbohydrate in the diabetic diet and from the careful clinical and experimental work, certain hypotheses were postulated. It was brought forth that diabetics whose carbohydrate rations have not been too low even though a glycosuria existed, lived longest; that a drastic reduction of the carbohydrate may precipitate coma, and that normal men and animals show temporarily at least a lowered tolerance to carbohydrate when living on a low carbohydrate high fat diet. This I¹¹ too demonstrated with Steffanson and Anderson, both of whom lived for a year on a diet of protein and fat—exclusively meat. At the end of the experimental periods both men showed a diminution in tolerance to glucose. The ability to use carbohydrate returned after two weeks of a general diet. This, and other similar experiments by Porges and Adlersberg,¹² demonstrated, I believe, that the normal carbohydrate mechanism needs adequate daily stimulation and if this stimulus is withheld the insulin secreting function lags behind. It is easily appreciated why more physicians began to use a liberal carbohydrate diet in the treatment of diabetes. Porges and Adlersberg are great advocates of a high carbohydrate low fat diet. Their clinical experiences show that a diet of such composition elevates a diabetic patient's tolerance to glucose. This view is now shared by many. Joslin's³ present day diet contains six times the quantity of carbohydrate compared to his diet in 1915. With the increase he prescribes 23 units of insulin.

Rabinowitsch¹³ of Montreal uses diets of 250 grams of carbohydrate with a minimum of 45 to 50 grams of fat. All of his diets are based on the undernutrition principle in spite of the generous portion of carbohydrate. He has treated over 500 cases with such diets and reports excellent results. Some of his patients required as little as 5 to 10 units of insulin daily.

From our experiences at the clinic I can aver that the patients enjoy high carbohydrate rations. Before discussing the method we employ it is important to stress that undernutrition is our guiding principle irrespective of how we dress it.

In our clinic we are particularly interested in the patient's eye-grounds, blood-pressure, weight and condition of the arteries, in addition to the routine physical examination. We then briefly explain the nature of the disorder, stress co-operation, and discuss some of the hazards connected with carelessness in the diet. The patient is then told what and how much to eat. In planning a diet we use household measures such as cupful, teaspoonfuls, etc., in preference to having the patient weigh everything. Weighing the diet is not very feasible as we have traveling men stenographers, bank clerks and men in every walk of life, living in rooming houses and eating most of their meals in restaurants. The patients prefer simplicity. It is our aim, of course, to prescribe a minimum of 30 calories for each kilogram of the standard weight, and increase this as the individual needs warrant. Most often, however, we commence with less. We advise from $\frac{2}{3}$ to 1 gram of protein per kilogram, the fat being kept at a minimum and the quantity of carbohydrate is rather liberal. It is appreciated that we must experiment with each patient's diet but we must arrange his diet so that *he* is satisfied. Let us assume that a man weighing 170 lbs. comes to us because of a glycosuria. Diabetes is suspected and confirmed by the examination of the blood. The patient's expected weight is 155 pounds or 70 kilograms, and on that basis the diet is planned. Calculating the protein at $\frac{2}{3}$ of a gram per kilogram he is to have about 50 to 60 grams of protein, and though we would like to place him on 2100 calories we must use less at the beginning, let us say 1400 to 1500 calories. We will, therefore, plan a diet of 60 grams of protein, 60 of fat and 125 of carbohydrate. Having formulated this trial diet we proceed to translate our figures into a language the patient appreciates. To outline his menu we must learn certain food values, for example, a Uneda biscuit contains 5 gms. carbohydrate. Two such biscuits equal the carbohydrate content of a small orange. About 4 tablespoons of cooked oatmeal contains 10 gms. Two saucers of 5% vegetables or 1 saucer of 10% contain 10 grams; one slice of bread about 15 gms.; etc. We then tell the patient that his specific diet is, for example:

Breakfast

- 1 orange, orange juice or $\frac{1}{2}$ grapefruit
- 2 eggs
- 4 tablespoons of oatmeal
- 1 slice of bread or toast, buttered
- Tea or coffee with 1 tablespoon of cream

Lunch

- 2 slices of ham or 1 tablespoon of salmon or 2 slices of American cheese
- 2 saucers 5% vegetable
- 1 saucer 10% vegetable
- 1 slice of bread
- 1 fruit

Dinner

- Clear soup
- A portion of meat, fish or chicken
- 2 saucers 5% vegetable
- 1 saucer 10% vegetable
- 1 slice of bread buttered
- Salad made of 2 leaves of lettuce and 3 slices of tomatoes Vinegar and lemon juice dressing
- Tea or coffee with 1 tablespoon of cream
- Fruit

In addition to dietary instruction the patient is taught how to examine his urine and at first we encourage him to bring us records of the analytical results. Most of our patients become interested in all procedures and the task in a majority of cases is relatively simple. The more the patient knows about diabetes the less difficult it is to treat him and we do all we can to educate him. As the clinical symptoms improve and the urine is free of sugar the diet is gradually increased so that the patient's calculated caloric requirements are met. Actually we keep a bit below this as the patient is inclined to eat a little more than prescribed.

The majority of our patients are mild or moderately severe cases presenting no difficulties. The more severe diabetics must have insulin. They are taught how to administer the hormone to themselves, as well as the symptoms and treatment of an overdose. Some cases in spite of all our efforts and threats continue to go downhill. At first we suspect them of dietary indiscretions and very tactfully suggest adherence to our prescription. As the glycosuria persists we accuse

them of breaking their diets, and since we cannot control them by seeing them once or at most twice a week, we advise hospitalization. Usually our advice is rejected. They feel well, we are told, and as they have no subjective symptoms, to them, entering a hospital is a waste of time and money. Some do not return to the clinic if we insist on hospitalization, while others accept our advice reluctantly. After a two or three week stay at the hospital they return to the clinic still showing heavy traces of sugar in the urine and apparently little benefited by the hospital stay even though the hospital records reveal a lowering of the blood sugar and the absence of sugar in the urine and almost always a loss of weight. When we express our disappointment over the fact that their clinic record is not as attractive as the hospital one, they reply, and truly so, that it is impossible for them to imitate the hospital regime while in pursuit of their daily occupation. Being served in bed contrasts sharply with chasing subway eating in cafeterias and competing for a job.

Such patients are real problems. It is obvious that we must modify our treatment to suit such patients' circumstances and at the same time attempt to control the diabetes. This requires much modification with frequent changes of the diet and the quantity of insulin. The results are slow, but we find that gentle persuasion, patience, and understanding the patient's philosophy help considerably.

We must constantly bear in mind that even though we are always aiming to give the patient fewer calories than he requires our policy must be flexible lest in our scientific enthusiasm we become so oblivious of the patient's needs to carry on that our treatment becomes a greater hardship than the diabetes.

In summary, our method at the clinic of treating a diabetic is based chiefly on the principle of undernutrition. We are employing a high carbohydrate low fat low caloric diet, we attempt to educate the patient so that he learns to judge his diet, and examine his urine, we acquaint him with the use of insulin as well as the symptoms and treatment of an overdose. We stress cooperation but at the same time we try hard to see his point of view.

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HEAD INJURIES

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THE number of cases of injury to the cranium and its contents has increased with the advent of this highly mechanical age and the era of rapid transportation. For many years much stress has been placed upon fractures of the skull per se, yet the fracture is rarely the cause of trouble unless a fragment of bone has been jammed into the brain or is compounded, adding the danger of infection. Hence, too much attention need not be paid to the uncomplicated fracture. It is damage to the cranial contents resulting in edema, laceration or contusion of the brain or intracranial hemorrhage that requires care and attention, not forgetting concussion, the true pathology of which is still in doubt.

Injuries to the head may be divided into

1. Injuries to the scalp.
2. Injuries to the cranium.
3. Injuries to the intracranial contents, and
4. Any combination of the above.

SCALP

Injuries to the scalp may be divided into

- a. Contusions.
- b. Wounds.

The thick skin of the scalp is solidly bound by tough, fibrous septa to the epicranial aponeurosis, or galea aponeurotica, and this in turn is only very loosely attached by areolar tissue to the pericranium. As a result, the skin can not be detached from the aponeurosis, though the latter can very easily be torn from the skull, and a potential space is always present beneath the galea in which infection or hemorrhage can spread without hindrance from the superciliary ridges of the frontal bone to the superior curved line upon the occiput.

The scalp, because of its excellent blood supply, is resistant to infection and wounds thereof heal readily. Contusions are associated with hematomata which may be subcutaneous, intramuscular, subaponeurotic or subperiosteal. Subperiosteal hematomata, because of the attachment of the periosteum, remain limited to the area of one bone. The subaponeurotic hematomata may spread over a wide area from the forehead to the occiput and to the lateral sides of the head. The other forms of hematomata, because of the structure of the scalp, remain localized. It is often difficult to differentiate between a depressed fracture of the skull and a hematoma of the scalp by physical examination. The differential diagnosis is made, at times, by noting

that in depressed fractures the edges are usually rough, irregular and sharp, while in hematomata they are smooth and quite regular around the circumference of the swelling and on occasions may be movable. The use of the radiograph is, of course, of great value, though a negative x-ray does not rule out fracture. An hematoma may be caused by a fall or blow upon the head with a blunt object. The hematomata of childbirth are the result of prolonged pressure.

Though hematomata usually disappear, absorption may be hastened by elastic pressure, wet dressing and a firm bandage. Rarely, blood serum remains encysted and aspiration or incision is indicated. Watchful waiting and careful observation for the possible development of abscess are essential. Early evacuation of an abscess or broken down hematoma with free drainage is indicated.

Wounds of the scalp are sustained, described and treated as wounds in other parts of the body. Scalp wounds bleed freely and so have a tendency to carry any foreign material out of the wound. Blood vessels in the scalp are difficult to clamp because of their tendency to retract. Bleeding is controlled by either pressure, suture or packing. In the treatment of wounds, it has been our custom to give the scalp a dry shave, cleanse the wound and the surrounding tissue with either gasoline, benzine or kerosene to remove all grease and grime and then flush the wound with full strength tincture of iodine. If treated early, the incised wound is immediately closed with interrupted non-absorbable suture material and drained for twenty-four hours. In the contused or lacerated wounds, after the iodine flushing a thorough debridement is practiced and then the wound is sutured and drained for twenty-four hours. Badly bruised and devitalized tissues are easily infected, hence the necessity for complete debridement. Wounds seen two hours after an injury or later are either allowed to remain open for forty-eight hours and then sutured or are sutured loosely and are always drained. Drainage material should be either rubber tissue, rubber bands or strands of suture material and never gauze. In all infected wounds, sutures are removed early, adequate drainage instituted and a wet dressing applied. Infection is extremely dangerous and may easily be carried into the blood stream or to the brain. Occasionally infection attacks the skull and causes an osteomyelitis which is most resistant to treatment. In children, it is sometimes possible to bring the edges of the wound together by tying several strands of hair on either side of the wound to one another. A sterile gauze dressing is then applied.

* Read before the Cortland County Medical Society on October 30, 1931.

Wounds of the scalp heal readily and sutures should be removed early.

Fractures: Fractures of the skull are divided into those of the vault and of the base, but of course a fracture of the vault may extend to the base and vice versa. They are further divided into linear fractures and depressed fractures and may be either simple or compound. Fractures of the base are by far more common than fractures of the vault. LeCount and Apfelbach,¹ in a study of 504 autopsies upon fractures of the skull, found that 85% were the simple linear type and that 15% were extensively comminuted or depressed, "with the bones of the cranial base involved in varying degrees in all but 8% of the 504." McCreery and Berry² in 111 autopsies found the base involved in 44, the vault in 15 and the vault and base in 52. Rest, ice bag to the head, a light diet and quiet are indicated in the simple, nondepressed fracture without intracranial involvement. It has been our practice to keep such patients in bed for a period of from two to three weeks and if necessary, sedatives such as luminal, grains ss, or bromides grs. XXX, are administered for restlessness and headache. Recently, the writer was present at an autopsy performed upon a patient who had sustained a simple fissured fracture of the skull. Two hours after admission to the hospital he was symptom free and against the advice of the doctors insisted upon leaving the hospital five days after the injury. On the day following his arrival at home, he lapsed into unconsciousness, developed a unilateral paralysis and died. At autopsy an old extradural blood clot was encountered, an extensive fresh extradural hemorrhage and a fissured fracture of the skull with a recent tear of the middle meningeal artery. Apparently, there was originally some extradural hemorrhage with which the patient could cope, and it was the consensus of opinion that the excitement attendant upon going home caused a secondary hemorrhage and death.

In the simple depressed fractures without intracranial damage there is some difference of opinion as to treatment. By some it is claimed that depressed fractures, unless evidenced by focal signs or signs of intracranial damage, require no surgical interference since the brain will accommodate itself. We are of the opinion, however, that all depressions that are definitely visualized by the radiograph and palpable on physical examination should be raised without regard to the site of the fracture. The inner table of the skull is always broken to a greater extent than the outer and the amount of depression of the outer table is no sign of the extent of the displacement of the inner. We have always felt that though no focal signs are present, the continued pressure of bone upon the brain and its coverings must result in definite

damage to these structures. In raising depressed bone every effort should be exercised to prevent damage to the brain and meninges. No bone should be removed unless it appears devitalized or cannot readily and safely be replaced. All agree that depressed fractures with focal signs should be operated upon early and the bone raised or removed.

In compound fractures of the vault and in fractures of the base of the skull communicating with the nose, throat, ears or sinuses, the danger of infection is always present and though primarily no intracranial damage exists, infection of the coverings of the brain or infection of the brain itself may follow and not infrequently with fatal results. Compound fractures of the vault of the skull are treated as wounds of the scalp and at the same time the exposed bone is inspected. It is easy to tell a fissured fracture from a suture line because fracture lines always bleed. If the bone is depressed, in cases seen early, it should if possible be elevated immediately. No bone that remains covered by periosteum and attached should be removed unless there are definite indications therefor. When a suspicion of infection appears, free drainage must be allowed. In fractures of the base of the skull accompanied by bleeding from the orifices, no attempt should be made to stop the hemorrhage or the discharge of cerebrospinal fluid since the patient is decompressing himself and packing may prevent drainage and result in intracranial pressure. We do not feel that the ears or nares should be irrigated. The installation of a few drops of 3½% tincture of iodine into the orifices is good practice. Blood clots should be gently removed with forceps or curette. The diet should be light, sedatives used sparingly and urotropin grains 7½ administered every four hours. Of course, an ice cap to the head and quiet are indicated together with proper hygiene. It is difficult to imagine a blow upon the head sufficient to cause a fracture not causing some cerebral damage, yet all of us have seen marked intracranial damage without fractures of the skull and no intracranial damage with fracture.

Retrostastoid or subconjunctival ecchymosis appearing late is pathognomic of fractures of the base of the skull.

Watchful waiting and careful observation are essential in the treatment of skull fractures.

DAMAGE TO THE INTRACRANIAL CONTENTS

The normal spinal fluid pressure varies from 6 to 10 mm. of mercury and can be measured by a mercury monometer attached to a lumbar puncture needle. Cushing³ has definitely proven that the effect of intracranial pressure is not compression of brain tissue, but interference with circulation to the brain. In the care of head injuries, primary attention must be directed

toward the treatment of shock and no attempt made to establish a diagnosis until the patient's condition warrants it.

The simplest form of cerebral lesion resulting from trauma is *concussion*. No basis exists for the term lesion since no definite pathologic findings have ever been ascertained. Many theories have been expounded, such as temporary inhibition of cortical functions, generalized cerebral anemia and multiple very fine hemorrhages within the brain. Vance⁴ feels that "all that can be said about this condition, as far as its etiology is concerned, is that the violence in some way jars the brain and that the cerebral centers are depressed. It must be regarded solely as a clinical entity with a pathologic basis which our present methods of examination cannot demonstrate." Yet concussion presents a definite symptom complex and runs a more or less typical course. Concussion is entirely limited to those cases of intracranial damage that do not show signs of intracranial pressure, hemorrhage, laceration or contusion of the brain. The symptoms are immediate and generalized and involve a disturbance of consciousness extending from a simple state of lethargy to deep coma; yes, from "seeing stars" to death. The prize fighter who is "knocked out" by a punch on the jaw or a person who "sees stars" from a blow on the head is suffering from concussion. There may be present a picture of shock with pallor, dilated pupils, rapid thready pulse, normal or lowered blood pressure, superficial respirations and either an absence or diminution of reflexes. The spinal fluid pressure may be normal and no change in the spinal fluid noted. With the return of consciousness, headache, vertigo, vomiting and loss of memory for events immediately preceding or causing the injury and disorientation may follow. The treatment is dependent upon the severity of the concussion. Many patients react readily if left severely alone. Others will require some stimulation, such as the administration of whiskey, caffeine, etc. More severe cases require rest, heat, forced fluids, avoidance of external stimuli, luminal or codein for restlessness and headache and shock position. A solution of 500 c.c. to 1,000 c.c. of 5% glucose or normal saline by hypodermoclysis or infusion is at times of great value. The period of bed confinement is dependent upon the severity of the concussion. Headache, dizziness and disorientation are the commonest sequelæ and I might add that these complaints though frequently seen in compensation cases are not limited to that group of patients. In a series of 500 cases of death from head injuries, Vance⁵ found 139 due to concussion, the majority dying within the first hour.

Contusions of the brain may cover a larger or smaller area and present the same symptoms as noted in concussion, with the possible excep-

tion that they are more severe and of longer duration; there may be some twitching of the extremities. The temperature may be normal or subnormal. The spinal fluid will be bloody and under increased pressure, providing of course that the patient has reacted from the shock of the injury. Subarachnoid or pial hemorrhage is present. The duration of the symptoms is variable.

Laceration of the brain is a severe injury associated with unconsciousness, which is usually immediate, profound and of long standing. After the shock of the original injury has passed, there is a rise in temperature to 103° or 104° F. Early fever is a sign of laceration. Irritability, restlessness, twitchings and spasms of the extremities may be present depending upon the area involved. In other words, all signs of cortical irritation are present. A spinal tap will show bloody spinal fluid and usually under pressure.

Cerebral Edema is definitely associated with intracranial damage. As a result of the edema, there is interference with the venous flow and the absorption of cerebrospinal fluid. An actual increase in the amount of spinal fluid follows and further increases the spinal fluid pressure. As the pressure increases, the arterioles within the brain are compressed and an anemia of the brain results. The signs of compression will depend upon the amount of intracranial pressure. There may be slight headache and drowsiness and possibly some focal signs. With increasing pressure, there is headache, vertigo, restlessness, excitement, delirium and occasionally cyanosis. As the pressure continues, the pulse rate slows, there is some dilatation of the retinal vessels and the skin is warm and dry. Later, the pulse rate may drop as low as 40, respirations become noisy, irregular and of the Cheyne-Stokes type. When the pressure reaches a point where the brain no longer accommodates itself, the pulse becomes rapid, respirations irregular and rapid, the pupils dilate and become fixed, coma deepens and death follows.

In *intracranial hemorrhage* of the extradural type, symptoms of pressure are observed. In cases where the hemorrhage is under control there may be no signs. As a rule, the onset of unconsciousness is slow, or if the patient is immediately rendered unconscious, there may be a lucid period followed by deepening coma. Twitchings, paresis or paralysis, and irritation of the cortical cells may be noted and aid in localizing the lesion. In a study of 908 skull fractures (547 demonstrated as such) Moody⁵ found that there were 100 with extradural hemorrhages of such extent that compression of the brain by blood was the chief cause of death. Pupillary changes, unilateral dilatation and fixation invariably occur with cerebral lesions and are usually associated with hemorrhage. Bilateral

widely dilated and fixed pupils indicate a rather grave prognosis. With unequal pupils, the dilated pupil is usually on the side of the lesion. The value of early eye ground examinations is greatly disputed at the present time. In the late cases, definite eye ground findings are noted.

TREATMENT OF INTRACRANIAL DAMAGE

The number of operations for acute intracranial injuries has decreased markedly since 1916. It is generally accepted that conservative treatment is not alone less dangerous but also more efficacious than operative treatment in the majority of cases, especially those without localizing signs.

Dandy¹ is of the opinion that "20% of all head injuries are lost in spite of all you do, 70% will recover if left strictly alone and 10% are saved only by a well timed and well directed operation." From our experience, we believe that 20% will die in spite of all you do, 60% will recover if left alone and 20% are saved by well directed treatment or operation.

Each patient admitted to our service suffering from a head injury is immediately put to bed. If the patient is in shock, no complete physical examination is made nor is the patient rushed to the x-ray department for radiographic study. The patient is treated for the primary shock in the manner described under concussion. The pupils are examined, temperature, pulse and respirations are taken every half hour. The reflexes are noted and we are on guard for any local signs. When the patient has reacted from the shock, then a more complete examination and careful study are attempted. The pupils are again examined and any inequality of the pupils is noted. The pulse rate and volume are carefully studied and recorded. The respirations are noted as to type and rapidity. The degree of consciousness is observed and we also note whether or not the patient has a tendency to lapse into unconsciousness. Muscular twitchings, and paralysis are looked for. The reflexes are carefully studied. A spinal tap is done and the spinal fluid pressure is noted. A small quantity of spinal fluid is allowed to flow into three test tubes, each tube being carefully studied to note the presence or absence of blood, for the spinal fluid to be classified as bloody, it must appear so in all three tubes. A pressure above 12 mm of mercury should be considered abnormal and enough fluid removed to bring the pressure down to normal or if the pressure should be greatly increased above normal, that increase should be relieved by about one half of the excess pressure. If equal to 18 mm it should be reduced to 15

mm by the first tap. Repeated spinal taps for both diagnostic and therapeutic reasons are of value though frowned upon by some investigators. The removal of the spinal fluid will reduce the pressure and also remove blood, which if allowed to organize either blocks the flow of spinal fluid or irritates the meninges. One must be certain that an extradural hemorrhage does not exist since in such injuries lowering of the spinal fluid pressure may start a secondary hemorrhage.

Recently, the intravenous administration of hypertonic solutions has been shown to decrease the spinal fluid pressure. Of the many solutions used, glucose has proven the safest, since it is non-toxic and apparently non-irritating. The administration of 50 cc to 75 cc of a 50% solution of glucose is followed by a gradual lessening in the spinal fluid pressure. This lowered pressure may not be sustained and the repeated administration of the same solution every six or eight hours may be necessary. Glucose not alone brings down the spinal fluid pressure but also has a splendid food value. Four to six ounces of a saturated solution of magnesium given per rectum will aid in sustaining the lowered spinal fluid pressure. The fluid intake must be limited so that the patient obtains at the most 1,000 cc in twenty-four hours. Rest, freedom from external stimuli, an ice cap to the head and attention to general hygiene are essential.

Absolute indications for operation are

- 1 Depressed bone with focal signs
- 2 Extradural hemorrhage with progressive or focal signs
- 3 Foreign bodies with focal signs
- 4 Abscess—intracranial

Every case of intracranial injury should remain under observation for at least one year with attention paid to all of the patient's complaints. The administration of various types of sedatives for headaches, irritability and nervousness is indicated. Penfield has suggested the injection of air via a method devised by him and described in an article entitled "Chronic Meningeal (Post-Traumatic) Headache. Its Specific Treatment by Lumbar Air Insufflation" which appeared in the December, 1927, issue of *Surgery, Gynecology and Obstetrics*.

In closing, may I be permitted to emphasize the necessity for conservatism in the treatment of head injuries and to warn against being stampeded into operative procedures. It is evident that the pendulum has swung far away from radicalism when one notes that in 1916 Sharp² reported 30 per cent of cases operated upon and in 1930 reported the percentage as 41%.

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REPORT OF TWO HUNDRED AND EIGHTEEN COMPLETED CASES SEEN AT THE WESTCHESTER COUNTY PRENATAL CLINIC IN 1931

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From the Department of Health of Westchester County.

DURING the year 1931 there were seen at the prenatal clinic of the Westchester County Department of Health conducted at the White Plains Health Centre two hundred and fifty-five women who made a total of 1,256 clinic visits. Of these four were found not to be pregnant; for nine the subsequent history could not be learned (eight moved away and one could not be located). There were two hundred and eighteen completed cases of which records are available for study.

Of the two hundred and eighteen cases, one hundred and sixty-three were white and fifty-five colored; forty-nine were primiparæ and one hundred and sixty-nine multiparæ. Nineteen were gainfully employed, the majority of these being houseworkers. One hundred and seventy were delivered in hospital, twelve at home by physicians and thirty-two at home by midwives. There were two additional cases in which the midwife in attendance called a physician in consultation. There was one precipitate labor and one abortion in which there was no professional attendance until after the events occurred when physicians were called. Two hundred and one were natural de-

liveries, five were instrumental, six were prolonged or difficult, three were breech presentations, three were delivered by Cæsarian section. Twin birth occurred in two instances.

Time of Enrollment at Clinic

The greatest number of women enrolled at the clinic during the sixth month of gestation; the seventh and fifth month were closely grouped as second and third in frequency. Fifty-six per cent of the patients enrolled during these three months. During the first four months, more than one quarter registered, while practically one-third came for the first time during the last three months of pregnancy.

The following table shows for the white patients, colored patients and all patients the number enrolling for each month of gestation, the corresponding percentage and the cumulative percentage for each month. For all patients and white women the average was 5.6 and 5.5 months respectively; for the colored women the average was six months. The mode for the three groups was six months, six months and seven months respectively.

MONTH OF GESTATION DURING WHICH PATIENT ENROLLED AT CLINIC

Month	WHITES AND COLORED			WHITES			COLORED		
	No.	Percent	Cumulative Percent	No.	Percent	Cumulative Percent	No.	Percent	Cumulative Percent
1.....	2	0.9	0.9	2	1.2	1.2	0	0	0
2.....	9	4.1	5.0	6	3.7	4.9	3	5.5	5.5
3.....	20	9.2	14.2	15	9.2	14.1	5	9.1	14.6
4.....	29	13.3	27.5	23	14.1	28.2	6	10.9	25.5
5.....	35	16.1	43.6	27	16.6	44.8	8	14.5	40.0
6.....	51	23.4	67.0	44	27.0	71.8	7	12.7	52.7
7.....	36	16.5	83.5	24	14.7	86.5	12	21.8	74.5
8.....	29	13.3	96.8	20	12.3	98.8	9	16.4	90.9
9.....	7	3.2	100.0	2	1.2	100.0	5	9.1	100.0
TOTAL.....	218	100		163	100		55	100	
AVERAGE....		5.6 months			5.5 months			6 months	
MODE.....		6th month			6th month			7th month	

Number of Clinic Visits Made

Excluding four patients who obviously should not be included in any analysis of the number of clinic visits made, the remaining two hundred and fourteen made a total of 1,093 clinic visits, an average of 5.1 per patient. The following table analyzes the clinic visits according to the month of gestation during which the mother entered the clinic.

treated regularly for syphilis but subsequently developed eclampsia which may have been the cause of the stillbirth rather than syphilis. The mother of the other stillbirth did not enter the clinic until the eighth month of gestation, too late for antisyphilitic treatment to be of any value to child. No explanation is offered for the fact that the mothers of three apparently normal infants did not enroll until the eighth month of pregnancy.

CLINIC VISITS BY MONTH OF ENROLLMENT

Month of Enrollment	Number Patients	Total Visits	Average No. Visits	Median	Maximum	Minimum
1	2	19	9.5	8	10	9
2	8	56	7	8	13	4*
3	20	144	7.3	8	13	2
4	27	166	6.1	6	13	2*
5	35	209	6	6	10	1
6	50	258	5.2	6	10	1*
7	36	132	3.6	3	8	1
8	29	96	3.3	3	7	1
9	7	13	1.8	2	3	1

*Excludes one woman who aborted shortly after first visit.

**Excludes two women who aborted shortly after first visit.

***Excludes one woman who transferred from clinic to private doctor after two clinic visits.

Syphilis

As a result of routine Wassermann tests, twelve cases of syphilis were found among the two hundred and eighteen patients. Not one of these presented any obvious manifestation of the disease. The serum of each of these patients caused complete or almost complete fixation of complement. Of the twelve, four were white women, eight colored; the incidence of syphilis was 2.5 per cent among the former and 15.5 per cent among the latter.

Seven apparently normal infants resulted from these twelve pregnancies. One child is alive but shortly after birth developed dermal manifestations of syphilis which have disappeared under specific treatment. Two other children were born alive but died; one of these was a seven months premature infant. There were two stillbirths in the group. The mother of one of the normal children gives a history of four previous miscarriages and three children who died in early infancy. This woman enrolled in the clinic during the second month of gestation, was given vigorous antisyphilitic therapy and had a normal child at term with a negative cord Wassermann test. One woman whose child died refused to cooperate and neglected treatment. The mother of the premature infant which died six weeks after birth had been vigorously treated for eighteen months. The mother of the syphilitic living child did not enroll in the clinic until the sixth month of gestation, evidently too late to prevent the disease in the offspring. The mother of one stillbirth enrolled early in her pregnancy, was

and could not possibly have had treatment sufficient to influence the results.

Complications of Pregnancy Other Than Syphilis

Albuminuria: Forty-eight (22½%) had albuminuria on one or more occasions; in thirty-eight this was transitory; in five cases the condition was slight but more or less constant; in three instances there was a moderate albuminuria fairly constantly; and two patients had a severe albuminuria throughout the later months of pregnancy.

Hypertension: More than 50 per cent (11) showed at one time or another hypertension (systolic blood pressure of 120 mm. or more). One hundred and five cases the blood pressure no time reached 120 systolic. The following table shows the range of systolic blood pressure in the two hundred and eighteen clinic patients.

There was but one case of eclampsia, and the blood pressure in this patient was never more

SYSTOLIC BLOOD PRESSURE—218 CLINIC PATIENTS

Blood Pressure	Number of Patients
120 or less.....	105
121 to 129.....	15
130 to 139.....	53
140 to 149.....	29
150 to 159.....	10
160 to 169.....	4
228.....	1
242.....	1
TOTAL	218

than 140 systolic. The woman with the blood pressure of 242 also suffered with severe cardiac disease and finally died in labor. Her case is described in detail later.

Only sixty-four women failed to have either albuminuria, hypertension or both. One hundred and fifty-four had one or both of these conditions.

Glycosuria: Two patients had slight glycosuria.

Cardiac Disease: Two patients definitely suffered from cardiac disease with decompensation, one with pulmonary edema. In addition in eleven others systolic murmurs were found; in one case there was a presystolic apical murmur and in one a diastolic murmur.

Defective Pelvis: Seven instances of justomino pelvis were discovered, there was one flat pelvis and one slightly funnel shaped pelvis.

Gynecological and Obstetrical Complications: There was one case of gonococcus infection; one patient gave a history of persistent bleeding dating from the fourth month of gestation; one presented an abnormal cervix uteri; there was one case of placenta prævia; one patient had an artificial vagina precluding a normal birth; one patient had eclampsia (mentioned above).

Miscellaneous Complications: Two patients had hyperthyroidism; one patient was persistently underweight and another overweight (253 lbs.).

Maternal Mortality

But one patient of the two hundred and eighty-eight died. This was the case of cardiac disease previously mentioned. She enrolled in the clinic during the seventh month of her fifteenth pregnancy. On account of her high blood pressure (242 systolic) on admission she was urged to enter the hospital immediately. After two days delay she went to the hospital, but in spite of definite improvement and contrary to advice she refused to remain. Five weeks later she came again to the clinic, this time suffering with extreme decompensation as evidenced by pulmonary edema. The patient was sent directly from the clinic to the hospital where with rest and proper supervision her condition improved immensely. However, after five days, in spite of all advice she insisted on going home. Two days later the woman went into labor, delivered an eight and one-half pound dead fetus, and a few hours later died.

Fetal and Infant Mortality

The two hundred and eighteen patients at the clinic were the mothers of two hundred and twenty potential infants (two twin pregnancies). The fetal and infant mortality however was high—twenty-three potential lives were lost on account of conditions associated with pregnancy. There were three abortions, fourteen stillbirths and six neonatal deaths.

Abortions: One mother who enrolled during the second month of gestation aborted at three months, cause undetermined; one aborted at about four months, cause unknown; and another, a woman forty-seven years of age, aborted also at the fourth month.

Stillbirths: Two of the mothers of stillborn infants enrolled during the third month of pregnancy. In one the fetus was carried to term but was dead when labor began; in the other the stillborn was a malformation. Three mothers enrolled during the fourth month. One delivered a stillborn macerated fetus at term; one had both syphilis and eclampsia but carried the fetus to term; one, a multipara, had a slightly contracted pelvis and after a prolonged (36-hour) labor was delivered instrumentally. The mother of a stillborn premature infant entered the clinic during the fifth month; the cause of the premature delivery is unknown. Three stillbirths resulted to mothers who enrolled during the sixth month; one of these was a prolonged labor in which a midwife was the attendant—a physician was ultimately called; one was a macerated twin fetus, the other twin being a normal infant; the third was due to cerebral compression as a result of instrumental delivery. This woman was a primipara with a contracted pelvis, who was permitted to remain in labor three days before she was sent to the hospital. Stillbirths resulted in two mothers who entered the clinic during the seventh month; one was the cardiac case who died (referred to previously), the other was a prolonged labor in which a midwife was the attendant, a physician being summoned later. Three stillbirths occurred to women who enrolled during the eighth month of gestation, one a difficult case of high forceps delivery, one a breech presentation with the cord about the neck and the third to a syphilitic mother.

Neonatal Deaths: One neonatal death was due to prematurity, cause unknown, the child living eight hours. Another seven months premature infant whose mother was syphilitic lived six weeks. A third premature child died of subdural hemorrhage and fetal atelectasis; this was a precipitate labor unattended by midwife or physician until after actual delivery; furthermore the mother was syphilitic and was ill with pneumonia at the time of delivery; the infant died on the day of birth. One child died an hour after birth; this also was a precipitate labor in which there was no professional attendance until after delivery. One child with a positive complement fixation for syphilis in the cord blood (mother a known syphilitic) failed to survive. One baby a malformation, died of convulsions two days after birth.

It will be noted in the accompanying table summarizing the causes of fetal and neonatal mortality that in many instances more than one factor is involved. For instance, although there are five

cases in which syphilis was a contributing factor, in one of them the mother had eclampsia and it was an instrumental delivery and in another the mother had pneumonia at the time of delivery

eclampsia and the stillbirth cannot be charged solely to instrumental delivery. The fourth was a high forceps delivery in the hospital necessitated by difficult labor.

FETAL AND NEONATAL MORTALITY—218 DELIVERIES

Case No.	Period of Gestation	Age of Infant	CAUSES OF DEATH									
			Un-known	Pre-mature	Syph'is	Mal-formation	Pro-longed Labor	Instru-mental Delivery	Mac-erated Fetus	Breech Delivery	Precip. Labor	Miscellaneous
1	3 Mos.		x									
2	4 Mos.		x									
3	4 Mos.		x									
4	Term		x									
5	Term					x						
6	Term								x			
7	Term				x			x				Eclampsia
8	Term						x	x				
9	8 Mos.		x	x			x					
10	Term						x		x			
11	Term						x	x				
12	Term											Maternal Death Cardiac Disease
13	Term											
14	Term						x					
15	Term							x				
16	Term											
17	Term				x					x		Cord about neck
18	7 Mos.	8 hrs.	x	x	x							
19	7 Mos.	6 Wks.		x	x							
20	Term	1 Day			x							
21	Term	1 Hour									x	Maternal Pneumonia
22	8 Mos.	?		x	x							
23	Term	2 Days				x						
TOTAL			6	4	5	2	4	4	2	1	2	

and it was a precipitate labor. In such cases one can not attribute the fatality to any one individual cause.

Of the aforementioned twenty-three abortions, stillbirths or neonatal deaths, six were to primiparæ, seventeen to multiparæ; the relative frequency being about the same for both groups, 12.2 per cent in the former and 10.0 per cent in the latter. Seven were to colored mothers and sixteen to white mothers, the slight relative difference being insignificant

Instrumental and Operative Deliveries

In the whole group of two hundred and eighteen patients there were five instrumental deliveries and three Cæsarian operations. Only one of the infants delivered instrumentally lived, four were stillborn. One of these was to the primipara referred to previously under stillbirths, who was in labor seventy-two hours before being referred to the hospital. The second was to another woman with contracted pelvis but who had previously given birth to a normal child; her labor was prolonged (36 hours) and she was finally delivered with high forceps. The third was to the patient who had both syphilis and

Three women were delivered by Cæsarian operation. In all cases living children resulted and the mothers recovered without complication. The first case was a woman with an artificial vagina as a result of plastic surgery. She gave no history of this operation and her condition was discovered at the first examination at the clinic. The patient was instructed to go to the hospital immediately upon the appearance of the first sign of labor. The second was in a woman who had been pregnant twice. The first time the infant was stillborn after a very prolonged labor in which forceps was finally required; the second had been delivered by Cæsarian section and operation was therefore advised this time. The third case was in a woman who had had a threatened abortion at the third month. During the eighth month of gestation she had a sudden profuse vaginal hemorrhage without pain. A diagnosis of placenta prævia was made and the woman was sent into the hospital immediately. Cæsarian operation resulted in a three and one-half pound infant which is now nine months old.

Postpartum Examination

Postpartum examinations were made of one hundred women in the clinic. Of these fifty-

eight were found normal; forty-two were abnormal. Of the remaining one hundred and eighteen of which no record of postpartum examination is available, some who were delivered in Grasslands Hospital, undoubtedly had such examination made there.

Analysis of Clinic Results by Month of Gestation During Which Mother Enrolled in Clinic

The observations for the various months of gestation during which the mothers enrolled deal with too few cases in most of the groups to warrant comparisons or to permit conclusions to be drawn. However, the facts are given for what they may be worth.

1ST MONTH Two women enrolled during the first month of gestation. Both were primiparae and both delivered normal offspring naturally.

2ND MONTH	White..... 6	Primiparae.... 3
	Colored..... 3	Multiparae.... 6
	TOTAL..... 9	9

In this group, eight mothers delivered naturally eight normal infants. One abortion occurred at three months, cause unknown.

3RD MONTH	White..... 15	Primiparae.... 4
	Colored..... 5	Multiparae.... 16
	TOTAL..... 20	20

There was one instrumental delivery in this group, a multipara. Fifteen normal infants were born. There were two stillbirths; one premature child lived eight hours; one syphilitic baby (4 + cord Wassermann) died in early infancy; one malformation lived two days.

4TH MONTH	White..... 23	Primiparae.... 5
	Colored..... 6	Multiparae.... 24
	TOTAL..... 29	29

Twenty-three living babies resulted from this group. There was one abortion (mother forty-seven years old); there were four stillbirths; one precipitate labor occurred, the child living but one hour.

5TH MONTH	White..... 27	Primiparae.... 8
	Colored..... 8	Multiparae.... 27
	TOTAL..... 35	35

In this group there was one stillbirth, due to prematurity. One syphilitic mother gave birth to a seven-months' infant which lived six weeks; this woman had vigorous anti-syphilitic treatment for eighteen months. Two syphilitic mothers who were treated had apparently normal offspring.

6TH MONTH	White..... 44	Primiparae.... 10
	Colored..... 7	Multiparae.... 41
	TOTAL..... 51	51

There were three stillbirths in this group, two due to prolonged labor and one was a macerated fetus—one of a twin pregnancy—the second being a normal infant.

7TH MONTH	White..... 24	Primiparae.... 6
	Colored..... 12	Multiparae.... 30
	TOTAL..... 36	36

The maternal death previously described was from this group. Three stillbirths occurred, one child died the day of delivery.

8TH MONTH	White..... 20	Primiparae.... 8
	Colored..... 9	Multiparae.... 21
	TOTAL..... 29	29

Two stillbirths occurred in this group, or a breech presentation, the other to a syphilitic mother.

9TH MONTH	White..... 2	Primiparae.... 3
	Colored..... 5	Multiparae.... 4
	TOTAL..... 7	7

There were no obstetrical complications in this group and no infant deaths.

Conclusions

With few exceptions the foregoing data are insufficient in number to permit drawing mass deductions. Some facts however seem to be sufficiently striking to warrant emphasis.

1. Thirty-eight per cent of the white patients enrolled during the last three months of pregnancy; forty-seven per cent of the colored entered the clinic during this period. Greater effort needs to be made to secure earlier enrollment; particularly is this true for the colored race.

2. Too large a number of patients make too few clinic visits. Many of them, although enrolled during the earlier months of pregnancy came to the clinic but two or three times. The average number of visits is fairly adequate because a few women made a large number of visits.

3. The value of routine Wassermann tests is clearly demonstrated. Five and one-half per cent of the two hundred and eighteen patients were found to be syphilitic as a result of such examinations.

4. In at least one instance the value of anti-syphilitic treatment is clearly demonstrated.

5. Syphilis is much more prevalent among the colored patients. Fifteen and one-half per cent were found diseased, while only 2.5 per cent of the whites were affected.

6. The value of routine physical examination at regular intervals is demonstrated. Only 29.4 per cent of the patients failed to show albuminuria, hypertension or both at some time during pregnancy.

7. Vaginal examination should be made of all primiparae. Several cases of deformed pelvis were discovered and in one case of anomalous vagina not discovered until too late to assure child if such examination had not been at the clinic. This occurred. This

woman probably could have been saved and possibly the child if she had followed the advice given at the clinic and hospital.

9. The fetal and infant mortality was high—over ten per cent of the potential lives. A few of these might have been saved by prompt obstetric attention during delivery, but excluding these the proportion of fatalities would still be much higher than the average. No explanation is offered for this abnormal mortality other than the fact that the clinic clientele perhaps contains a larger proportion of the group which normally contribute most to fetal and infant mortality. The mortality was relatively as high among whites as colored.

10. Four of the five instrumental deliveries resulted fatally to the offspring. No criticism should be inferred by this statement. Forceps

delivery may well have seemed to be the lesser of evils. Indeed, in at least two instances earlier forceps delivery might possibly have given a different result.

11. In three Caesarian deliveries all mothers and infants survived in spite of the fact that one of the latter was premature and weighed but three and one-half pounds.

12. Less than fifty per cent of the mothers have postpartum examinations in the clinic.

We wish to acknowledge our indebtedness to Miss Marion McKinney, M.S., who assisted in compiling the data on which the foregoing report was based and also to give credit to Dr. William J. Mahar, clinician, and Miss Deborah Davis, R.N., for the actual work of the clinic and for the splendid records without which this study could not have been made.

SOME NOTES ON A HISTORY OF MEDICINE OF ONONDAGA COUNTY*

By LOUIS J. BRAGMAN, M.D., SYRACUSE, N.Y.

IN the opinion of William Welch, "it is well worth while to rescue the local annals of medicine in any part of the country." That this is particularly true of Onondaga County is attested to by Elsner, who remarked that "he who reads the history of the medical profession of central New York will agree that its fellows tenaciously swam on the upper stratum of the rising tide of medical progress." In a similar vein John Van Duyn has asked: "Do you believe that any county can show in its history of 1800 to 1845 a better lot of men than Onondaga in Day, Ball, Jones, Porter, Bartlett, Taylor, Sampson, and Needham?"

With the fast-moving progress of the present days, with the constant changes of time, and with the tendency ever to look forward, it would seem almost imperative that some effort be made to gather together in compact form such data as is still available for a History of Medicine of Onondaga County. The men who played an integral part in its development have almost entirely disappeared. Valuable records are fading, archives are gathering dust and are becoming extinct. A sense of loyalty, if nothing else, to those who came before us and laid the foundation, bids us feel impelled to erect some monument to their memories that we may know how it was we achieved our present status. It was with some such thought in mind that for the past few years I have attempted to assemble from various sources these fragments and bits of

historical data that in part shall be presented to you tonight, with the hope that, with the collaboration of others, a permanent record of the progress of medicine in our county may be obtained.

The following are some of the references of which I have made use: The Past and Present of Syracuse and Onondaga County, from prehistoric times to the beginning of 1908, by William M. Beauchamp; the History of Onondaga County, by Dwight H. Bruce; the Alumni Record of Syracuse University, by Smalley; the Physicians of the Village of Syracuse, by Didama; the Early Physicians of Onondaga County, by John Van Duyn; the History of Medicine in N. Y. State, by James J. Walsh; various manuscripts in the Onondaga County Historical Association Building, newspaper files, etc.

A comprehensive history of medicine of the county should comprise the following:

Biographical material of the physicians of the county, including photographs, if possible.

The history of the various local medical organizations, including a summary of the minutes of their meetings, papers read, activities, members, etc.

The history of the local medical institutions, including medical colleges, hospitals, sanitaria, publications, etc.

The history of public health measures, epidemics, etc.

Much of the material is on hand, easily available, merely awaiting collation. Gaps could undoubtedly be filled in with the assistance of many of the members of the county

* Read at the 125th Anniversary Meeting of the Onondaga Medical Society, Syracuse, N. Y., January 5, 1912

society, or by families of deceased members. In this manner a succinct volume could be compiled, which, brought up to date, would ensure the permanence of much valuable material that now is in danger of fading into the limbo of the past.

In this present contribution an attempt will be made merely to envisage the approach, first by giving a bird's eye view of the history of local medicine, and then by brief references to some of the outstanding achievements of former physicians. A card index of some eight hundred names has already been prepared as a start towards this work.

Some time after 1500, Beauchamp states, a group of Onondaga Indians settled in the northern part of the county. Champlain and his companions were known to have visited the locality in 1615. Erecting a log-trading house near the north of Onondaga Creek, Ephraim Webster in 1786 was the first white settler to dwell here, and in 1794 Onondaga County was definitely established.

The first doctor to arrive was David A. Holbrook. He was born in Sturbridge, Massachusetts in 1760, enlisted in the Army at Adams, Mass., in 1779, and is reputed to have visited Salina and other parts hereabouts previous to locating in Morehouse's Flats in the town of Dewitt in 1792. The next year he moved to Pompey Center, and around 1800 was practicing in Jamesville. He was one of the organizers of the County Medical Society in 1806, and died either in 1830 or 1832.

About 1794 a Doctor Pickard came to the town of Elbridge; at the same time Silas Park settled in Lafayette, moving to Pompey Hill around 1800, and dying in 1809. The first physician to practice in Syracuse was Zibia Swan, who arrived in 1807 and died the next year at the age of 41. He was succeeded by Jonathan Day who practiced in Syracuse from 1808 to his death in 1832.

In 1792 there were 31 inhabitants in the county. By 1836 eleven doctors had established in Syracuse. In 1845 the proportion of physicians to the population was 1—475 in Syracuse, and 1—1000 in the towns. Exclusive of Syracuse there were 92 doctors in the county at that time. In 1853 there were 38 doctors in Syracuse to a population of 25,000, a ratio of 1—660. In 1906 the ratio was 1—424. Today it is 1—522 in the city.

The Onondaga Medical Society was organized May 8, 1806. The county was then scarcely a dozen years removed from a forest uninhabited save by Indians. When the 22 members first met, there were only four medical colleges and three medical journals in the country. Syracuse was then known as Bogardus Corners; there were no physicians in

the low-lying towns in the north, the hills having attracted the first settlers. Some of the early men of eminence in the State, according to Alfred Mercer, were Bissel of Geneseo, Little of Avon, Ellwood, Backus, and Reed of Rochester. The stethoscope had appeared in Mercer's youth, a village doctor had advocated out-of-door living for consumptives, most men in practice were licentiates of county medical societies, and all were expert phlebotomists.

In 1808 the prize question before the County Society was: Does a Gonorrhea Virulenta ever become a confirmed Lues Venerea? And in 1826 the utility of examination by percussion and stethoscope in diagnosis and treatment of diseases of the chest was discussed. In 1851 the society discussed the question: Who performed the first surgical operation in Onondaga County? The honor was assigned to White of Whitesboro, of Oneida County, but it was also claimed that Bildad, Beach, and Hull, who had been studying with White had previously amputated a limb. In 1835 G. W. Richards reported a case of knife wound in the heart of a child; in 1832 a cholera meeting was held inasmuch as this dread disease had reached the shores of America. In 1840 Hoyt spoke on Phrenological Medicine, the first reference to psychiatry at a local medical meeting.

In 1847 the Syracuse Medical Association held its first meeting, becoming the City Medical Association in 1858, reorganizing in 1866, and changing to the Academy of Medicine in 1894. In 1849 the Homeopathic Medical Society of Central N. Y. was organized. A charter was obtained the same year for the establishment of an eclectic medical institute, which was then called the Syracuse Medical College. To 1855, 298 students had matriculated. Two years later the school passed out of existence. In 1850 an effort was made to start a medical school in the office of Hiram Hoyt, with the cooperation of Roger Pease, Henry Didama, and William Manlius Smith. In 1871 the County Society considered the possibility of the transference of the Geneva Medical College; in 1872 this took place. Walsh says that the history of the Syracuse Medical College, told completely, and in detail, is the history of the development of N. Y. State. It was the first college in the State, and the third in the country to adopt a three year course; and the laboratory of physiology, opened in 1896 under Gaylord Clark, was one of the first of its kind for the instruction of medical students.

That the physicians of Onondaga made their mark in American medicine is shown by the inclusion of a group of them in Kelly

and Budge's American Medical Biographies. Those mentioned in this classic volume are Backus, Buchanan, Didama, Elsner, Ford, Harris, Hyde, Jacobson, Lozier, Mercer, Plant, Shipman, Spencer, Van de Warker, Wilbur, and Wilder. A summary of the life of Elsner might serve as an index of how the biographical material of the men of our county can be handled:

Henry Leopold Elsner was born in Syracuse, N. Y., August 15, 1855. Studying medicine under his father, Leopold, for many years one of the best known herbalists in central New York; and under a brother, Simon, who was a physician, Henry subsequently graduated from the College of Physicians and Surgeons in New York, 1877. After a course of post-graduate instruction in Berlin and Vienna, he returned to Syracuse to start the practice of medicine in 1878. That year he joined the faculty of the Syracuse College of Medicine as instructor; in 1884 he was made lecturer in the Practice of Medicine; in 1886 he became professor of Clinical Medicine; in 1893 professor of the Science and Art of Medicine and Clinical Medicine; and in 1904 professor of Medicine.

He was at various times the president of the Syracuse Academy, the Onondaga Medical Society, the central New York Medical Association, and the New York State Medical Society. He was a member of the House of Delegates of the American Medical Association, and on the educational committee of that organization for several years. He was largely instrumental in bringing about the amalgamation of the New York State Medical Society and the New York State Medical Association. He was affiliated with the St. Joseph's Hospital, the Hospital of the Good Shepherd in Syracuse, and the State Hospital for Crippled Children at Tarrytown, N. Y.

Perhaps his greatest claim to lasting recognition rests as his skill as a prognostician. His "Prognosis" is a complete treatise on internal medicine, in 1200 pages, containing especial reference to prognosis. As Garrison, in his History of Medicine, says, Elsner "summed up the experience of a lifetime in his massive treatise on prognosis (1916), almost the only important work on the subject after Prosper Albinus (1601)." A bibliography of his writings reveals over 63 topics, ranging from a paper in 1885 on "Typhoid Fever As We See It In Central New York" to "The Prognosis of Chronic Myocardial Insufficiency," written in 1914. He died February 17, 1916 of cardio-vascular disease.

Brief mention might be made of some of the other outstanding physicians, as further proof that these records are worthy of being preserved. For

instance, Ely Van de Warker was among the pioneers in American gynecology, and was one of the founders of the American Gynecological Society. He is said to have performed over 2,000 laparotomies. He made a study of gynecological conditions at the Oneida Community in 1854 at the request of its leader, Noyes. He wrote on the mechanical treatment of versions and flexions of the uterus; discussed the treatment of extrauterine pregnancy by electricity; made a survey of the abandoned canals of the state of New York, for the Popular Science Monthly; and in 1903 wrote a book of 225 pages called "Woman's Unfitness for Higher Education," inspired perhaps by the inevitable cynicism engendered in the practice of gynecology. Nathan Jacobson, who studied abroad with Stricker, Billroth, and Hebra, wrote, according to my records, some 60 articles ranging from a case of mediastinal tumor in 1891 to perforated duodenal ulcer in 1913. He was known beyond the limits of the state as a surgeon of rare skill and medical learning, particularly in the diseases of the upper respiratory tract.

William Plant was the author of "A Succinct History of Medicine of the Last (the 18th) Century." Gregory Doyle, in 1880, read a paper on the dressing of Colles fracture and fractures of the leg, with plaster of paris splints made in sections. Two years later an English surgeon published an article on the same subject. Doyle invented many orthopedic devices, among which was a spiral spring rotator for automatic eversion and inversion in talipes. He was the first physician in Syracuse to use an automobile in making calls. Frederick Hyde, our first dean, has a long medical and surgical bibliography, among which is a paper called: "Some notes on 267 cases of dislocated hip, occurring in the State of New York." From 1850 to 1854 he operated with Miles Good-year, a private school in Cortland for anatomy and surgery, giving demonstrations and dissections. He wrote on malignant tumors of the abdomen, taxis in strangulated hernia, psoas or lumbar abscess, and trephination of the skull. P. J. Gibbons, practicing otolaryngology around 1880, invented an intranasal tube for the treatment of nasal stenosis, an adenotome for the removal of adenoids in the vault of the pharynx, and an apparatus for artificial respiration. He described a method for resuscitation from electric shocks which brought him world-wide acclaim. Charles Magee was reputed to have been the first in Syracuse, in the 1890's, to do a total hysterectomy, as well as the first to do intubation. Harvey Backus Wilbur was the first in America to attempt the education of the feeble-minded. He was the first medical director of the Syracuse State School, and wrote on "Aphasia," "The Relations of Speech and Language to Idiocy," and kindred topics. Gaylord Clark was the first in the coun-

try to devote himself exclusively to the teaching of physiology; in 1896 he wrote on "Equilibrium Fracture of the Ear." Alfred Mercer has a voluminous list of writings, and is notable particularly for his pioneer work in microscopy and photomicroscopy. In 1879 he wrote on the "Causes of Pus and Their Differential Characteristics"; and in 1881 published in the Transactions of the Pathological Society of London an article called "Tubercular Diseases of the Joints," the first practical microscopical contribution to this subject in England. Henry Darwin Didama wrote many articles of current interest and letters of travel in foreign lands under the pseudonym of Amos Cottle. John Wieting was a pioneer as a popular lecturer on the laws of physiology and

hygiene. Manville MacDonald invented a number of devices for the treatment of hernia. Robert Aberdein was the first in the county to perform a Cæsarian section. John Van Duyn, who has been professor of histology, anatomy, ophthalmology, otology, surgery, and the history of medicine, translated Wagner's "Manual of General Pathology" into English.

It would seem then, from these scant notes, that for scientific, historical, and sentimental reasons, some effort should be made to compile a History of Medicine of Onondaga County, dedicated, as it well might be, to those *Weelum Machures* who not so long ago guarded the health of the people living in the hills and valleys of Onondaga County.

THE TREATMENT OF TRAUMATIC RUPTURE OF THE POSTERIOR URETHRA

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Read before the Otsego County Medical Society, June 8, 1932.

TRAUMATIC rupture of the posterior urethra presents one of the most difficult therapeutic problems in urological surgery. Many methods of conservative and radical operative treatment have been advocated from time to time but the best opinions regarding the proper management of such cases are at considerable variance with one another. The purpose of this report is not to discuss these methods, but to record three simple procedures which were found useful in the treatment of two patients with this condition.

In each case, the injury was the result of an automobile accident and was complicated by fractures of the pubis. One patient was a boy, nine years old; the other was a man, sixty-one years of age. Both patients were brought to the hospital soon after the injury was received. The diagnosis of rupture of the posterior urethra was based on the patient's inability to void, gradual distension of the bladder, unsuccessful attempts to pass a catheter followed by the appearance of a few drops of fresh blood at the meatus, and ecchymosis of the perineum, upper portion of the scrotum, and base of the penis. Confirmation of the pelvic fracture was obtained by roentgenological examination.

Suprapubic cystotomy was performed as soon as the diagnosis had been made. In the first case this was followed immediately by external perineal urethrotomy and repair of the floor of the ruptured urethra over an inlying catheter. The roof of the urethra was so severely lacerated that the edges could not be brought together. In the second case, it was not considered advisable to explore the urethra immediately because the pa-

tient was in a mild degree of traumatic shock. Twelve days later a soft rubber catheter on a stillette was passed into the bladder without difficulty and urethral repair was not attempted.

The subsequent treatment of these two patients was facilitated and simplified by the following procedures:

1. *Use of Inlying Urethral Catheter as a Splint Only, with Continuous Drainage of the Bladder by a Suprapubic Tube.*

Drainage of the bladder was maintained constantly by a suprapubic mushroom catheter.

The tip of the urethral catheter, instead of remaining within the bladder, was brought out through the suprapubic wound and fixed to the anterior abdominal wall by passing several sutures of silkworm gut through the catheter and around a sterile, wooden tongue-depressor. The tongue-depressor was allowed to lie on the abdominal wall just above the pubis, at right angles to the incision and superficial to the dressings immediately overlying the wound (Figure 1). This was covered with more sterile gauze and all was held in place firmly with straps of adhesive plaster.

This very simple scheme was devised to prevent patients from withdrawing the urethral catheter at inopportune moments, and is especially applicable to children whose conduct is not always easy to control (Case 1).

It is believed by the writers that such an inlying urethral catheter acts as a splint around which the lacerated or repaired urethra heals more readily than when no attempt at immobilization is employed.

The bladder may be irrigated through the su-

prapubic tube and the splinting catheter left in the urethra for as long as desired. The necessity for its frequent removal and the dangers of introducing a new catheter through a recently repaired urethra are thereby obviated.

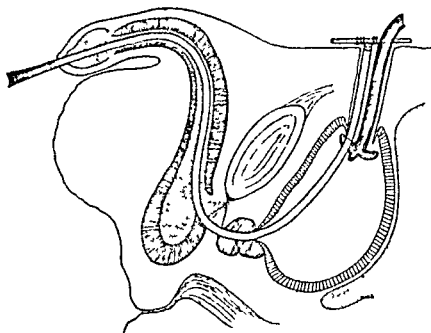


FIGURE 1

Drainage of the bladder is maintained by the suprapubic mushroom catheter.

The inlying urethral catheter acts as a splint and not as an outlet for urine. The upper end is brought out through the bladder to the abdominal wall and fixed to a sterile tongue-depressor by several sutures of silkworm gut. (The tongue-depressor should lie at right angles to the suprapubic wound instead of parallel to it as shown in this diagram.)

adequate size by followers, the filiform is permanently removed and subsequent dilatations are carried out with sounds.

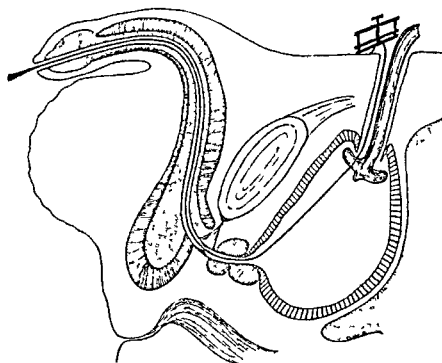


FIGURE 2

The inlying filiform is introduced either through the urethral splinting catheter before this instrument is removed or by suprapubic cystostomy and retrograde passage of a ureteral catheter through the internal orifice past the stricture and out through the meatus; the filiform may be attached to the lower end of this instrument and drawn back through the urethra and bladder. When not in use, sterile clamps are attached to each end. Followers may be screwed to the lower end and the urethral stricture dilated as indicated.

2. Use of Inlying Filiform as a Guide to the Passage of Metal Followers.

Utilization of a silk thread as a seton for preserving the integrity of the lumen of a lacerated or strictured urethra has been described by McWhorter.¹ The authors believe that a filiform, to which metal followers may be attached, is a much more satisfactory instrument for this purpose.

In Case 1 the filiform was introduced through the inlying urethral catheter from below, the tip was passed out through the suprapubic wound and the catheter was withdrawn. Sterile clamps were attached to each end and the instrument was left in place.

In Case 2 the filiform was introduced by the method described in the next section.

At intervals of three to seven days the patients were taken to the operating room, the clamps were removed, and the urethra was easily and gradually dilated to proper size by attaching metal followers to the inlying filiform-guide (Figure 2).

The filiform was then removed, the mushroom catheter was withdrawn and the suprapubic wound was allowed to heal.

No urethral reaction occurs around such an inlying guide which is easily held in place, and may be left in the urethra as long as is desired. When the stricture of the urethra has been dilated to

3. Suprapubic Cystoscopy and Retrograde Instrumentation of the Urethra.

During the interval after withdrawal of the urethral splinting catheter of the patient described in Case 2, such a dense stricture formed at the site of injury that neither sounds nor filiforms could be passed from below.

Consequently, cystoscopy was performed through the suprapubic sinus (after removing the mushroom catheter) and by this maneuver it was possible to pass a ureteral catheter down through the internal urethral orifice, past the stricture, and out through the meatus below. The tip of a filiform was then tied to the lower end of the ureteral catheter and drawn up through the urethra and out through the wound to the anterior abdominal wall.

Furthermore, suprapubic cystoscopy was found to be a valuable aid in determining the success of subsequent dilatations of the urethra with sounds. By looking into the bladder from above and passing a sound simultaneously through the urethra from below, it was possible to tell with great accuracy whether the tip of the instrument emerged through the internal orifice or whether it had been diverted by a false passage into the perivesical tissues around the neck and floor of the bladder.

Report of Cases

Case 1. V. D.—a white boy, aged nine, entered the hospital June 5, 1931, complaining of severe pain in the back, left lower quadrant of the abdomen, and left hip, following an automobile accident.

Past History. Irrelevant.

Present Illness. The patient was struck on the left hip and in the left flank by a passing car and thrown to the ground. He entered the hospital fifteen minutes later.

Physical Examination. There were numerous superficial abrasions of both arms, thighs, and legs, and one deep abrasive burn of the left flank just above the crest of the ilium. Severe pain was induced by motion of both hips and by compression of the iliac crests. There was marked tenderness in the perineum. The pulse rate was 100, and the blood pressure was systolic, 90; diastolic, 60.

Roentgenological Examination. X-ray of the pelvis disclosed a fracture of both rami of the left pubis with medial and downward displacement of the separated fragment.

Clinical Course. The patient was unable to void and three hours after admission began to complain of distension of the bladder. Ecchymosis appeared in the perineum and along the dorsal aspect of the base of the penis. The bladder could be percussed half way to the umbilicus. Unsuccessful catheterization was attempted with soft rubber and metal catheters. Upon withdrawal of the instrument each attempt was followed by the appearance of a few drops of bright red blood at the meatus.

Preoperative Diagnosis.

Multiple superficial abrasions.

Fractures of the left pubis.

Traumatic rupture of the posterior urethra.

Operation. Suprapubic cystotomy, external perineal urethrotomy, partial suture of lacerated posterior urethra over an inlying rubber catheter. Five hours after admission the patient was taken to the operating room and suprapubic cystotomy was performed under general anesthesia. The space of Retzius and the perivesical tissues around the neck of the bladder were heavily infiltrated with blood. The bladder was not ruptured.

The patient was then placed in lithotomy position and the posterior urethra was exposed by a v-shaped incision with the apex anterior. A sound was introduced into the urethra and, in the region of the membranous portion, a cavity containing liquid and clotted blood was opened. The distal end of the urethra was severely lacerated and a complete transverse rupture was found. The proximal end could not be located until a sound had been introduced in retrograde fashion in the posterior urethra through the bladder. The proximal end had retracted for some distance and the roof had been entirely destroyed for at least three-quarters of an inch. After excising much of the lacerated tissue, it was possible to suture the floor of the urethra over an inlying rubber catheter. The perineal wound was closed around a rubber tissue drain and the bladder was placed on constant drainage through a suprapubic mushroom catheter.

Postoperative Course. On the ninth postoperative day the patient pulled out the inlying catheter in spite of the fact that it had been sutured to the prepuce with silk. An attempt to pass a sound into the bladder through the urethra one month after operation was unsuccessful. A low grade osteomyelitis occurred in the separated fragment of the pubis which was removed at the end of two months.

Subsequent attempts to pass sounds into the bladder through the urethra were all unsuccessful because of an obstruction at the site of rupture. Consequently, a second urethrotomy and plastic repair of the strictured urethra were performed four and one-half months after

admission. The membranous urethra consisted of dense scar tissue which, when exposed, would not admit a sound or a filiform. Retrograde sounding through the bladder was likewise unsuccessful. The dense scarred portion of urethra was completely excised, an inlying catheter was placed through the anterior urethra, across this gap, through the proximal urethral segment and brought out through the bladder to the abdominal wall where the tip was firmly fixed in position by ligating it to a sterile tongue-depressor (Figure 1). Drainage of the bladder was reestablished by a suprapubic mushroom catheter. No irritation or discharge occurred around the inlying catheter which acted purely as a urethral splint.

Two weeks later a filiform was introduced through this catheter from below to the abdominal wound and the catheter was removed. At intervals of three to five days metal followers were attached to the filiform and the caliber of the urethra was dilated gradually to 23F. The mushroom catheter and inlying filiform were then removed. The suprapubic wound closed rapidly and the patient was able to void spontaneously without difficulty. Dilatation with sounds was continued at intervals until the patient's discharge on December 24, 1931.

Subsequent Note. May 17, 1932. The boy voids normally without difficulty. The abdominal wound is firmly healed and the urethra admits a 20F sound with ease.

Case 2. C. H.—a white man, aged sixty-one, was admitted to the hospital by ambulance, September 27, 1931, complaining of pain over the pubis, in the rectum, in the left gluteal region, and of inability to use the left leg.

Past History. Urinary frequency, nocturia, and difficulty in voiding had been present during the previous one and one-half years.

Present Illness. The patient was involved in an automobile accident in which he was thrown violently forward, and struck his left hip against an irresistible object. The injury was followed immediately by severe pain in the regions described above and by complete disability of the left leg.

Physical Examination. The mucous membranes were pale and the patient was obviously in pain. Tenderness and ecchymosis were present about the left hip, and in the perineum. Pain was induced by passive motion of the left thigh, and by pressure over the symphysis pubis. The prostate was moderately enlarged. The pulse rate was 60 and the blood pressure was systolic, 100; diastolic, 60.

Roentgenological Examination. X-ray of the pelvis revealed a fracture of the descending ramus of the left pubis.

Clinical Course. During the first two hours after admission, the blood pressure gradually fell to systolic, 60; diastolic, 50. The pulse was of poor quality, and the patient was in rather severe shock. After the administration of 1,000 c.c. of ten per cent solution of glucose intravenously and 1,000 c.c. of normal saline hypodermically, the systolic blood pressure rose to 100 and the diastolic to 70. During this interval the patient began to have an urgent desire to void but was unable to do so. Attempts to catheterize the bladder with rubber, silk-woven, and metal instruments were unsuccessful. Each effort was followed by the appearance of several drops of fresh blood at the meatus.

Preoperative Diagnosis.

Fracture of left pubis.

Traumatic rupture of the posterior urethra.

Benign hypertrophy of the prostate.

Traumatic shock.

Operation. Suprapubic cystotomy. Eight hours after admission to the hospital, the patient was taken to the operating room, and suprapubic cystotomy was performed under local anesthesia. The space of Retzius and the perivesical tissues around the neck of the bladder were heavily infiltrated with blood. It was not possible to pass a sound through the urethra, either from

below or in retrograde fashion through the internal orifice. Exploration of the urethra through the perineum was not considered advisable because of the patient's poor general condition, and the bladder was drained by a suprapubic mushroom catheter.

Postoperative Course. The following day the blood pressure was normal. Four days later the patient developed a transient urinary infection which was controlled by the administration of sodium acid phosphate and urotropin, with large amounts of fluid. On the twelfth postoperative day, it was possible to pass sounds through the urethra into the bladder without difficulty. An 18F soft rubber catheter was introduced on a metal stillette, the tip of the catheter was brought out through the suprapubic wound and fixed to the abdominal wall by several sutures of silkworm gut passed over a sterile tongue-depressor. Intravesical palpation of the prostate at that time disclosed moderate hypertrophy of the median lobe. No reaction occurred around the inlying urethral catheter which functioned merely as a urethral splint, and not as an outlet for urine.

Three weeks later this catheter was removed, the suprapubic wound was enlarged under spinal anesthesia and the hypertrophied median lobe of the prostate was excised with a punch. The urethral catheter was not replaced, and drainage of the bladder was maintained above.

After an interval of ten days, attempts were made to pass sounds into the bladder through the urethra, but all were unsuccessful because of an obstruction in the posterior urethra. Similar efforts with filiforms met with the same result. A urethroscope was passed to the point of obstruction, and a dense stricture was seen in the region of the membranous portion. The mushroom catheter was removed, a cystoscope was introduced into the bladder through the suprapubic wound and a urethral catheter was passed through the internal urethral orifice past the point of stricture and out through the meatus. A filiform was attached to the distal end and drawn back through the urethra and bladder to the abdominal wound. Metal clamps were attached to each end of the filiform and the instrument was left in place.

During the subsequent two weeks metal followers were attached to the inlying filiform and the urethra was dilated at intervals of five to seven days. The filiform was then removed and further dilatations with sounds were continued to 30F. The accuracy of these procedures was verified by simultaneous suprapubic cystoscopy and observation of the tip of the sound in the internal urethral orifice.

Drainage of the bladder from above was then discontinued, the suprapubic wound was allowed to heal, and the patient was discharged December 12, 1931.

Subsequent Note. Recent report from the patient states that he is in good physical condition and is urinating freely.

Comment and Conclusion

The authors believe that the period of hospitalization of these two patients could have been shortened materially had the procedures which are described above been instituted early in the postoperative convalescence.

The following regime is suggested for the treatment of patients with traumatic rupture of the posterior urethra.

Immediately after the diagnosis is made, suprapubic cystostomy should be performed. If a catheter cannot be passed through the urethra either directly or in retrograde manner, and the general condition is suitable, perineal urethrotomy and repair of the ruptured urethra should be performed over an inlying soft rubber catheter. The tip of this instrument should be fixed to the abdominal wall and act only as a urethral splint, while drainage of the bladder is secured by the suprapubic method. At the end of twelve to fourteen days, a filiform should be passed through the urethral catheter, which is then withdrawn. The filiform is left in place and dilatations of the urethra are carried out at intervals of three to seven days by attaching metal followers to this instrument. When a satisfactory caliber of the urethra has been obtained, the mushroom catheter is removed and the suprapubic wound is allowed to heal. This may be hastened by draining the bladder temporarily with an inlying urethral catheter for a few days. Subsequent dilatations should be performed at gradually increasing intervals before the patient is finally discharged.

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REPORT ON THE OCCURRENCE OF GONOCOCCIC VAGINITIS IN THE NEW BORN

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AT the 1923 meeting of this Society, a preliminary report on the occurrence of Gonococcic Vaginitis in the New Born was read, and subsequently published in the New York State Journal of Medicine, October, 1923.¹

The report was drawn from work which consisted of the routine examination of vaginal smears on all female infants born in the Syracuse Memorial Hospital. 163 cases were observed. The method of study was as follows:—Smears were taken with a platinum wire loop from the vestibulum vaginae on the 1st, 4th, and 13th days. These smears were examined for gram negative intracellular diplococci and the presence or absence of polymorphonuclear leukocytes, and the form and staining characteristics of the prevailing types of bacteria. No gram negative intracellular diplococci were found in any smears examined in this series of 163 cases.

In November, 1926, Dr. E. J. Wynkoop and Dr. Edgar O. Boggs reported² 435 additional cases studied in the same manner and with the use of the same technique as in the preliminary report; i.e., the routine examination of vaginal smears in the New Born taken on the 1st, 4th and 13th days. No smear showed gram negative intracellular diplococci in the 435 cases examined. Four cases of gonococcic ophthalmia of the New Born were discovered among the 435 cases examined, none of which developed gonococcic vaginitis.

We have studied 552 additional cases, making a total of 1150. In this third series as in the 1st and 2nd series previously reported, no smear showed gram negative intracellular diplococci. 12 cases of gonococcic ophthalmia in the New Born were discovered in the 552 cases studied.

The following is a brief summary of the total number of cases examined.

1. Number of cases—1150. Days on which smears were taken—1st, 4th and 13th.
2. Number of cases showing no polymor-

phonuclear leukocytes at any of three examinations—460 or 40%.

3. Number of cases showing polymorphonuclear leukocytes in the 1st day smears—195 or 17%.

4. Number of cases showing polymorphonuclear leukocytes in the 4th day smears—241 or 21%.

5. Number of cases showing polymorphonuclear leukocytes in the 13th day smears—494 or 43%.

6. Number of vaginal smears showing gram negative intracellular diplococci—none.

7. Number of cases showing gonococcic ophthalmia in the New Born—19 or 1.6%.

Several varieties of bacteria were found. Gram positive cocci and gram positive and gram negative bacilli were the most frequent forms. The smears containing no polymorphonuclear leukocytes showed fewest bacteria. Many such contained no, or very few bacteria. On the other hand, smears were occasionally found which contained rather large numbers of organisms in the absence of polymorphonuclear leukocytes. The type of bacteria, as a general rule, seemed to determine the presence or absence of polymorphonuclear leukocytes. The gram positive cocci were associated in a considerable number of cases with large numbers of polymorphonuclear leukocytes. Gram positive or gram negative bacilli usually predominated in cases showing no, or but few polymorphonuclear leukocytes. In but a few cases were numerous pus cells found in the absence of bacteria.

CONCLUSIONS

1. The occurrence of gonococcic vaginitis in the New Born is extremely rare.
2. The presence of polymorphonuclear leukocytes in the vaginal secretions of the New Born is of little clinical significance.
3. The mere presence of polymorphonuclear leukocytes in the vaginal secretions should not be taken as evidence of gonococcic vaginal infection of the New Born.

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A CASE OF MONOCYTOID MYELOBLASTIC LEUKEMIA*

By CARL REICH, M.D., NEW YORK, N. Y.

RESCHAD and Schilling-Torgau¹ described the first case of monocytic leukemia in 1913. Since then 26 other cases have been reported. These were recently reviewed by Dameshek² who added two additional cases. Many hematologists believe that monocytic leukemia is a separate entity and that the monocytes are derived from reticulo-endothelial cells. Other authorities, notably Naegeli³, state quite definitely that there is no such thing as a true monocytic leukemia, and that it is only a variety of myeloblastic leukemia and will turn into the latter type if the patient lives long enough. This latter school also believes that monocytes are derived from myeloblasts.

The following case is of interest in that it presents a patient who became ill with what appeared to be a monocytic leukemia and then ended up with a myeloblastic leukemia.

Case History—The patient was a young German male, 33 years old, a painter by trade. He was admitted to the hospital on 7/11/31 with the complaint of sore throat, 3 weeks in duration. He had always been well and the onset of his illness was acute, with fever, headache and swelling of the glands of the right side of the neck. His voice became hoarse and he had difficulty in swallowing. He was treated with argyrol and gargles, but became progressively worse and hospitalization was considered necessary.

On admission his temperature was 103, pulse 100 and respiration 20. He looked quite ill and complained of severe pain in his throat. His tongue was heavily coated and the gums were swollen and inflamed, with marked pyorrheal changes around the base of the teeth. The tonsils were red and boggy and there was a large swelling around the right tonsil, extending to the soft palate and pushing the uvula to the left. The glands at the angle of the jaw on the right side were enlarged and a few pea sized glands were palpable in the cervical region on both sides. The physical examination was otherwise essentially negative and a diagnosis of acute tonsillitis with right peritonsillar abscess was made. The

supposed abscess was incised but no pus was obtained. Culture from the incision showed mic. catarrhalis, non hemolytic streptococcus, pneumococcus and influenza bacillus. The blood count 7/22 was Hb. 54%, R.B.C. 2,700,000, W. B. C. 52,300. Neutrophils 14%, Lymphocytes 25%, Monocytes 61%. The blood Wassermann test was negative. The throat condition began to improve and the temperature slowly came down. On 7/24, seven days after admission, his blood count was Hb. 44%, R.B.C. 1,900,000, W.B.C. 36,200. Neutrophils 7%, Lymphocytes 24%, Monocytes 69%. His temperature ranged around 101 and the spleen, axillary and inguinal lymph nodes were definitely enlarged. During the next month the patient ran a low grade septic temperature, going up as high as 101 in the afternoon. Repeated blood cultures were sterile. The urine showed albumin and casts. The anemia became more pronounced and two 500 c.c. blood transfusions were given with no improvement. The blood picture slowly changed and on 7/30 it was Hb. 30%, R.B.C. 1,400,000, W.B.C. 8,100. Neutrophils 14%, Lymphocytes 70%, Monocytes 14%, Myeloblasts 2%. The myeloblasts gradually increased in number and the patient had hemorrhages from the gums, a hematoma of the eyelid and retinal hemorrhages. The count on 8/21, four weeks after admission, was Hb. 20%, R.B.C. 1,000,000, W.B.C. 19,900. Neutrophils 5%, Lymphocytes 26%, Monocytes 19%, Myeloblasts 50%. The patient became rapidly worse and expired, 8/23. Autopsy was refused.

Discussion—This case may be explained in two different ways. It is possible that the patient first ran an acute angina with a concomitant monocytoid reaction. Following this he developed an acute myeloblastic leukemia. On the other hand, the high total white count and the anemia noticed at the onset of the illness speak against it being a benign process at that time. This would lead to the second explanation which is that it was a case of monocytoid myeloblastic leukemia. This type of leukemia begins with an increase in monocytes and then ends as a myeloblastic leukemia.

* From the Lenox Hill Hospital, medical services of Dr. O. Hensel and Dr. A. L. Garbitt.

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QUESTIONNAIRES

Every medical editor is often asked to promote a questionnaire in order that some one may obtain what is called "the opinion of the medical profession" regarding some point. The questionnaire is a statistical study whose value depends on at least two unknown quantities:

1. The exactness of the question that is asked.
2. The qualifications of the answerers.

A physician may be asked, "Do you prescribe Smith's rheumatic pills?" He can answer it truthfully if he has tried them only once.

The next question may be, "What results did you get?" The answer might truthfully be, "The patient was well on the next day." The interpretation of such statistics as these is that Smith's rheumatic pills are one hundred per cent efficient;

but in reality the first question is inexact and meaningless, and any doctor that answers it thereby demonstrates his incapacity to give a thoughtful opinion.

Object of the Questionnaire: A questionnaire is used for either one of these objects:

1. A record of scientific observations.
2. A basis for publicity.

The Scientific Questionnaire: Medical societies and the editors of their journals are always ready to promote scientific observations, and to give publicity to the results. An example of valuable study conducted by means of a questionnaire is that of student medical service in the colleges of New York State, reported in this Journal of November 1, 1930, page 1283. This particular questionnaire dealt with facts rather than opinions; and yet the facts reflected widely varying opinions and attitudes of the governing authorities of the colleges in regard to the health service which they provide for their students. The report is of value to the colleges and their students, to the parents about to choose a college, and to physicians who are consulted regarding the health of students.

Publicity: In contrast with the scientific study of a problem is the questionnaire conducted for publicity ends. This publicity is of two forms:

1. Propaganda.
2. Advertising.

Propaganda: A propaganda is any systematic scheme for propagating an opinion or course of action. It is like the plea of a lawyer employed to promote one side of a case. The field of public health is occupied by many organizations whose strength is their ideals backed up by financial endowments. These organizations make free use of the questionnaire in support of their cause, often to the annoyance of family doctors who

wish that both sides of a problem shall be presented impartially.

The officers and editors of medical organizations are cold in their attitude toward all forms of propaganda because they dare not say that any form of treatment is a sure cure for any ill, either personal or civic. Physicians are therefore not responsive to a questionnaire whose object is to support a cause or an ideal.

Advertising: The questionnaire is abused when it is used for a selfish end, especially one that is financial. Medical journals are confronted with the economic problem of balancing their expenses for salaries, printing, and postage, against receipts from subscriptions and advertisements. The NEW YORK STATE JOURNAL OF MEDICINE conducts its advertising department on the theory that it serves both the medical profession and the public by announcements regarding standard medical wares; and at the same time its service to manufacturers and dealers is worthy of the same kind of financial remuneration that a family doctor receives from his patient. Medical service comes first, and financial considerations are secondary.

Medical advertisements are often handled as a subdivision of some advertising agency which uses the methods of supersalesmanship employed in selling automobiles, and cosmetics, and hats. The questionnaire is a favorite device in which the cooperation of medical editors is often asked. The reply of the editors is always that of the conscientious family doctor who refuses to lend his professional support to any purely financial scheme of a patient. This point of view is generally accepted by manufacturers and dealers in medical wares. The advertising agencies also appreciate the attitude of the physician when the principles of the medical profession are explained to them.

LOOKING BACKWARD

This Journal Twenty-Five Years Ago

Automobile Accidents:—This Journal of October, 1907 has an editorial on physical fitness which suggests a physical examination for drivers of locomotives and automobiles. The part referring to automobiles is as follows:

"The automobile rushes through the streets and country in the hands of any one who lays himself to the task. The number of accidents is appalling. The driver may be half blind, deaf, or parietic—there is no restriction. The large number of fatalities are all in the day's work, so long as we do not know the parties involved; but still we may be the next victims, and then it becomes

a different matter. No person should be permitted to run an automobile faster than four miles an hour within the town limits who has not been subjected to a physical examination and determined physically fit and free from disease which does or might suddenly incapacitate him. A medical examination should be necessary for a license, and the license should be good for one year. This need not be burdensome or expensive, and it would surely be for the public good. Our anti-paternalist might object to such an ordinance, but after he is run into by a cross-eyed parietic, he will be convinced, if he survive."



MEDICAL PROGRESS



Early Diagnosis and Treatment of Pregnancy Toxemia.—Norman White divides the toxemias of pregnancy into two main groups: (1) albuminuric toxemia, pre-eclampsia, and eclampsia; and (2) hyperemesis. Albuminuric toxemia occurs usually in from 3 to 5 per cent. of previously healthy women. The dangers of this form of toxemia are: (1) eclampsia; (2) permanent renal damage; (3) death of the fetus. The writer has examined the case sheets of 18 recent cases of eclampsia and found that in 8 cases symptoms of toxemia began one month or more, and in 7 cases one or two weeks before the onset of convulsions; in 3 cases the onset was rapid, the patient being probably normal two or three days before the convulsions occurred. Fifteen of the cases therefore could have been diagnosed by efficient antenatal supervision, and in the other three the fits might possibly have been prevented if the patient had come for examination when she began to feel ill and treatment had immediately been instituted. In toxemia, edema is the most important early symptom, being absent only when the onset of toxemia is fulminant. It starts in the feet and legs and may then be regarded as due to pressure by the enlarging uterus, but it should be taken as a warning to look for albuminuria and a rise of blood pressure. Generalized edema, shown by swelling of the face and hands, is a more definite sign of toxemia. The most important type of edema is that which gradually spreads up the thighs and on to the abdominal wall. Headache is a later symptom, preceding the development of albuminuria and the rise of blood pressure by not more than about two weeks. Visual disturbances are also a late sign. Partial or complete blindness commonly precedes the first convulsion by not more than an hour or two. Other signs calling for immediate treatment are the rapid onset of severe headache and epigastric pain. A rise of blood pressure is the most important symptom of toxemia in the pregnant woman, and therefore routine blood pressure estimations should be made repeatedly throughout pregnancy. According to F. J. Browne these should be made every month till the thirtieth week, then fortnightly till the thirty-sixth week, and weekly after that till delivery. Any rise in blood pressure, in a woman not over 35 years, to more than 140 mm. should be regarded as probably toxic, and a rise to 160 mm. or more is an urgent indication for treatment. Albuminuria occasionally occurs as the first sign and rapidly increases in amount in the pre-eclamptic state. Antepartum hemorrhage is an occasional consequence of toxemia, usually however associated with extensive placental infarction. As a

rule a toxemia which leads to antepartum hemorrhage does not cause eclampsia. The most important point in all methods of treatment is absolute rest in bed, and in cases of mild toxemia little else may be called for. The diet may be restricted (1) to give rest to the kidney, (2) to prevent the production of a hypothetical toxin in the alimentary canal, (3) to decrease the production of acid and increase that of alkali in the body, and (4) to decrease the ingestion of salts. The patient should drink large quantities of plain water, lemonade, or barley water, lemonade being the best. Elimination of the toxin is to be encouraged by this ingestion of a large amount of water, inducing diuresis or diaphoresis, and purgation by magnesium or sodium sulphate. If the toxemia is not overcome or markedly reduced by the end of a fortnight the pregnancy should be terminated.

Hyperemesis gravidarum is rare as compared with toxemia. The sufferer should be treated by isolation and reduced diet. In definitely toxic cases one must forbid all feeding by the mouth and give saline enemata or rectal drip with 5 per cent. glucose added. Bromides may be added to the enemata. If the urinary output remains small and the patient's condition does not improve, therapeutic abortion is indicated.—*The Practitioner*, September, 1932.

Blockade Theory of Polyp Formation.—John L. Jenkins adds another and a plausible theory to those at present accounting for the origin of nasal polyps. This type of polyp, he says, is always preceded by more or less marked chronic inflammation. The polyp is an accumulation of intracellular fluid dammed up by an infiltration of lymphocytes producing a blockade of intercellular spaces. Now if this blockade of lymphatic elements is lifted the accumulated fluid will be absorbed, with disappearance of the polyp. Roentgen rays or radium in proper dosage will dissolve out the lymphatic elements, but if the chronic inflammation continues the round cell infiltration will recur and the polyp will reappear. Occasionally the polyp itself by its weight or its pressure may be a factor in keeping up the chronic inflammation, and so a sort of vicious circle results. Examination of an old polyp, which has existed for months or years, gives no clue to the nature of its formation, by reason of the tissue and chemical changes produced by time. But the author has arrived at his conclusions as to the constitution of newly formed polyps from a chemical and radiographic study before these changes have occurred.—*The Laryngoscope*, September, 1932.

The Relations between Paroxysmal Tachycardia and Lesions of the Myocardium.—Ralph H. Major and H. R. Wahl, writing in the *Archives des maladies du cœur* of August, 1932, say that a recent study of 4 cases of paroxysmal tachycardia, 2 of which were of auricular and 2 of ventricular origin, revealed upon microscopic examination the presence of grave lesions of the myocardium, which might have been completely overlooked in a superficial examination. In every case the patient died during the course of an attack. Histological examination of the myocardium revealed in Case 1 numerous foci of inflammation, with lesions more marked in the ventricles than in the auricles, degeneration of the myocardium with muscle fibers replaced by fibrous tissue; in Case 2, both acute and chronic myocarditis, more marked in the auricles; in Case 3, marked increase in size of the heart muscle and degeneration of muscle fibers, shown in fragmentation and segmentation of these; in Case 4, chronic interstitial myocarditis, segmentation of muscle fibers, with infiltration of round cells; numbers of disseminated islands of sclerosis and hyaline degeneration, with foci of necrosis in the muscle fibers. The ages of the patients ranged from 15 to 34, and all had a long history of heart trouble, dating in some cases from childhood. In 2 of the cases no lesion was found until more than 10 sections had been carefully scrutinized, showing the necessity of minute microscopic examination. In none of the cases was there any evidence of the coronary occlusion which has been reported by a number of writers, whose cases were tachycardia of ventricular origin. Nevertheless, the cause of the tachycardia was probably identical, namely, inflammation and degeneration. The authors' cases emphasize the role played by lesions of the myocardium in the etiology of paroxysmal tachycardia.

Posterior Pituitary Extract in the Prevention of Post-Operative Intestinal Distention.—In a preliminary report Philip C. Potter and R. Sterling Mueller describe a study undertaken at Bellevue Hospital for the purpose of working out a method for the prevention of post-operative distention and ileus. In a series of 100 abdominal cases they employed pituitary extract as recommended by Joseph A. Blake, in 1924, using one ampoule of surgical pituitrin after operation and continuing at intervals of four hours for six doses, or more if indicated. Although the incidence of post-operative distention was materially lessened, there were certain cases which continued to be a problem, namely, those in which considerable gas was present before the administration of pituitrin, and those in which distention appeared after the final dose of pituitrin had been given. It was evident that in certain cases pituitrin was started too late and in others its use had not been sufficiently prolonged. In a new series

of 100 operations, 50 for acute appendicitis and 50 for biliary disease, selected because distention seems more likely to occur in these conditions, the beta hormone of pituitary was employed. The routine adopted was as follows: In the cases operated upon under spinal anesthesia an initial dose of pitressin was given intramuscularly directly after operation, and continued every four hours for eight doses in the case of uncomplicated appendicitis, for twelve doses in the biliary cases, and for fifteen or more where acute appendicitis was complicated by peritonitis. In 90 of the 100 cases there was no distention, in 8 cases there was moderate distention. One extremely obese patient was unaffected by the drug, and in the remaining case there was mechanical obstruction necessitating an ileostomy. In twelve cases of biliary disease operated upon under general anesthesia, the action of pituitary extract was observed. In eleven of these cases a gradual generalized shrinkage of the small intestine was noted, but not of the degree seen in spinal anesthesia. This came on in from ten to twenty minutes after the administration of the pituitrin and remained throughout the operation, making for an extremely easy closure in all instances. In none of the twelve cases was any effect on the musculature of the stomach or large intestine noted.—*Annals of Surgery*, September, 1932, xvi, 3.

Cinchophen Poisoning.—Cinchophen, or 2-phenyl-quinoline-4-carboxylic acid, is also known as phenylcinchoninic acid, phenylcincholinic acid and as the proprietary preparations agotan, phenoquin, atophan and quinophan. It is also the chief component of neocinchophen, weldona, atquinol and diiodoatophan. T. G. Reah classifies the toxic manifestations of cinchophen poisoning as follows: (1) *Cutaneous*: Various rashes—scarlatiniform, purpuric, erythematous and urticarial. (2) *Vasomotor*: Palpitation, giddiness, collapse, fall of blood pressure, rapid pulse and cyanosis; these may follow even one dose of cinchophen. (3) *Gastro-intestinal*: Anorexia, nausea, vomiting, abdominal discomfort, or even severe epigastric pain may occur. (4) *Hepatic*: Jaundice is the first definite indication of involvement of the liver. At autopsy there is found destruction of liver cells; where the process is more chronic there may be widespread fibrosis and even attempts at regeneration of liver tissue. (5) *Renal*: Occasionally a transient albuminuria may appear. Reah found records of 35 cases of jaundice following the ingestion of cinchophen, including three unpublished cases from the records of the London Hospital. Of the 35 cases 18 terminated fatally. Factors which appear to have exerted an adverse influence are alcoholism, syphilis, pregnancy, and other conditions known to affect the liver. The toxic effects are not directly related to the amount of drug taken, the

milder symptoms having followed the ingestion of a single dose of $7\frac{1}{2}$ grains. In the more severe cases glucose should be given in large amounts, either by mouth or intravenously. It would seem reasonable to give insulin along with the glucose, but its administration should be controlled by estimations of the blood sugar. Calcium may be of value, as it appears to have been in one of the cases reported by Reah. Calcium salts should be given intravenously either in the form of calcium gluconate or of a 5 per cent solution of calcium chloride, which must be given very slowly. Cinchophen should not be used as a routine measure in the treatment of gout. Its use should be reserved for those cases in which other methods have proved inadequate. The patient should be tested for idiosyncrasy with a small initial dose, and if the drug is well tolerated 10 grains may be given three times daily for three days a week.—*The Lancet*, September 3, 1932, ccxxiii, 5688.

Therapeutic Use of Bacteriophage in Typhoid Fever.—During a typhoid epidemic in Donezbacken (Ukraine), I. E. Rutschko and M. I. Melnik had an opportunity to observe the effects of bacteriophage in 69 proved cases. General races of bacteriophage were employed, obtained from various sources. In 52 cases the treatment was given per os, and in 17 subcutaneously. In the former group, 10 c.c. of a bacteriophage preparation was given to the fasting patients, usually with a small amount of weakly alkaline soda solution. In the cases treated subcutaneously $\frac{1}{3}$ c.c. was injected once under the skin of the abdomen. In only a few cases was a second dose of the same strength required. The time of administration was generally at the beginning of the second week, but occasionally at the end of the second or beginning of the third week. In no case were any "negative" phenomena observed, but, on the other hand, no abortive effect upon the disease was seen. The reactions observed in most cases immediately after use of the bacteriophage were: (1) diarrhea, (2) fresh appearance of rose spots, and (3) increased sweating. These phenomena were more marked in those patients treated subcutaneously. Regardless of the day of the disease on which the bacteriophage was given, the temperature rose in nearly every case 0.3° - 0.8° C. during the next 48 to 72 hours, after which it fell 1° - 2° C., and then continued to decrease by lysis until normal. In a few cases it rose again 1° - 1.5° before undergoing lysis. Another no less important observation was that within 24 hours of administration the patients were free from delirium and a considerable improvement in their general condition was seen. In 50 per cent of cases the positive results were striking, in the other 50 per cent less marked. A few cases were hardly affected at all; these were mostly among those treated per os. There were 4 deaths (5.8 per cent), one

patient succumbing to an erysipelas infection and one to a pneumonic complication; a third was already in a hopeless condition when admitted. The mortality of control cases not treated with bacteriophage was 7.5-8.5 per cent. In the light of these results, it seems desirable to investigate further the effects of this form of treatment upon typhoid patients.—*Münchener medizinische Wochenschrift*, August 19, 1932.

A Case of Tuberculous Pericarditis with Effusion Treated by Means of Pneumopericardium.—In a search of the literature Giles W. Thomas found 16 cases of pericarditis with effusion treated by means of pneumopericardium, in all of which the author felt that the procedure gave symptomatic relief and slowed up the reaccumulation of fluid. He reports the case of a boy of 18 years, in which the diagnosis was acute serofibrinous pericarditis, probably tuberculous. Several pericardial taps were made during the first month of his hospital stay which yielded from 120 c.c. to 600 c.c. of fluid. A decided subjective improvement resulted although there was little clinical change. It was then decided to inject air the next time fluid was withdrawn. This was done and the patient stood the procedure well. As each 50 c.c. was withdrawn the blood pressure rose about 5 to 10 points, and when a similar amount of oxygen was injected, it fell about the same amount. As there was no apparent ill-effect from the procedure, it was repeated three times in the course of a week, and several times during the following weeks. The patient's condition improved to such an extent that he was discharged from the hospital. Six weeks later he was readmitted and examination seemed to indicate that he had an adherent pericardium. Cardiolysis was decided upon and performed. The pericardium, which was adherent to the heart was gently peeled off and large flaps were cut away. These pieces of pericardium showed lesions sufficiently typical to justify the diagnosis of tuberculosis in the healing stage. The tubercle bacillus had never been found in the fluid obtained by tapping. The patient survived the operation and was discharged to a sanatorium for general care. At last reports he had gradually increased his activities and was up and about for short periods daily. While pneumopericardium did not cure this patient, nor even prevent the necessity for operation later, this may have been because the treatment was not continued for a sufficiently long period. In order to prevent the formation of pericardial adhesions in pericarditis, it would seem, on theoretical grounds, preferable to keep the parietal and visceral pericardium apart by means of elastic gas rather than of inelastic fluid. The method of artificial pneumopericardium would seem to deserve more extensive trial than it has yet been accorded.—*American Heart Journal*, August, 1932.

Visceralgia: Reflex Dermatalgia.—According to J. Paviot and H. Jarricot, when a visceral organ is in a state of inflammation, 2 types of pain may be induced, in addition to spontaneous pain. The one type is that which may be elicited by the classic methods, such for example as pain on palpation at MacBurney's point. Pain of the other type, to which the authors are here especially calling attention, is induced by exploration of the dermal tissue by a procedure which they have termed the "pinch-roll" method, consisting of pinching up and rolling the superficial layers between the thumb and index finger. This produces in very limited zones a pain which the patient usually likens to that of a prick. These points of induced hyperesthesia, which do not coincide with the peripheral localization of spontaneous pain, occupy only a part of what may be called the zone of projection of the organ. Exploration of the skin by this technique shows that a visceral pain objectifies its peripheral repercussion in a given zone by vasomotor disturbances which impress upon the skin a special condition called by the authors cellular edema, or, better, "dermal cellulism" (cellulie dermique). The zone of cellulism forms a wide border around the hyperesthetic point revealed by the "pinch-roll." For any given visceralgia there is a corresponding "reflex dermatalgia." The existence of reflex dermatalgia is not confined to visceralgia; it is met with in a number of painful states, such as arthralgia, arthritis, neuritis, etc., but with this difference, that in these conditions it is not a constant phenomenon as it is in visceralgia. The zones recall "cellulism" conditions (a term preferable to cellulitis). Their pathogenic mechanism is reciprocally explained. Intradermal injection of double-distilled water at the dermal point of maximal intensity cause the cellular substratum of the reflex dermatalgia, or the placards of cellulism, to disappear, while at the same time the spontaneous pain and its train of sequels (functional impotence, etc.), if they exist, become modified. Analysis of these phenomena, in addition to its immediate diagnostic and therapeutic interest, makes it possible to envisage in a new light a number of problems of physiotherapy.—*Journal de médecine de Lyon*, August 20, 1932.

The Choice of an Anesthetic for Abdominal Surgery.—Finsterer, writing in the *British Medical Journal*, August 27, 1932, ii, 3738, summarizes the replies of 120 members of the German Surgical Society to a questionnaire asking for their views and experiences with various anesthetics. He also relates his own experience in 5,172 abdominal operations performed during twenty-five years under various methods of anesthesia. Chloroform caused most of the immedi-

ate deaths, especially at the beginning of narcosis. It injured parenchymatous organs, particularly the liver; it regularly induced intestinal atony, with frequent vomiting, often leading to death. Statistics from Austrian and German clinics showed that the immediate risks of ether were very slight. Of much greater importance were the so-called deaths from operative shock occurring from three to five days after the operation; they did not occur when deep narcosis was avoided. Prolonged ether narcosis injured or destroyed the normal powers of resistance, especially phagocytosis, so that the smallest infection, insignificant in operations under local anesthesia, led to death from peritonitis. Ether also favored pneumonia. Narcosis with nitrous oxide did not injure the parenchymatous organs, and was therefore least dangerous. Avertin was being used by 45 of the 120 surgeons who replied to the questionnaire. Finsterer, however, did not use this preparation as a basal anesthetic, owing to the frequency of unavoidable deaths (1 in 10,000 according to Specht), neither did he regard peritonect as harmless, for seventeen surgeons had reported five deaths from this anesthetic. Only 14 of the 120 surgeons used high spinal anesthesia, while 44 used spinal anesthesia for operations below the umbilicus.

In preparing patients for practically all abdominal operations Finsterer preferred regional, conductive, or paravertebral anesthesia with novocaine. In every laparotomy an exactly performed anesthesia of the abdominal walls was most important. This form of anesthesia was sufficient for gastrotomy, jejunostomy, colostomy, and also gastroenterostomy. In other operations at least mesenteric anesthesia procured with novocaine was essential. With splanchnic anesthesia operations on the gall-bladder, resection of the stomach and of the colon could be performed with a lower mortality than under general narcosis. Local anesthesia was absolutely without danger, prevented shock, and should be applied to spare general narcosis, even if this had been administered. In a series of 4,562 operations under local anesthesia Finsterer had only five deaths during operation or shortly after, in spite of the large number of bad risks. The mortality from pneumonia in 610 operations performed under general narcosis was 1.31 per cent; in 4,562 operations under local anesthesia it was only 0.24 per cent. In 843 patients, ranging in age from 60 to 88 years, the mortality was only 0.94 per cent. In aged patients with extreme arteriosclerosis it was advantageous to add pituitrin instead of adrenaline. Serious disease of the heart or lungs, extreme cachexia, and old age were no contraindications to an absolutely indicated operation.



LEGAL



PRIVILEGED COMMUNICATIONS— AN INTERESTING CASE

By LORENZ J. BROSNAN, ESQ.

Counsel, Medical Society of the State of New York

Very recently an interesting case came before the Supreme Court which involved the construction and application of the statutory provisions of this State relating to confidential communications between patient and physician.

A woman had taken out a policy of insurance on her life in 1929 and she had died in the following year. The policy contained certain provisions to the effect that it should be void if the assured, within two years before the date of the policy, had been treated for a serious disease or if the assured had suffered from certain enumerated diseases. The beneficiary brought suit to recover the amount of the policy, and the insurance company set up as a defense that the assured had suffered from various diseases and had received medical treatment with respect thereto in violation of the policy provisions.

In order to establish its defense, the defendant at the trial called a certain Dr. J. who testified that he was a pathologist and that, while he had never treated the decedent during her lifetime, he had performed an autopsy upon her body after death. He testified that she had suffered from various ailments including cirrhosis of the liver, diseased kidneys, degeneration of the heart and general arterio-sclerosis. He further stated that the said diseases had had their beginning approximately ten years before the assured's death, and that for the three years prior to death had progressed to such an extent that the assured's health was seriously impaired, and further that the said conditions were caused by the excessive use of alcohol.

The testimony of Dr. J. was received over an objection on the part of the plaintiff, that it was improper and inadmissible as privileged under the section of the Civil Practice Act forbidding disclosure of professional information. It had been stipulated by the attorneys that the trial court should decide the issues in the case without a jury, and in ruling, in favor of the defendant the Court delivered an opinion in which the manner that that conclusion had been arrived at, was clearly and ably set out. In the opinion the court stated that the testimony vital to the case, namely, Dr. J.'s testimony, was admissible if at the time of the autopsy there was no existing relation of physician and patient between the deceased and the physician. The question thus presented, according to the Court, had never arisen in this State, but when it had come up in other juris-

dictions the courts had uniformly held that "a patient is a person under medical or surgical treatment and that a deceased body is not a patient, and that therefore, the relation of physician and patient ends when death ensues." The Court stated that on the basis of logical reasoning as well as on the said authorities outside New York State, there had been no relation of physician and patient in existence at the time of the performance of the autopsy, and therefore it permitted the testimony with respect to the autopsy findings to be considered, and directed judgment in favor of the defendant. The Court apparently felt as one case stated it, that "a dead man is not a 'patient' capable of sustaining the relation of confidence towards his physician which is the foundation of the rule given in the Statute, but is a mere piece of senseless clay, which has passed beyond the reach of human prescription, medical or otherwise."

One of the cases cited as authority by the Court in its opinion justifies its holding as follows:

"A deceased body is not a patient. The relation of physician and patient ends when the death of the patient ensues. To hold that facts discovered through an autopsy are privileged communications within the meaning of the Statute will not effectuate what we conceive to be its manifest purpose, namely, to obtain full disclosure to the physician in order to enable him to properly treat the patient. Treatment cannot avail after death. On the other hand, to hold that facts obtained by a physician through an autopsy are not privileged communications will not in our opinion, in any wise prevent the accomplishment of the purpose for which the Statute was enacted. The foregoing must be true, unless it can be said that a sick person will be deterred from calling a physician because of fear that, if death ensues, such physician will probably perform an autopsy and disclose the facts obtained through such autopsy. We think it altogether unlikely that such a fear would deter a sick person from securing the services of a physician. As a matter of fact, an autopsy is much less likely to follow in cases where the deceased person has had the services of a physician during his last illness. Where the deceased person has no physician during such illness the public authorities are more likely to require an autopsy and facts disclosed at an autopsy held at the instance of the public authorities are, of course, not

privileged. It follows that facts obtained at an autopsy are neither within the letter nor the spirit of the Statute; they are not within the letter because they are obtained after the relation has ceased; they are not within the spirit because keeping them secret will not in any wise accomplish the purpose for which the Statute was enacted. This Statute is in derogation of common law. In many cases it will close the door to the best possible evidence on the issue of fact presented for determination. It should not therefore be construed to apply to matters of evidence not coming clearly within its provisions."

Another of the authorities relied upon by the New York Court, in its opinion took occasion to discuss the wisdom of the enactment of a statute regarding privileged communications, and said in part the following:

"The enactment contemplates that a physician receives in confidence what his patient tells him, and also what the physician learns by a personal examination of the patient. It contemplates that the patient may testify with reference to what was communicated by him to the physician, and in that event only, it permits the physician to testify without the patient's consent. The express object is to exclude the physician's testimony at the patient's option, respecting knowledge gained at the bedside, in view of the very delicate and confidential nature of the relation between the parties. The statute recognizes that

they do not stand on equal terms. The patient is more or less suffering from pain or weakness, distracted by it, ignorant of the nature or extent of his injury or illness, driven by necessity to call in a professional adviser, sometimes with little freedom of choice, he relies, perforce, upon the physician's discretion as well as upon his skill and experience, and is obliged by the circumstances of his own condition not only to make an explanation of his ailment or injury, so far as it may be within his knowledge and may be communicable by word of mouth, but also to submit to the more intimate disclosures involved in a physical examination of his person. The physician on the other hand is in the full possession of his faculties and of that knowledge which is power. Manifestly, a patient occupies, for the time, a dependent position. The chief policy of the statute, as we regard it, is to encourage full and frank disclosures, by relieving the patient from the fear of embarrassing consequences."

In conclusion it should be noted that these cases are authority only for the proposition that the professional privilege does not apply to testimony as to autopsy findings. If the doctor who makes the autopsy treated the deceased in the deceased's lifetime, the doctor in testifying with respect to the autopsy, should not be permitted to disclose facts which came to his knowledge as a result of attending the deceased when the latter was alive.

TREATMENT OF LACERATION OF EYELID—LOSS OF EYE

A two and one-half year old child was brought to a hospital suffering from a laceration under the right eyebrow which he had received in falling on a milk bottle. The defendant was called upon to attend the child, and inserted three sutures in his treatment of the laceration. He found the right upper eyelid edematous and swollen, and an examination of the eye itself showed that it had apparently not been injured.

Two days after the child's admission to the hospital, it was determined that he had developed diphtheria, and the hospital authorities considered transferring the child to a hospital for infectious diseases. The doctor, however, succeeded in having the child sent to the home of his parents, where the physician continued his care of the case. He administered various doses of antitoxin to the child and continued his dressing of the wound.

After about a week the condition of the diphtheria was improving satisfactorily, but the wound near the eye developed an infection. The

doctor noticed some secretion in the eye cavity and called in an eye specialist, who found that a post-orbital infection had developed which would probably cause the loss of the eye. Under the direction of the specialist, the doctor each day thereafter probed the wound in the eye in order to release pus, and applied certain antiseptic medications. The patient made a good general recovery but developed a pan-ophthalmitis which rendered the eye useless.

Suit was brought against the doctor by the child's guardian, claiming that because of his carelessness the child's eyesight was destroyed and his face disfigured. The definite charge was, as developed at the time of the trial, that the defendant in treating the child's eye had punctured the eyeball and thereby caused blindness. The case was tried before a judge and jury, the trial lasting three days. The jury returned a verdict in favor of the defendant, thereby exonerating him from all charges of malpractice and terminating the case in his favor.



NEWS NOTES



SIXTH DISTRICT BRANCH

The Twenty-sixth Annual Meeting of the Sixth District Branch of the Medical Society of the State of New York was held on Tuesday, September 27, 1932, in the Masonic Temple, Binghamton, New York. This District is composed of the nine counties, Delaware, Broome, Tioga, Chemung, Schuyler, Tompkins, Cortland, Chenango, and Otsego, located in the south-central part of the State. (See map in Journal of Oct. 1, page 1137.) The county medical societies of the District have a membership of 428—the smallest in the State—and yet over one hundred, a quarter of the members, attended the meeting, and doubtless many more would have been present if the day had not been stormy.

Dr. Steuart B. Blakeley, of Binghamton, presided, and the Secretary, Dr. Hubert B. Marvin, also of Binghamton, recorded.

A noon luncheon was served by the ladies of the Eastern Star at one dollar a plate.

The program was a well-balanced combination of public health and society activities, and was of personal interest to every doctor.

The subject of the activities of a medical society as distinguished from the private practice of its members was presented by Mr. Homer Folks, Secretary, State Charities Aid Association, New York City, who spoke on the program recommended by the State Health Commission last fall. Mr. Folks said that the Commission had made 115 recommendations, of which he would emphasize only three.

Mr. Folks first discussed anti-tuberculosis work, and urged that special efforts be taken to prevent the usual increase in the number of cases during a time of economic depression such as this. He emphasized the need of special attention to epidemiological work in order to prevent the spread of the disease from the infected persons. The State is carrying out the recommendations of the State Health Commission that the State build three hospitals to treat tuberculosis cases coming from the smaller counties which could not support their own hospitals.

The second activity discussed by Mr. Folks was the control of venereal diseases. The number of cases of syphilis reported exceed that of tuberculosis. Length of time of treatment was a great factor in the cure and control of the disease, as in tuberculosis. No particular method of venereal disease control was advocated, for the speaker said that his organization was promoting results and not methods.

The adoption of the county as the unit of public health work was urged, in place of the present

independent units of towns and villages. Mr. Folks also discussed health insurance and said its principle was that a sick man was entitled to care by others,—the well members of his family, if possible, but otherwise by the community. The object is the promotion of the welfare of the community as distinguished from the individual; and mass service as distinguished from that to the individual. Mr. Folks did not fear that private practice would be seriously displaced by State medicine in the United States of America.

Dr. C. J. Longstreet, Health Officer of the city of Binghamton, referred to the friendly attitude of the doctors to the city venereal disease clinics, as shown by the fact that most of the cases had been referred to the clinic by the family doctors of the patients.

Dr. Martin B. Tinker, a member of the Advisory Committee of the Health Commission, referred to the need that promoters of county health units should use diplomacy in dealing with the health officers, who were faithfully protecting the health of the community.

Representatives of the State Medical Society, who were introduced at the luncheon, spoke on matters relating to medical society activities. Dr. F. H. Flaherty, President-elect, spoke of the influence of the excellent program in inspiring and educating the members.

Dr. D. S. Dougherty, Secretary, interpreted the attendance as convincing evidence of the growth and evolution of the civic and social aspects of the practice of medicine by family doctors.

Dr. O. S. Wightman, Editor-in-Chief, made a plea for a more extensive reporting of the activities of county societies in the Journal. He spoke of the permanent value of the record of the activities of the societies, and suggested that the reports include committee work as well as the formal meetings of the society as a whole. While the editors would prefer that the news items conform to the style adopted by the Journal, yet a more important consideration was their content, for the editors could mold the information to the approved form.

The scientific program consisted of two addresses, both most interesting in content and manner of presentation.

Dr. Hugh Auchincloss, from the Department of Surgery of the College of Physicians and Surgeons, New York, explained the principles of "Finger and Hand Destruction and Reconstruction," making effective use of charts and lantern slides to vivify his points and impress them upon the physicians.

Dr. Louis C. Kress of the State Institute for the Study of Malignant Diseases, Buffalo, took "Bone lesions" as his subject, and illustrated it in a unique way by the use of four projecting lanterns simultaneously, so that the audience had continuously in view the outline of the history of

the case, the appearance and pathology of the affected part, and the method of treatment.

The meeting of the Sixth District Branch was a pleasing demonstration of an effective way to arrange and conduct a meeting of a medical society.

THE SEVENTH DISTRICT BRANCH

The Twenty-sixth Annual Meeting of the Seventh District Branch of the Medical Society of the State of New York was held on Thursday, September 29, 1932, in the Clifton Springs Sanatorium, Clifton Springs, Ontario County, New York.

The Seventh District Branch stretches across the west-central part of New York State from Lake Ontario to the southern boundary, and comprises the eight counties of Monroe, Wayne, Cayuga, Seneca, Ontario, Yates, Livingston, and Steuben. (See the map in the Journal, October 1, page 1137.)

The membership of the Seventh District is 781, of which 469 live in the county of Monroe in which the city of Rochester is located, and 322 in the other seven counties, which may be classed as rural. The attendance at the meeting was about 200, or one-quarter of the membership. The President, Dr. James M. Flynn, of Rochester, presided with grace and efficiency.

The program of the meeting was almost entirely scientific, and consisted of four papers.

"Cancer of the Uterus" was the subject of a paper by Dr. William P. Healy of Roosevelt and Memorial hospitals, New York City, who set forth the practical pathology of the condition simply and clearly by the use of lantern slides. He dwelt principally on the use of endothermia and diathermia. The paper was discussed by Dr. Louis C. Kress, State Institute for the Study of Malignant Diseases.

The next paper was given by Dr. George W. Crile, Director of the Surgical Service of the Crile Clinic, Cleveland, Ohio, on the subject "Indications for and the end results of denervation of the adrenal glands." Dr. Crile spoke of the relation of the adrenals to the thyroids. The adrenals are quick and explosive in their action, and in animals they are three times the size of the thyroids. Animals are alert and extremely responsive to danger signals, and yet they are likely to be sleeping between the times of danger. The thyroids are slower and more sustained in action, and in man are twice as large as the adrenals. The thyroid gives a slow, continuous stimulation, in distinction from the explosive action of the adrenals, and in man the thyroid and the brain are likely to overbalance the adrenals.

Dr. Crile discussed some newer knowledge of

the adrenals, and mentioned the good results which often follow the severing of the nerves of the adrenals in spastic conditions of the intestine. Dr. Crile's paper was discussed by Dr. William D. Johnson of Batavia.

The sanatorium served a noon luncheon, after which officers of the State Society were introduced.

Dr. F. H. Flaherty, President-Elect, spoke of the valuable work of the State Society in coordinating the activities of the county societies.

Dr. T. P. Farmer, Chairman of the Committee on Public Health and Medical Education, called attention to the graduate courses and to the civic duties of the physicians in promoting public health work.

Dr. D. S. Dougherty spoke of the advantages resulting from the social gatherings of the District Branches, and the cooperation growing out of the good fellowship.

Dr. O. S. Wightman, Editor-in-Chief, called attention to the Journal and its wealth of material, especially in regard to the activities of the county medical societies. He emphasized the importance of these records, and urged the secretaries and reporters to send accounts of their society activities to the Journal for permanent record and future reference. The officers and committeemen of the State Society look to the Journal as their principal source of information regarding the activities of county societies.

A piece of work well done by the smallest society is an example and inspiration to all the other societies, regardless of the size.

Two papers were presented during the afternoon session.

The subject of "Head Injuries" was presented by Dr. Foster Kennedy of the Neurological Hospital of New York City, and the paper was discussed by Dr. H. W. Williams, of Rochester.

Dr. Warfield L. Longcope, of Johns Hopkins Hospital, Baltimore, gave a paper on "The differentiation of chronic pyelonephritis from other forms of Bright's disease." The discussion was led by Dr. E. C. Riefenstein, of Syracuse.

The audience was unusually attentive and enthusiastic, and the meeting will be remembered as one of the best ever held in the District. The physicians were shown through the sanatorium by the Superintendent, Dr. Hubert Schoonmaker.

COMMITTEE ON PUBLIC RELATIONS

The Committee on Public Relations of the Medical Society of the State of New York met at the Hotel Statler in Buffalo on September 15th, 1932.

The following problems were considered at the morning session:

1. The adequacy of care of the orthopedic cases in Nassau County.
2. The preparation of a statement of the aims and objects of the Committee on Public Relations for this year.
3. A report of the Committee on the Professional Administration of the State-aided Lewis County Hospital.
4. A report regarding the medical problems of workmen's compensation administration in the State.
5. The appointment of a committee to study and report on the problem of the ratio of hospitals to population.

The afternoon session was a conference with the chairmen of the Public Relations Committees, or the Committees on Public Health, of the Medical Societies of Erie, Niagara, Wyoming, Orleans, and Chautauqua Counties.

The discussion brought out the fact that the Erie County Medical Society was about to take steps to become officially a member of the Health Council of Buffalo.

The discussion showed that the State Education Department's proposed activity for the early diagnosis of tuberculosis in school children should stimulate the interest of the family physician in the tuberculosis problem.

There was a free discussion regarding the activity of full-time physicians in State service engaging in the private practice of medicine. A committee was appointed to take up this matter.

The next meeting of the committee will be held in the month of October in Rochester.

JAMES E. SADLER, *Chairman*,
WILLIAM H. ROSS, *Secretary*.

AIMS AND OBJECTIVES OF THE COMMITTEE ON PUBLIC RELATIONS

The Committee on Public Relations of the Medical Society of the State of New York is undertaking this year to translate into county society activity the knowledge that it has gained of the problems of medicine in the last six years.

The aim of the Committee is to assist the physicians of the county medical societies in providing the best medical service possible. This is the prime objective. Achievement, however, will depend upon a number of factors, among which three stand out as important.

1. By creating harmony among all medical and public health workers. If the Committee on Public Relations can help to develop a common program between all agencies in health work, it will have accomplished one of its primary purposes.

2. By aiding the public to recognize good medical service. The rapid advancement in medical knowledge and medical practice makes it necessary to keep the public correctly informed, so that the people may reap the full benefit of the advancement in medicine.

The Public Relations Committees of the county societies should feel a responsibility to the people of their counties for a correct knowledge of what is good medical practice and what the conscientious citizen should do to protect his health. One of the serious conditions which must be thought of in publicity is the danger of encouraging self-diagnosis and self-treatment. The Public Relations Committee in entering this field should

stress particularly the importance of the advice and counsel of the family physician.

3. By stimulating physicians to become active members of public movements in health and welfare. Physicians should take a leading part in all health activities just as lawyers have done in political or historical activities. Physicians should have a similar feeling regarding their position in health and welfare activities, and they should feel that it is their prerogative to join with official bodies in developing health and welfare programs.

The technique of putting these suggestions into operation must be worked out by each county medical society committee. It is not expected that a program can be devised that will fit each county in detail.

A basic need is harmony and cooperation between the physicians represented by county medical societies, and the official and unofficial health organizations. Wherever public health can be directed by the local physicians, it should be done.

It is increasingly apparent to physicians that the problems of medical relations must be solved in the county society, and that the function of the State Public Relations Committee is to stimulate interest in the solution of medical problems by the county society, and to take leadership in the solution of problems that are State-wide.

There are many opportunities for the profes-

sion to improve public welfare and at the same time their own economic status, by helping to meet present day problems. To this end the Committee on Public Relations is holding, this year, regional conferences for the purpose of hearing a discussion of the problems of medicine from each county society of the State and for receiving their suggestions of how these problems

can be met; and then coordinating them into a policy of public relations which will meet the situation between the profession and the unofficial and official health agencies, and satisfactorily solve the economic relation of the profession to the administration of these services of whatever kind they may be.

THE PUBLIC RELATIONS COMMITTEE.

PRIZE ESSAYS

The Committee on Prize Essays desires to call the attention of the medical profession to the following prizes offered through the Medical Society of the State of New York.

The Merrit H. Cash Prize: This prize was established by Dr. Merrit H. Cash in 1863 and is given to the author of the best original essay on any subject in medicine or surgery. Competition is limited to the members of the Medical Society of the State of New York, who at the time of entering the competition are residents of New York State.

The essay shall be typewritten or printed, and the only means of identification of the author shall be a motto or other device. It shall be accompanied by a sealed envelope having on the outside the same motto or device, and containing the name and address of the writer. This essay must be an original communication and must not have been presented previously.

An idea of the type of subject upon which competitors may write their essays is indicated by the list of previous awards of this prize, which is as follows:

- 1864—A. N. Bell, Brooklyn: "How Complete Is the Protection of Vaccination, and What Are the Dangers of Communicating Other Diseases with the Vaccinia?"
- 1913—William Kirk, Jr., Troy: "Brown Sequard Paralysis: Review of Subject with Summation of Cases and Report of Case Resulting from Stab Wound of Autopsy."
- 1920—Herman B. Sheffield, New York City: "Present Status of Poliomyelitis."
- 1923—Arthur M. Wright and Edward M. Livingston, New York City: "Leucocytosis of Internal Hemorrhage."

The Lucien Howe Prize: In 1906, the late Dr. Lucien Howe, then residing in Buffalo, presented the State Medical Society with a prize fund, the interest of which is to be used by the Society for the presentation of a suitable medal for the best original contribution to our knowledge of some branch of surgery, preferably ophthalmology.

The author need not be a member of the Medical Society of the State of New York.

"The method of presenting the communication and of awarding the prize shall be substantially the same as that followed in regard to prize essays. That is to say, the communication shall be typewritten or printed, and the only means of identification of the author shall be a motto or other device. It shall be accompanied by a sealed envelope having on the outside the same motto or device, and containing the name and address of the writer. If, in any year, the committee does not deem any essay or communication which is offered worthy of the prize, then it shall not be awarded, and the interest for that year shall be added to the principal."

In the past this prize has been awarded as follows:

- 1914—Mark J. Schoenberg, New York: "Contribution to the Experimental Study of Ocular Anaphylaxis."
- 1918—Israel S. Wechsler, New York City: "Ophthalmic Changes in Tabes and Paresis—Pathology and Diagnosis with Reference to Cerebrospinal Syphilis."
- 1922—Arthur J. Bedell, Albany: "Some Observations with the Gullstrand Slit Lamp on the Lens, Including Cataract."
- 1924—Arthur J. Bedell, Albany: "Study of the Vitreous."
- 1927—Arthur J. Bedell, Albany: "Photographs of the Fundus Oculi; Normal and Pathological Conditions."

Prize essays must be submitted before January 31, 1933. They must be directed to the Committee on Prize Essays, Medical Society of the State of New York, 2 East 103rd Street, New York City.

If any identification marks other than the ones prescribed are attached to the essay, it will be disbarred from the competitions.

HENRY H. M. LYLE, *Chairman*,
MARTIN COHEN,
JOSHUA E. SWEET,
Committee on Prize Essays.

DUTCHESS-PUTNAM COUNTY

A regular meeting of the Dutchess-Putnam Medical Society was held Wednesday, September 14, 1932, at the Wassaic State School for mental defectives, Wassaic, N. Y.

An inspection was made of the institution after which Dr. Arthur W. Pense, acting in the absence of Doctor Storrs, gave a clinic at which interesting cases were presented. Following this there was a business meeting at which the following candidates were elected to membership in the County Society:

Dr. Thomas S. White, Millbrook, N. Y.; Dr. Alice Stone Woolley, Poughkeepsie, N. Y.; Dr. James J. McGrath, Poughkeepsie, N. Y.; Dr. William H. Meyer, Poughkeepsie, N. Y.; Dr. Walter C. Nelson, Fishkill, N. Y.; Dr. Alexander Heller, Matteawan State Hospital, Beacon, N. Y.; Dr. Arthur W. Pense, Wassaic State School, Wassaic, N. Y., by transfer from Binghamton State Hospital, Broome County.

Doctor J. E. Sadlier reported the work of the Cancer Committee, and moved that sufficient money, not to exceed \$100.00 at the present time, be voted from the treasury to meet the expenses of the committee. This was seconded and carried.

Doctor Aaron Sobel introduced the following resolution:

BE IT RESOLVED, that the Dutchess-Putnam County Medical Society request the Board of Health of the City of Poughkeepsie not to open its venereal disease clinic for the treatment of rural cases.

BE IT FURTHER RESOLVED, that if the State Department of Health has any suggestions on health matters, that they be presented by the District Health Officer to the Dutchess-Putnam County Medical Society for first consideration.

BE IT FURTHER RESOLVED, that a copy of these resolutions be sent to the Chairman of the Committee on Venereal Disease of the Board of Health of the City of Poughkeepsie, and to Dr. Thomas Parran, Jr., State Commissioner of Health, Albany, N. Y.

Meeting adjourned at 6:00 P. M. for dinner.

Present: Drs. Deyo, Richie, Krieger, Breed, Marks, Sadlier, Carpenter, Hoag, Tabor, Appel, Niles, Roberts, Borst, Cavanaugh, Thompson, White, Harrington, Folsom, Sobel, Jennings, Pense, Vanderburgh, Rodgers, Peckham, J. N. Boyce, Hitchcock, Gordon Mackenzie, Gilbert Mackenzie, George—6 nurses—35.

H. P. CARPENTER, M.D., *Secretary*

ROCKLAND COUNTY

The fall meeting of the Medical Society of the County of Rockland was held on Wednesday, September 28, 1932, in Letchworth Village, the State institution for the care of medical defectives, in Thiells.

The scientific session was addressed by Burton T. Simpson, M.D., Director State Institute for the Study of Malignant Disease, Buffalo, N. Y., on the subject of "The responsibility of the medical man in the control of cancer." Dr. Simpson outlined the principles of cancer control in a simple, convincing way, and told of the means which the family doctor has at his control or service for the detection and treatment of the disease.

Luncheon was served at 5 p.m., the members being the guests of Dr. Charles S. Little, Superintendent of the Institution.

The Secretary announced a series of post-graduate lectures on the subject of traumatic surgery, to be given under the auspices of the committee on Public Health and Medical Education of the State Society. These lectures will be given in the Recreation Hall of the Summit Park

Sanatorium, Pomona, on Friday afternoons at 3:45 p.m. The subjects are as follows:

October 7th—John J. Moorhead, M.D., F.A.C.S., Fractures in general. The treatment of common fractures.

October 21st—Herbert M. Bergamini, M.D., F.A.C.S., Care of head injuries.

October 28th—David M. Goldblatt, M.D., The treatment of fractures of the femur and humerus.

November 4th—Emmett A. Dooley, M. D., The treatment of fractures of the forearm and leg.

November 11th—Henry H. Ritter, M.D., F.A.C.S., The treatment of burns and hand infections.

November 18th—Harry V. Spaulding, M.D., F.A.C.S., Abdominal injuries.

November 25th—Willias W. Lasher, M.D., F.A.C.S., The treatment of joint injuries.

W. J. RYAN, M.D., *Secretary*



THE DAILY PRESS



Mr. and Mrs.—

Anybody's Word But Your Wife's



From New York Herald Tribune, August 5, 1932.

BARBER RACKET

The New York *Sun* of September 12 has the following account of a new racket worked by barbers in New York City:

"The up-to-date barber in a 'gyp' shop poses as a specialist in treatments of the scalp and shows what purports to be a diploma issued by Prof. So and So. Having thus prepared the victim for treatment of his head and bank roll, the barber discovers that he is suffering from an attack of 'skees pus,' puts him through an elaborate course of sprouts, charges him all he appears to be able to stand and, if he is still receptive, sells him a bottle of scalp revivifier for a couple of dollars, which is nothing but colored alcohol and water.

"The Better Business Bureau, 280 Broadway, has received numerous complaints against the 'gyp' barber shops, but owing to the reluctance of the victims to appear against the swindlers in

court has been unable to make much headway against them. The Board of Health has had more success and only a short time ago revoked the license of a Grand Central area barber. A short time ago a policeman of the West Thirtieth Street precinct underwent the 'gypping' process in a barber shop near the Pennsylvania Station, arrested the barber and had him fined \$25 in a police court.

"The Better Business Bureau told of a boy jockey from Miami who didn't have much more beard than a debutante. He went through a course in a barber shop near the Penn. station, got a bill for \$4.70 and paid it. But, being a jockey, he complained to the first policeman he met and the policeman went back with him to the barber shop and got his money back.

"I'll give it to the little stiff because I don't want any trouble," the proprietor explained."

MEDICINE SHOWS

The New York *Herald Tribune* of September 28 has the following editorial comment on medicine shows:

"For all that the sophisticated city dweller knows, the oldtime medicine show, once as familiar as chin-whiskered Silases, corn huskings and other forms and emblems of country carnival, might have passed into utter oblivion, to be remembered only in the folklore of pastoral reaches and flag-station towns. Such, however, is not the case. Turn any week to the delightful insertions in the magazine "Billboard," where, a little beyond the shopworn lion advertisements, you will come across an

enchancing encyclopedia of medicine show dispatches and information, and only last week a dispatch to 'The Morning Telegraph' recorded the blithe progress of a medicine show company through the transalpine uplands of Pennsylvania. 'We are selling the Oregon Indian remedy, "Katonka,"' writes the correspondent. 'I sold it thirty-five years ago and it goes over right today. We sold a dozen or so last night at a buck a throw and a lot of Indian Oil and Corn Salve.'

This recalls a description of such a show that appeared as an editorial in this Journal of August, 1925.



OUR NEIGHBORS



CERTIFICATION OF SPECIALISTS IN NEW JERSEY

The Medical Society of New Jersey has given serious consideration to a plan for the certification of specialists by the State Society. An outline of this plan was printed in this Journal of July 15, 1931, page 928.

The plan was further developed on May 29, 1932, by the Welfare Committee which voted to submit the plan to the House of Delegates which met on June 15, 1932. This plan was printed in the Journal of the Medical Society of New Jersey of July, 1932, page 591, and is as follows:

"A special committee of the State Society shall be appointed to be known as the Committee on Credentials of Specialists, to be composed of the President and Secretary, and the Chairman of the Welfare Committee, Chairman of the Board of Trustees, the Secretary of the State Board of Medical Examiners, and First Vice-President.

"Each component county medical society shall set up a similar Committee on Specialist's Credentials for a period of three to five years, composed of its President and Secretary and three other members to be elected by the county society."

The applicant shall fill out a blank form of application to be supplied by the State Society and submit it to the County Society Committee. If this committee approves the application and credentials, it shall send it to the State Committee for final judgment. The certification shall be awarded at the annual meeting of the State Society. A charge of \$25 shall be made to defray the costs of the procedure.

The following conditions may be considered favorable recommendations in judging an applicant's qualifications for certification:

1. General reputation as an honest, conscientious, and ethical physician.
2. Membership in national societies, such as the College of Surgeons, or a diploma from a national examining board such as that in ophthalmology.

3. An experience of at least five years in the practice of the specialty in a hospital.
4. Post-graduate courses in recognized medical schools.
5. Evidence of continuous, active, successive practice during at least ten years, marked by study, travel, active membership in medical societies, and proof of special ability in their chosen fields of practice, will be deemed worthy of consideration.

The supplement of the September Journal of the Medical Society of New Jersey records the following discussion of the plan when it was presented to the House of Delegates on June 15, when Dr. Schauffler said:

"The Welfare Committee of the State Society has had that matter up for three years now, combating attempted legislation introduced by laymen, and possibly some physicians whose names are unknown, trying to force through the Legislature a law making specialists subject to another examining board, and insisting that this certification shall come from the State.

"The Welfare Committee has threshed this over for several years and, in order to avoid another step into State medicine, in order to avoid political interference with the duties and privileges of the medical profession, this matter has been most carefully considered, and it has seemed to the Welfare Committee members that if some method could be devised by which the whole thing could be kept in the hands of the medical profession instead of getting into the Legislature and into the hands of politicians, it would save the respect for the medical profession, it would really amount to something in the way of certification, and it would be pleasing to the public at large; therefore, the Welfare Committee has thoroughly approved of a procedure of this kind and, after long deliberation and many conferences, this plan has been evolved."

The motion to adopt the plan as reported by the Welfare Committee was carried.

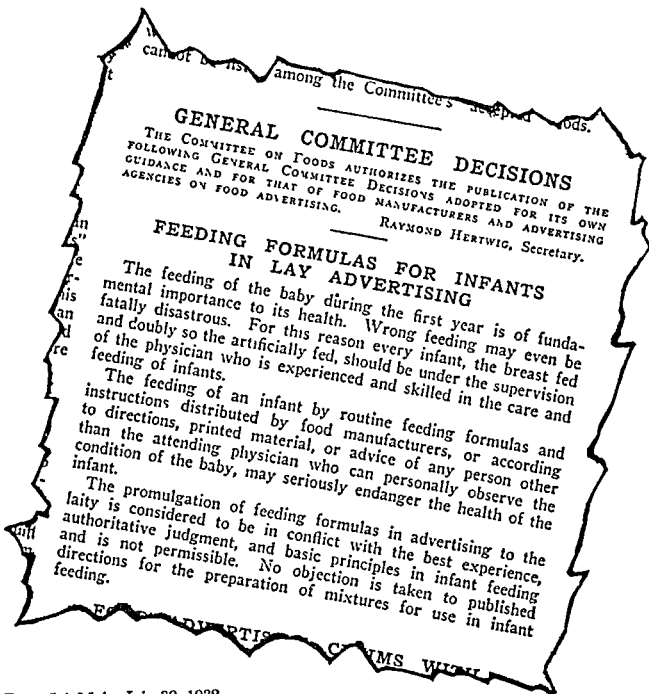
MEDICAL DIRECTORY FOR NEW JERSEY

The House of Delegates of the Medical Society of New Jersey considered the relation of the Medical Society of New Jersey to that of New York in regard to the Medical Directory of New York. The minutes of the meeting of June 15, published as a supplement to the September Journal, say:

"*Dr. Wells P. Eagleton:* The Directory of the New York State Medical Society contains a list of physicians in New Jersey and in Connecticut, in addition to its own roster. That is furnished to the members of the New York Medical Society for nothing. It seems to me that instead of

(Continued on page 1212—adv. xii)

MEAD JOHNSON & COMPANY Have Always Kept the Faith



From J.A.M.A., July 30, 1932

MEAD JOHNSON & COMPANY, Evansville, Ind., U.S.A. *Pioneers of the "Mead Policy"*: (1) No dosage directions on packages; (2) Clinical information available to physicians only; (3) No product advertising or broadcasting to the public. Manufacturers of: Dextri-Maltose Nos. 1, 2 and 3; Dextri-Maltose with Vitamin B; Mead's Viosterol in Oil 250 D; Mead's 10 D Cod Liver Oil; Mead's Newfoundland Cod Liver Oil; Mead's Cereal; Mead's Brewers Yeast Powder; Mead's Powdered Lactic Acid Milk Nos. 1 and 2; Mead's Powdered Whole Milk; Alacta; Mead's Powdered Protein Milk; Casec; Reolac and Sobee.

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons

Please mention the JOURNAL when writing to advertisers

In Dropsical Conditions

Theocalcin

(theobromine-calcium salicylate)

An effective diuretic for the reduction of ascites and edema. May be used in large doses. Well tolerated.

7½ grain Tablets and Powder.

Dose: 7½ to 15 grains t. i. d. and up to 75 grains per die.

Council Accepted.

Literature and samples upon request.

BILHUBER-KNOLL CORP. 154 Ogden Ave.
Jersey City, N. J.



Nourishment for vigorous school days

MALTCAO, the scientific chocolate food drink, is an ideal any-time-a-day "energy builder." It contains added organic salts of calcium, iron and phosphates derived from vegetable sources.

Recommend Maltcao for youngsters with meals, after school and at bedtime.

So far as is known, Maltcao is the only chocolate food drink that contains these added organic salts.

8 oz. sample can to physicians on request.
Merckens Chocolate Co., Inc., Buffalo, N. Y.

Maltcao
BUILDS FOR THE YEARS AHEAD

(Continued from page 1210)

our starting another directory, it would be a simpler matter to work in cooperation with the New York State Society, to furnish them the data, and for us to receive a certain number of copies of the directory. Personally, I buy it every year because it is the best directory around this region. It would not cost the New York Society very much more to issue a sufficient number of copies to supply the New Jersey members. I offer that as a suggestion.

"*Dr. Jaffin:* For a number of years I have written to the New York State Society concerning this exchange and have met with no results whatever. They have, apparently, adopted a policy of abandoning the former liberal listing of physicians in New Jersey and Connecticut. Recently, in the *New York Medical Week*, similar criticism has been raised, by members of the New York County Society, about this very omission, and if the New York Medical Society will list them as fully as they do members of their own Society, it would be quite satisfactory and would spare us making this venture, but they have refused to do it for so many years, that I thought it would be a good thing to bring the question before this State Medical Society.

"*Secretary Morrison:* If my recollection is correct, about seven or eight years ago the New York State Medical Society approached us about sharing the cost of such a directory and this State Society took no action. It appears to me far cheaper to again open negotiations with the New York State Medical Society, asking for information as to what our share of the cost would be to have our State listed as fully as their own. It probably would be only about one-quarter what the issuing of a directory of our own would cost."

The House adopted the following resolution:
"Resolved, That the Medical Society of New Jersey shall communicate with the Medical Society of New York and find out what would be the proportionate cost of including our membership in their directory."

HOUSE OF DELEGATES IN NEW JERSEY

A seventy-five-page supplement to the September issue of the *Journal of the Medical Society of New Jersey* devotes fifty pages to the minutes of the House of Delegates on June 15, 1932, including the annual reports of the officers and committeemen, all of which were recorded as having been read at the meeting.

The House discussed a wide range of subjects, including a plan for the certification of specialists, which was outlined in the *New York State Journal* of July 15, 1931, page 928.

The subject of continuing the employment of a field secretary to do educational work among school children elicited opposition which was

(Continued on page 1213—adv. xiii)

(Continued from page 1212—adv xii)

oted in the New York Journal of September
rst, page 1044 Thus present issue of the Journal
contains abstracts of the discussion on the
subjects of a nominating committee, the Journal,
he certification of specialists, medical insurance
nd a directory

NOMINATING COMMITTEE IN NEW JERSEY

The supplement to the September issue of the
Journal of the Medical Society of New Jersey
contains five pages of discussion on an amend-
ment to the constitution in regard to the com-
mittee appointed to make nominations for offi-
cers of the Society to be elected at the annual
meeting in June The following resolutions were
passed

'This committee shall meet on a date in March
ufficiently early for its report to be published
in the April number of the Journal, and it shall
report in that number of the Journal the result
of its deliberations in the form of a ticket con-
taining nominations for each office to be filled

'Candidates other than those offered by the
Nominating Committee, may be nominated for
any or each office, provided that such nomina-
tions are proposed by at least fifteen members
of this Society, who number at least five from
each of at least three different component soci-
eties, and provided further that such other nomi-
nations are made in time to be published in the
May issue of the Journal'

RESOLVED, That this Society permit of the
advertising, in the March issue of the Journal
the names of members who have been endorsed
by their own respective Component Society as
candidates for office in this Society, and, that in
the same issue of the Journal there shall be ad-
vertised the complete membership of the Nomi-
nating Committee by name and county"

JOURNAL IN NEW JERSEY

The annual report of the Publication Commit-
tee of the Medical Society of New Jersey is con-
tained in the supplement to the September Jour-
nal, and says

'The Publication Committee again reports a
very successful year Our total expense for the
year was \$14,492.92, our net receipts were
\$8,857.60, leaving a deficit of \$5,635.32, which
was paid by the State Society As we have a
membership of about 2,830, this makes the cost
of the Journal \$1.99 per member, a material re-
duction from any previous year

During the year we published 122 original
articles, most of which were written by our own
members, using 770 pages to do so In addition,

(Continued on page 1214—adv xiv)



Solving the problem of MALNUTRITION in children who won't drink milk

Many children dislike milk, refuse to drink it — with
the result that they are underweight and poorly
developed

For such children—for all growing children—Cocomalt
in milk is recommended Not only do children love its
delicious, chocolate flavor, but, mixed with milk accord-
ing to directions, it adds 70% more nourishment (food-
energy). It provides extra proteins, carbohydrates and
minerals (calcium and phosphorus)

Cocomalt contains not less than 30 Steenbock (300
ADU) units of Vitamin D per ounce This rich supply
of Vitamin D makes possible a more efficient utilization of
the calcium and phosphorus furnished by Cocomalt and
milk for the formation of strong bones, sound teeth and
sturdy bodies High in food value, low in cost At grocers
and drug stores in ½ lb., 1 lb., and 5 lb. size



Accepted by the American
Medical Association
[COMMITTEE ON FOODS]

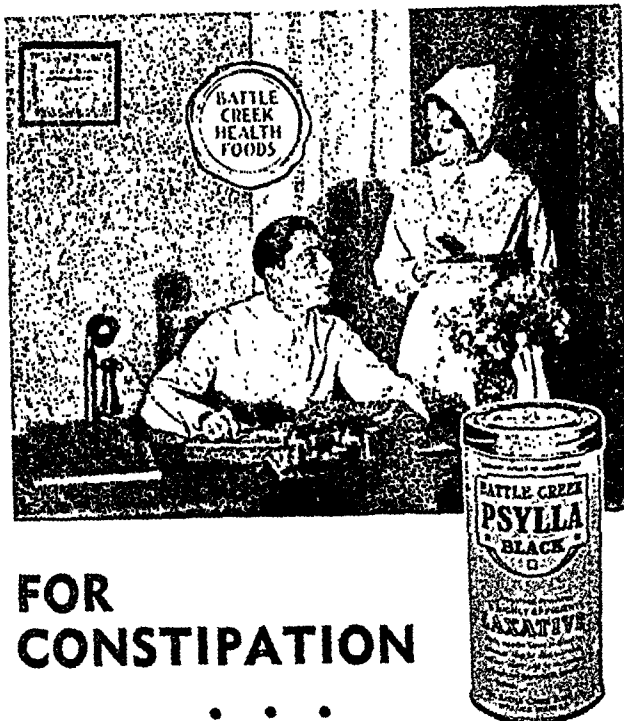
Cocomalt is accepted by the American Medical Asso-
ciation Committee on Foods and is licensed by the
Wisconsin Alumni Research Foundation under Steen-
bock Patent No. 1,680,818

Free to Physicians

We will be glad to send a trial can of Cocomalt free to
any physician who sends his name and address to R. B.
Davis Co., Dept. 71 S., Hoboken, N. J.

Cocomalt

Cocomalt is a scientific food concentrate of selected
cocoa, barley malt extract, partially defatted milk
sugar, eggs, flavoring and added Vitamin D
ADDS 70% MORE NOURISHMENT (FOOD-ENERGY) TO MILK
(Prepared according to label directions)



FOR CONSTIPATION

...
**safer and
more effective**

As a contrast to the irritant and unnatural action of the usual cathartics, more and more physicians are recommending the use of a natural bowel corrective in

PSYLLA (Plantago Psyllium)

Do not confuse Psylla with the ordinary commercial psyllium, because Psylla has been subjected to a number of cleansing processes to rid the original seed of waste material and to render it **SAFE FOR HUMAN USE**.

Psylla, therefore, is not only more wholesome but more therapeutically effective. It provides the maximum of bland bulk and lubrication in the bowel.

NOTE: Psylla is carefully cleaned and **sterilized**. There is an inner seal in each can as a guarantee of its wholesomeness.

**Insist on Genuine
BATTLE CREEK
PSYLLA**

**MAIL
COUPON**

FOR TEST SAMPLE

THE BATTLE CREEK FOOD COMPANY
Dept. NYM-7-32, Battle Creek, Michigan
Send me, without obligation, literature and trial tin of Psylla.

Name

Address

(Continued from page 1213—adv. xiii)

we published 392 pages of editorials, society reports, and collateral reading; and 460 pages of advertisements. Due to the cooperation of the Editor, and of all the officers, committees, and members, our Journal is one of the outstanding State Journals of the country. We feel that its wide appeal to members, many of whom at this time are omitting subscriptions to some of their other Journals, should be continued without curtailing any of its departments.

"We respectfully ask for \$14,500 as our next budget."

Receipts

"Advertising	\$10,924.83
"Cooperative Medical Adv. Bureau rebate	490.00
"Extra subscriptions	59.10
"Sale of Journal	13.48
"Bills receivable	1,117.51
	<hr/> \$12,604.92

Expenses

"Commissions paid Cooperative....	\$ 1,034.07
"Commissions paid local agents....	393.90
"Discounts	245.36
"Chairman's salary	500.00
"Chairman's expenses	120.00
"Printing and mailing of Journal..	13,472.34
"Reprints	241.00
"Index	15.00
"Addressograph	14.58
	<hr/> \$16,166.25

The following summary is also given:

"Amount of advertising secured by Cooperative	\$ 5,172.77
"Amount of advertising secured locally	4,895.86
"Amount of discount and commission allowed Cooperative	1,240.88
"Amount of discount allowed local advertisers	38.55
"Amount of commission paid local agents	393.90
"Total amount of advertising....	10,068.63
"Total cash receipts, all sources....	9,251.50
"Total amount paid Treasurer....	8,857.00

Advertising secured through the A.M.A. Cooperative Advertising Bureau	\$ 5,172.77
Amount of commissions paid the A.M.A. (24 per cent)	1,240.88
Amount of advertising secured locally	4,895.86
Commissions paid local agents (about 9 per cent)	432.45

(Continued on page 1216—adv. xvi)

S·M·A·CORPORATION

of Cleveland, Ohio, announces to the medical profession that it has been awarded sole rights for the ethical distribution of

VITAMIN D

produced from Cod Liver Oil
under license United States patent 1,678,454
issued July 24, 1928, developed in the laboratories of and controlled by Columbia University.

This is Natural Vitamin D, not an irradiated product, and not a cod liver oil concentrate, but rather a highly potent extract of the antirachitic principle of cod liver oil. It is extracted and prepared in suitable form for therapeutic use by methods developed by Doctor Theodore F. Zucker, Assistant Professor of Pathology at the College of Physicians and Surgeons of Columbia University.

This Vitamin D is now available for therapeutic use in 5cc and 50cc bottles. *The concentration is such that 10 drops is equal in Vitamin D potency to three teaspoons of standard potent Cod Liver Oil.* It is palatable and free from objectionable taste. This new product will be ethically advertised and carefully distributed through prescription pharmacies. It will be sold at prices approximately the same as those current for equivalent dosages of plain Cod Liver Oil. Interested physicians are invited to write for full information and complimentary samples to S. M. A. Corporation, 4614 Prospect Ave., Cleveland, O.

THE PLACE OF *Puretest* MINERAL OIL

in Bowel Management

Mineral Oil is not open to the objections made to other forms of laxatives. This is because its action is largely mechanical.

Puretest is a very highly refined mineral oil of uniformly high viscosity and specific gravity (up to .895 at 25° C.). This insures a maximum of penetration and lubricating action which is of particular regulative value in the following conditions:

THE NORMAL BOWEL IN OCCASIONAL LAPSES

Puretest Mineral Oil softens the food wastes and enables them to slide easily through the intestinal tract, even in a weakened peristaltic condition.

THE BOWEL CRIPPLED BY EXCESSIVE USE OF LAXATIVES

Colons injured by chronic constipation have usually lost some of their normal lubricating mucus. Puretest Mineral Oil is an excellent substitute.

THE BOWEL HANDICAPPED BY CERTAIN AILMENTS

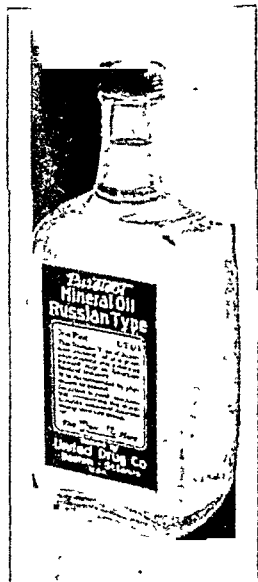
In cases where a bland diet is required, such as chronic gastritis, gastric ulcer, or where there is a tendency to spasm in the colon as in spastic colitis, or in any painful form of constipation, Puretest Mineral Oil is a soothing and effective agent.

THE CONDITION KNOWN AS "AUTO-INTOXICATION"

Tests show that Puretest Mineral Oil is highly absorbent of decomposition proteid products in the intestinal tract such as indol, skatol and histamine. These poisons, according to many authorities, are the cause of the condition known as "auto-intoxication" and its train of depressing symptoms.

AT ALL REXALL AND
LIGGETT DRUG STORES

Puretest
MINERAL OIL



(Continued from page 1214—adv. xiv)

This report says nothing about the three items of expense for rent, for clerical hire, or for the editorial proportion of the salary of the executive secretary and editor which would amount to about three thousand dollars.

MEDICAL INSURANCE IN NEW JERSEY

The Medical Society of New Jersey promotes three forms of insurance for its members:

1. Medical defense and indemnity.
2. Health and accident.
3. Automobile.

The annual reports on these lines of insurance are contained in the Supplement of the Journal for September.

Indemnity Insurance: The report on indemnity insurance reads:

"In 1921 the Medical Society of New Jersey entered into a contract with the U. S. Fidelity & Guaranty Co., of Baltimore, to defend and indemnify its members against malpractice claims. Since then there has been a steady growth each year in the number of members taking advantage of this form of protection.

"The number of doctors insured up to date is 1,886, which represents 67% of the total membership of 2,821.

"On February 4, 1932, a special meeting was held in Newark, at which were present the President, Secretary, Councilors and other officials of the Society, and representatives of the Company. On behalf of the Company, it was pointed out that during the past two years the number of claims in proportion to the total membership of medical and dental societies had increased, and the loss ratio had been correspondingly greater. The desire was expressed to maintain the existing premium rates. It was not the intention of the Company to advance its present schedules, unless the loss situation became more acute.

"As a result of the discussion, it was arranged that the Company would forward a report of each claim, as received, to the committee and to the Judicial Councilor of the district in which the claim happened to be made, so as to keep them informed. It was also decided to urge every insured member to cooperate with the Company, to limit and minimize the number of suits, by exercising the utmost vigilance in treatment and management of all patients.

"During the past year there were 29 claims settled at a total cost to the Company of \$19,127.58; 47 cases were pending, against which the Company has set up reserves of \$14,500; there were 74 claims in all."

Health and Accident Insurance: The report on health and accident insurance is as follows:

"This report is for the year ending April 15, 1932, and covers the two kinds of insurance pol-

(Continued on page 1217—adv. xvii)

(Continued from page 1216—adv. xvi)

icy offered to our members, that on Health and Accident, of the Independence Indemnity Company, consolidated with the Commonwealth Casualty Company, in which name the policy was formerly issued and which still remains the Commonwealth Division of the merged companies.

"The improvements made last year in the contract, have given increased advantages and greater satisfaction: (1) Extension of the period of indemnity for sickness to 6 weeks, instead of 4; (2) provision for covering total disability for work, even though the policy-holder be not strictly 'house-confined.'

"Further progress has been made this year in the Company's establishing a new State Agency to cover the whole State, thereby increasing means of contact with the company by our members.

"Number of members now insured:	
"Ages—under 50	91
50 to 60	63
over 60	49

Total203"

Automobile Insurance: The report on automobile insurance reads:

"Our Automobile Policies are standard policies issued at standard rates, but offered to our members at discounts which amount to 15 or 20%, plus annual dividend of about 15%. The law requires that separate companies carry the risks on casualty and fire and theft, but our companies are so associated that the policies are issued under one 'cover,' thus facilitating our dealing with only one agency.

"Number of members carrying liability and property damage.....	276
"Number carrying fire and theft policies	76
"The experience of the year shows premiums written	\$12,976.22
"Premiums earned (for time to date)	\$6,488.11
"Losses incurred	\$3,134.08
"Loss ratio	48.30%

"The committee's work has incurred no expense whatever to the Society, the office work being free, and even the stationery used being from the previous year."

JOURNAL OF MINNESOTA

The annual report of the Editing and Publishing Committee of the Minnesota State Medical Association, appearing in the September number of *Minnesota Medicine*, is devoted principally to the costs of the Journal, as follows:

"Effective January 1 the Editing and Publishing Committee decided to standardize on a 100-

(Continued on page 1218—adv. xviii)

SARATOGA HATHORN

A Naturally Carbonated Mildly Purgative MINERAL WATER

STATE OWNED AND STATE BOTTLED

This effective sparkling laxative water contains the following solids:

Ammonium chloride	\$3.54	Sodium Nitrite	Trace
Lithium chloride	65.25	Sodium bicarbonate	241.23
Potassium chloride	72.97	Calcium bicarbonate	3,962.24
Sodium chloride	11,290.17	Barium bicarbonate	46.83
Potassium Bromid	120.00	Strontium bicarbonate	Trace
Potassium Iodid	1.60	Ferrous bicarbonate	9.38
Sodium sulphate	Trace	Magnesium bicarbonate	2,837.48
Sodium metaborate	Trace	Alumina	15.50
Sodium Nitrate	Trace	Silica	9.20
TOTAL SOLIDS	19,376.70		

Note Results in milligrams per liter.

SARATOGA HATHORN is a mild but extremely effective purgative because of the presence of magnesium bicarbonate, sodium chloride, the alkaline bicarbonates and carbon dioxide gas. Hathorn has proved beneficial in hyperacidity occurring in cases of acid catarrh of the stomach and atony of the stomach. Especially favorable results have been obtained in cases of dyspepsia due to mental overexertion. It is not recommended for patients with nephritis.

Upon written request, we will gladly send a complete analysis and a complimentary carton of Saratoga mineral waters, including 2 bottles of Geyser and 1 bottle each of Hathorn and Cessa.

SARATOGA SPRINGS
COMMISSION

SARATOGA SPRINGS
NEW YORK



(Continued from page 1217—adv. xvii)

page journal monthly. Other economies have also been effected. If this standard of 100 pages is adhered to throughout the year, which it undoubtedly will be, it is almost certain that the publication of the journal for 1932 will show a surplus. For the first quarter of the present year our report shows a net surplus of \$494.70. The May number contains the largest volume of local advertising that any issue of the journal has ever carried, and plans are under way by which it is hoped to materially increase local volume of display advertising for the year. Obviously this depends to some extent upon general business conditions but, regardless of the very unfavorable conditions in all lines of business, we feel safe in promising that there will be no deficit for the present year.

"All kinds of publications have experienced tremendous losses in advertising volume during the past two years, and no relief of any consequence is anticipated for 1932. This volume loss is chargeable mainly to national business, all of which is handled through the Cooperative Medical Advertising Bureau, an auxiliary of the American Medical Association. *Minnesota Medicine* volume for 1932, in this class of advertising, compares more than favorably with other state journals. This is due in no small de-

gree to the high standing and fine reputation which the journal has throughout the country. But, as before stated, the Editing and Publishing Committee has reduced the size of the journal for 1932 and effected other economies which should be sufficient to more than provide for the anticipated loss of volume and leave a surplus for the year.

"At the close of the year our records show that subscriptions of two dollars were paid on 2,063 members, and that the journal was still being mailed to 135 delinquent members. There were upon our list 103 doctors paying the annual subscription of \$3.00, who are not members of the State Association. There are being mailed out monthly 359 copies on the complimentary list, to exchanges, to advertisers, etc., leaving a surplus each month of approximately 140 copies. A large number of these surplus copies is used in supplying miscarried copies, as samples to advertising prospects, and to prospective non-member subscribers."

A table shows that the advertising income was \$9,966.84, and members' dues of two dollars allocated to subscriptions to the Journal yielded \$4,126, a total net income was \$13,188.94. The expenses were \$14,915.20, leaving a deficit of \$1,726.26. No items were charged for salaries or rents.

The VEIL MATERNITY HOSPITAL

WEST CHESTER, PENNA.

For Care and Protection of the BETTER
CLASS UNFORTUNATE YOUNG WOMEN

Strictly Private. Absolutely
Ethical. Patients accepted
at any time during gestation.
Open to Regular Practition-
ers. Early entrance advisable



Adoption of babies when ar-
ranged for. Rates reason-
able. Located on the Inter-
urban and Penna. R. R. and
the Lincoln Highway. Twen-
ty miles southwest of Phila-
delphia.

Write for booklet
THE VEIL
WEST CHESTER, PENNA.

75% of Diabetic Patients

Approximately 75% of Diabetic Patients may be success-
fully treated by properly regulated diet.

LISTERS FLOUR

(Starch-Free)

is necessary. Your diabetic patients will do well and en-
joy these easily made starch-free muffins, biscuits, bread.

LISTER BROS., INC., 41 East 42nd Street, New York, N. Y.

EX-PRESIDENTS IN MINNESOTA

The annual report of the Secretary of the Minnesota State Medical Association contains the recommendation that four ex-presidents be added to the Council of the State Society. The minutes of the House of Delegates, printed in the September number of *Minnesota Medicine*, contains the following comment by Dr. A. G. Schulze of St. Paul:

"It is suggested that there be added to the Council four additional members consisting of the four past presidents whose terms have last expired. We believe that in this way we shall retain this all-valuable service of the men who know most about our program, history and precedents established."

"The purpose of this is to not lose abruptly the services of the men who have served, at the expiration of their short terms. The idea is to retain these men for a period of four years longer, to give of their wisdom and of their judgment to the Council. I think that is very good. The Councilors now consist of the nine Councilors, together with the President, the President-elect and the Secretary and Treasurer as ex-officio members. We add four more to that, which makes thirteen, and with the officers, the President, President-elect, Secretary and Treasurer, it is seventeen."

This suggestion was put to vote and carried.



Devised by Dr. A. Bassler, New York City

The original uplifting abdominal belt with the incured steels for Ptois Cases, devised by Dr. Anthony Bassler, is made by

S. EITINGER

Manufacturer of

SURGICAL APPLIANCES

of all descriptions are made at premises and correctly fitted.

S. EITINGER

714 Lexington Ave., Bet. 57th and 58th Sts.

NEW YORK, N. Y.

Tel. PLaza 3-8228

Est. 1912

Thousands of

Physicians from Maine to California are using M. P. Co. products and are

Satisfied Buyers

Because the quality is dependable and prices are right.

MUTUAL

PHARMACAL CO., Inc.

107 North Franklin Street
SYRACUSE, NEW YORK

P R E S C R I B E
K N O X
SPARKLING GELATINE
IN DIETS FOR DIABETES
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DISEASES OF COMMON INTEREST TO THE DENTIST AND OTO-LARYNGOLOGIST

By RICHARD TRAVIS ATKINS, M D, NEW YORK, N Y

Read at the Joint Meeting of Organized Medical and Dental Professions at Hotel Pennsylvania New York November 30 1931

THE dentist and oto-laryngologist are interested alike in many of the diseases which affect the oral cavity and upper jaw. There are also affections of remote structures in the oto-laryngological field which are of dental origin.

A great deal has been written about these various conditions, and I hesitate therefore, to add another paper which will fail to present anything new.

My remarks will be limited to a brief clinical discussion of the common diseases that our specialties are called upon to diagnose and treat.

The oral cavity is the site of the early manifestations of some of the contagious diseases, with which we should be familiar. The Koplik spots of measles which appear on the buccal mucous membrane and gums opposite the molar teeth, the strawberry tongue of scarlet fever, the occasional appearance of vesicles on the tongue in chicken-pox, and the presence of a membrane on the soft palate in some cases of diphtheria should always be kept in mind as characteristic lesions of these diseases.

Vincent's Infection is commonly encountered by our specialties, and it is interesting to note that the disease was first described by a dentist named Miller.

It is a serious disease, occasionally proving fatal. It is easily transmitted through kissing and the common use of eating and drinking utensils. It frequently follows slight trauma, such as vigorously cleansing the teeth in the presence of infection, and is predisposed to by smoking.

The disease most frequently originates in the gums, but the tonsils are also a common site of the infection, as the crypts harbor the micro organisms where they may remain dormant for long periods of time.

A sore, foul mouth or throat is the chief complaint. Ulcerations of the mouth, tongue or throat with a dirty grey membrane and enlarged sometimes tender cervical lymph nodes are the objective findings.

The diagnosis is made by the presence of the

bacillus fusiformis and the Spirochetes of Vincents in the smear.

Difficulties may sometimes be encountered by confusing this infection with diphtheria and syphilis. In prolonged, severe cases a Wassermann test should always be made, and also, a complete blood examination as Vincents infection is sometimes associated with gangrenous mouth lesions that occur in leukemia, agranulocytic angina and pernicious anemia. The rapidly fatal so called septic pharyngitis may be mistaken for a Vincents infection, although the streptococcus pyogenes is the micro organism usually found.

The fatalities are probably due to secondary infections.

The treatment of Vincents infection depends upon the severity, location and extent of the pathology. As the infection is due to an anaerobic micro organism, cleansing treatment is very essential. Removing sloughs and applying an oxidizing agent to the base of the ulceration will go far towards a cessation of the infective process. Various germicidal preparations are now being used with fair success.

Early diagnosis, vigorous and persistent treatment, and prolonged observation is essential to a cure.

The co operation of the dental and medical professions, propaganda concerning the transmissibility and seriousness of the disease; and the isolation of the infected patients will help to control the disease.

Thrush is sometimes seen by the dentist and oto-laryngologist, although the internist or pediatrician are usually called upon to treat this oral disease. It is occasionally mistaken for diphtheria or Vincents infection. The characteristic discrete, milky white patches, without an inflammatory areola, in the mouths of unhealthy infants make the diagnosis fairly certain. It can be confirmed by microscopic examination of a piece of the membrane, which will show the presence of a fungus, *odum albicans*. It is usually quite easily controlled by mild antiseptic treatment.

Noma or Cancrum Oris is a disease of childhood which often follows some infectious disease. It is characterized by the rapid formation of a gangrenous area on the cheeks or gums, which spreads to the surrounding tissues. It produces a severe toxemia and is frequently fatal.

In its early stages it may simulate a Vincents infection, and frequently the spirochetes and fusiform bacilli are found in great numbers in smears from the lesion. Heroic local, and general treatment is indicated.

Another very serious disease which comes within our province is Ludwig's Angina. It arises from streptococcic infections within the floor of the mouth, which produce a diffuse suppuration of the tissues above the mylohyoid muscle.

It demands prompt surgical relief before extension carries the infection downward through the lymphatic structures producing an edema of the glottis or a mediastinitis. Pneumonia and general septicemia may also complicate the disease.

General anesthetics are absolutely contraindicated in making the incision for drainage, as death frequently follows the first inhalation.

Pemphigus of the mucous membrane of the mouth is a rare disease. It is characterized by the formation of blebs, followed by irregular macerated, frequently bleeding ulcerations. The diagnosis is difficult unless accompanied by dermatologic lesions.

Leukemia may produce mouth symptoms such as swelling and ulceration of the mucous membrane of the gums and palate accompanied by bleeding. A blood examination will establish the diagnosis.

Leucoplakia is quite frequently seen in the mouths of excessive smokers. It is characterized by the presence of a dry white patch usually located behind the molar teeth or along the border of the tongue.

Local treatment is contraindicated. Elimination of the cause, usually cures the disease, but, if it persists or progresses, it must be viewed with suspicion and removed surgically.

Cancer of the mouth very often arises from mechanical or dental irritation, and we should be keenly alive to the early manifestations of this dreaded disease. Owing to the wide publicity that has been given to the "early recognition of cancer," the public has been aroused to seek advice with less delay than formerly.

They have been taught to look upon any prolonged irritation, ulceration, pain, swelling or bleeding with suspicion, and it is the duty of the dentist and laryngologist to examine these patients very carefully with the view of determining whether their fear is justified. Many people have been frightened by the propaganda and it is our duty to allay their fears if there is no evidence of malignancy.

On the other hand, we should not temporize

with suspicious lesions, particularly if the patient is of the cancer age.

Cancer of the mouth is not hopeless, as irradiation combined with electro-thermic procedures is often curative, if used early enough.

Tuberculosis of the mouth is so typical that once seen it can hardly be mistaken for anything else. The mucous membrane is anemic and studded with grey or yellow tubercles. The tubercles break down and ulcerations are formed which are worm-eaten in character. It is usually accompanied by a cervical adenitis. Lupus is sometimes mistaken for tuberculous lesions, but it is differentiated by having points of ulceration and cicatrization side by side. It is usually associated also with lupus of the face.

Many of the manifestations of syphilis occur in the mouth. The most common lesions are the mucous patches of the secondary stage which are often found on the soft palate, lips, gums and sides of the tongue. The primary lesion or chancre may be located on the lips, tongue, palate or tonsil. Tertiary lesions involving the jaws may also present changes in the structure of the mouth.

The salivary glands are occasionally the seat of infection introduced by way of the oral cavity, through the excretory ducts. Foreign bodies and calculi may cause an inflammation of the ducts with subsequent enlargement of the glands.

The pharynx, naso-pharynx and larynx may be involved directly or indirectly through dental affections.

Chronic laryngitis may be due to any inflammatory or ulcerative process in the mouth.

The irritation of erupting teeth or caries of the teeth is said to be an etiological factor in hypertrophy of the tonsils.

Tonsillitis and pharyngitis may result from dento-alveolar abscesses.

It is also well to remember the importance of dental hygiene as a preliminary to operative procedures on the throat, as complications are less likely to occur with a clean mouth.

Nasal obstruction is very often due to deficient and irregular development of the superior maxillary bones. The orthodontist and rhinologist should work hand in hand in these cases to obtain the best results.

Abscess of the nasal septum may occur as the result of an infection traveling through the floor of the nose from a central incisor.

Maxillary sinusitis is of great interest to the dentist because it is so frequently the result of dental disease.

Dental caries of the floor of the sinus is a common cause. Patients with this condition very often consult the rhinologist first, because their symptoms are chiefly nasal. There is a discharge of fetid pus from the nose and an absence of pain. In this connection it is well to remember that pain in the teeth is usually asso-

ciated with acute maxillary sinusitis of nasal origin.

Lipiodol roentgen pictures of the maxillary sinus will sometimes outline a fistulous tract leading to the diseased teeth.

The treatment consists of a removal of the offending tooth, supplemented by irrigations of the sinus.

A certain proportion of the cases of maxillary sinusitis are undoubtedly of dental origin where there is intervening (macroscopically) sound bone between an abscessed root of a tooth and the floor of the maxillary sinus. These patients present all of the characteristic signs of a dental infection, and if sections of the bone were examined microscopically they would probably show the pathway of infection.

Maxillary sinus infection may also follow the opening of the sinus by extraction of teeth. These infections usually clear up quite promptly after irrigation.

Infected dental cysts may rupture into the maxillary sinus and cause a suppurative sinusitis, but this is a rare occurrence.

Serious complications may arise from dental infection of the maxillary sinus; the most common is orbital abscess which may be produced by an osteitis following dental caries.

Cavernous sinus thrombosis; meningitis and brain abscess may also occur by extension of the infective process to the intracranial structures.

Maxillary cysts may be of dental origin. There are two main types—the root or periosteal and the follicular or dentigerous.

The rhinologist very often sees the root cysts. They are inflammatory in origin and comprise about 75% of all maxillary cysts.

The diagnostic sign is a protrusion of the anterior wall, with a crackling-like sound of palpation, if they are large.

Small cysts are usually undiagnosed, unless accidentally discovered by roentgen examination, and they require no treatment except they produce symptoms.

Cysts may be removed through the canine fossa, especially if they are small, and the cavity allowed to cicatrize.

If the cyst is large a Caldwell-Luc operation should be performed and a large opening made in the inferior nasal meatus, thus converting the

maxillary sinus and cyst into one cavity.

Malignant growths of the maxillary sinus sometimes are of dental origin. They may arise from the epithelial structures of the teeth, or degeneration of a dental maxillary cyst.

Very often one of the first intimations of trouble is a toothache, followed by swelling of the adjacent soft parts, which does not subside. Removal of the tooth does not relieve the pain and the tooth-socket is apt to be filled with granulations which bleed easily.

The bony walls of the maxillary sinus are softened by the disease, causing a protrusion in the mouth and cheek. Secondary infection may occur and obscure the diagnosis.

A review of the histories of thirty cases of malignancy of the maxillary sinus, treated on the oto-laryngological service of Bellevue Hospital showed five that were undoubtedly of dental origin.

The treatment consists of a radical removal of the growth, followed by irradiation.

Osteomyelitis of the superior maxilla sometime, occurs, particularly in infants, which results in a loss of considerable bone and tooth buds. These infections are usually very severe and are of staphylococcal origin.

The ears may be reflexly or secondarily involved through dental diseases. The otologist is frequently consulted because of pain in the ear, which is due to caries of the teeth. Noises in the ear and dizziness may also be caused by diseased or impacted teeth.

Auditory neuritis characterized by impairment of hearing for the high tones may sometimes be relieved by removal of dental infection.

Pain in the various ramifications of the fifth nerve is a symptom which is of common interest to the dentist and oto-laryngologist, and very often the cause of the pain is not found in spite of careful examination. Teeth are removed, and operations performed on the paranasal sinuses without beneficial effect. Finally the patient becomes a chronic sufferer, and often is classified as a neurotic.

It is with this type of patient particularly that the dentist and rhinologist should work together, and hesitate before doing any operative procedure that may perhaps obscure the original etiological factor.

DISEASES OF COMMON INTEREST TO THE DENTIST AND THE OPHTHALMOLOGIST

By WM. F. C. STEINBUGLER, M.D., NEW YORK, N. Y.

Read at the Joint Meeting of Organized Medical and Dental Professions at Hotel Pennsylvania, New York, November 30, 1931.

THE object of this paper is to demonstrate the relationship between some of the more common dental and eye conditions. That such a relationship exists has been known for

centuries. During the past 20 years the subject of dental focal infection has received much attention, due, primarily to Sir William Hunter, of Montreal, who first called attention to it in 1910,

and to the experimental work of Dr. E. C. Rose-now, of the Mayo Clinic, and the clinical work of Dr. Frank Billings. The last named has defined focal infection as a metastatic, systemic or local condition due to infectious micro-organisms or their toxins carried in the blood or lymph stream from a focus or foci of infection. A focus of infection is a localized or circumscribed area of tissue containing pathogenic micro-organisms and may be either primary or secondary. Clinically, these cases show a low grade anemia, a slight leucopenia with relative lymphocytosis, a low neutrophile count, low blood pressure, slow pulse, low basal metabolism, subnormal temperature and low blood calcium content.

Dental Causes of Eye Conditions—What are the dental causes giving rise to eye conditions, infectious or otherwise? The most common may be grouped under three headings: (1) Pyorrhea Alveolaris; (2) Caries; (3) Apical or Periapical Infection, usually in the form of granulomas of the roots. These consist of a capsule enclosing granulation tissue filled with streptococci, either hemolytic or belonging to the viridans group. The latter is the most frequent and most important. Whether pyorrhea itself is a source of infection is still a debated question. Finnoff, of Denver, considers it the most frequent cause of ocular lesions, while Lawler, of England, is opposed to this view. He bases his opinion on the fact that careful treatment of the mouth has failed to exert any favorable action upon the ocular condition. Another argument which would lend support to his contention is that if pyorrhea is as prevalent as it is supposed to be, there should be many more cases of ocular infection seen.

Periapical tissues are infected: (1) by the passage of bacteria and their toxins through the apical foramina of a tooth, with an infected pulp, consequent on caries as a general rule; (2) by their passage from an infected periodontal membrane via the blood or lymphatic drainage of this structure, and (3) by their passage in the blood or lymph circulation from more remote parts.

The most dangerous forms of dental infection are those of the pulp—pulpless teeth and apical abscesses. They are free from symptoms and hence unsuspected. Being situated in the osseous tissue, no expansion can take place, and their only drainage is into the circulation. They are exposed to pressure transmitted by the teeth during mastication, and as each bite has a pressure of 70 pounds to the square inch, it can readily be seen that a great number of bacteria are forced into the blood stream.

Impacted and ectopic teeth may, at times give rise to inflammatory conditions of the eye, the infection being hematogenous, but, as a general rule, they produce reflex disturbances.

As to which organisms are responsible for dental infection the following conclusions of Bulleid,

based on a bacteriological study of over 800 extracted teeth, and published in the *British Dental Journal*, January to March of this year, seem to sum up the situation:

(1) A member of the streptococcus group has been found in every case.

(2) In a fair percentage of cases, a yellow staphylococcus was present.

(3) The commonest type is the non-hemolytic streptococcus, followed fairly closely by the viridans group.

(4) The presence of true hemolytic streptococcus is rare—seen mostly in the acute alveolar abscess cases.

(5) No specific organism can be determined either by aerobic or anaerobic methods.

Other bacteria which occasionally act as causative factors are pneumococci and micrococcus catarrhalis.

The exact mode of eye infection from a dental focus is still open to question. Benedict of the Mayo Clinic claims there may be: (1) Direct transmission through bones; (2) Direct extension of the process along the periosteum invading the orbit; (3) Transfer by the blood stream. The latter he regards as the most common form. In some cases the infection spreads directly from the diseased tooth to the eye along the nerves. This is so in the case of herpes virus, spreading from the first to the second branch of the trigeminus. The lymphatics undoubtedly also play a role in transmission.

Eye Conditions—What are the eye conditions set up as the result of dental infection or irritation? There is no definite ophthalmic picture that can be attributed to dental infection and any part of the eye may be affected, but the iris, ciliary body and chorioid are most frequently involved. In these locations there is a gradation from an abundant to a scanty supply of blood and hence a gradation in the supply of available oxygen.

McCallan, in a symposium on eye conditions due to focal sepsis, reported in the *British Medical Journal*, December, 1930, classifies them under three headings: (1) Those which might be cured—increased lacrimation, chronic conjunctivitis, ulcers of the cornea, iritis; (2) Those which might be helped—the exudative form of chorioiditis, progressive myopia, thrombosis of the retinal vessels; (3) Those which are not helped—cataract, glaucoma and detachment of the retina.

Of the first group, increased lacrimation is recognized by the persistent tearing, chronic conjunctivitis by the redness of the lids with the accompanying complaint of dryness or burning. Ulcers of the cornea are associated with extreme pain and redness and the most frequent variety belongs to the dendritic group. Here the extension is along the nerve as the different branches of the 5th are affected. Iritis shows itself in the form of a red eye, with considerable tearing and severe pain, which is usually deep seated and

worse at night. It is probably the most common form of eye trouble due to dental infection. Pain in the eyeball and beneath the eye without any other symptom—reflex conditions—may be due to dental infection, very often a pulpitis. Of the remaining conditions, the diagnosis can be established only by the use of the ophthalmoscope, but any case in which there is sudden and marked diminution of vision may be due to dental sepsis.

That dental infection is frequent in ophthalmic practice can be seen by a study of the following figures. Lang found 71 of 176 cases, or 40 per cent, due to this cause. Brown and Irons, in reporting on 100 cases of iritis in 1916, 16 per cent, in their second series of 100 cases reported in 1923, 9 per cent. Frederick, 200 cases of iritis, 37 per cent. Back, 50 cases of iridocyclitis, 32 per cent, the condition in only 4 in this series being definitely negative regarding dental observations. In this study all cases in which the patients were suspected of having syphilis or tuberculosis were excluded. Byers, 80 cases of iridocyclitis, 32 per cent. Butler, 100 cases of uveitis, 12 per cent. Benedict, 60 cases of retrobulbar neuritis, 23 per cent. Elsching, 28 cases of iridocyclitis, 42 per cent. Wendt, 35 cases of iridocyclitis, 40 per cent, only 3 in this series had normal teeth, and Bulson, 100 cases of iritis taken from his private practice, 32 per cent. The French ophthalmologists, Rachen DuVigneaud, Morax, von Lint and Moreau, at a special meeting of the society to discuss this question considered the American concept, especially as to frequency, rather exaggerated.

In only one of the foregoing series that of Back, was the relationship of the side of the dental infection to that of the eye tabulated. In 23 cases of unilateral iridocyclitis 8 showed dental infection on the same side, 4 on the opposite side and 11 on both sides. In 23 cases of bilateral iridocyclitis, 9 showed unilateral infection, 14 bilateral. In 4 of the 8 cases in which the infection occurred on the same side the infection was in the upper jaw, in 2 in the lower jaw and in the remaining 2 in both the upper and the lower jaw. The conclusions reached from these observations are that the infection is usually on the same side and that the upper jaw is responsible for more infection than the lower. This is probably due to the fact that caries involves the upper teeth more than the lower.

As compared with other foci dental infection ranks first being followed by the tonsils, intestines, sinuses, and the genitourinary tract in the order named. Gill of Richmond claims that oral infection is eight times as frequent as tonsillar infection.

Treatment—Regarding the treatment of these cases. When a dental infection is suspected in addition to the local treatment for these conditions such as atropine instillations, leeching, administration of sodium salicylate etc., careful

search should be instituted at once, the x-ray being used at all times.

As to its value, Bullard concluded that in teeth the roots of which have been filled, those most likely to show radiated areas are the ones with what might be termed good root filling, i.e., filling right to, or nearly to, the apex. Those teeth most likely to show no typical shadows in roentgenograms are the ones with no root fillings or only partially filled roots. The only extracted teeth that showed granulomas were those with no root fillings or only partially filled root canals.

Haden made a study of cultures obtained from the periapical tissue of 1,307 vital and pulpless teeth and compared them with roentgen observations. The technic employed provided (1) proper controls to determine the chances of error, (2) a medium which is exceedingly favorable for the growth of the organisms usually encountered and (3) a means of measuring the extent of infection by determining the number of bacteria in the tissue culture.

Of 392 vital teeth, 9 per cent showed from 1 to 10 colonies in a dip agar tube, 5 per cent, 10 or more colonies and only 1 per cent more than 100 colonies. Of 490 pulpless teeth, with negative roentgenograms, 10 per cent showed from 1 to 10 colonies, 60 per cent had 10 or more colonies and 44 per cent had more than 100 colonies.

As a result he concluded that the incidence of infection is almost as high in the group with negative roentgen observations as in those with positive results. There is a sharp limitation to the translation of roentgenologic evidence of infection into terms of bacteria. The absence of roentgenologic evidence of infection at the apex of a pulpless tooth never excludes the presence of active infection. In many cases the roentgenologically negative tooth is a far greater source of systemic infection than the roentgenologically positive one, since in the former there may be little resistance to the infection.

There is a wide diversity of opinion regarding the use of vaccines and their value from the clinical standpoint. Lanier, in reporting on a series of patients with infective diseases of the eye found that he obtained more favorable results from the injection of stock vaccines or serums, both specific and paraspecific products having been employed. Wever expressed the opinion that streptococcus vaccines should always be autogenous and that in general autogenous bacterins are to be preferred to the stock preparations. The best results have been obtained when the pus has been recultivated and fresh bacterin prepared every two to four weeks. In cases of iridocyclitis cultures may be made from the aqueous and the vaccines prepared from these have given excellent results.

Rosenow has obtained favorable results from the use of vaccines prepared from the cultured strain but warns against expecting too much from

the use of specific vaccines or serums since the diseases that are commonly the result of focal infections are usually due to streptococci, immunity to which is of short duration. In a small series of cases in which vaccines were employed, he reported 26 per cent improved, 46 per cent unchanged and 28 per cent worse, compared with 21 per cent improved, 32 per cent unchanged and 47 per cent worse, in cases in which no vaccines were used. Berens was of the opinion that patients who were treated with vaccines made from organisms to which they were particularly hypersensitive were more benefited than those treated with autogenous mixed vaccines, but 19 patients were treated with stock mixed catarrhal vaccines for control and the results compared with 19 treated with selected autogenous vaccines. The results were identical, and he concluded that the nonspecific factor is extremely important. Benedict and de Schweinitz both reported gratifying results from the use of autogenous vaccine.

The histories of two illustrative cases are briefly cited. K. F., single, female, aged 35, first seen June 25, 1918, complaining of redness and pain in right eye of one week's duration. Had two previous attacks, the first 2½ years before being seen, lasting 8 weeks, the second after an interval of 25 months, lasting 5 weeks. Clinical picture—iritis right eye. Wassermann negative. July 1, 1918, right upper first bicuspid removed. Nose condition present which was cleared up. Improvement. July 9, 1918, fresh infection, August 12, 1918, some more teeth extracted. Slight re-

currence in same eye January, 1920. Three more teeth extracted. Patient has remained free of iritis since—a period of 11½ years.

C. W., colored boy, aged 18, first seen April 14, 1931. Had been under treatment in Richmond, Va., for six months prior to his coming north. Vision right 20/50; left 20/200. Both corneae involved in ulcerative process. Cervical glands enlarged. Lids markedly reddened and swollen. Wassermann negative. Because of his race and the glandular involvement, tuberculosis was suspected and he was given tuberculin injections. During the course of the treatment there were numerous recurrences until the later part of July, at which time several teeth were extracted, and the tuberculin injections stopped. Over a period of four months his eyes have remained free of inflammation and his corrected vision is approximately normal in each eye.

In conclusion, focal infections, of which those due to the teeth form the largest group, must be considered as etiologic factors ranking in importance next to syphilis and tuberculosis. When a suspected focus has been removed and a rapid and marked lessening of the inflammation does not set in within forty-eight hours, the true cause has not been reached and a further search should be made. While as a general rule, conservatism should be practiced regarding the extraction of teeth, it should be borne in mind that in doubtful cases, the eye should be given first consideration and elimination of oral sepsis should take precedence over preservation of the teeth.

SOME ORAL SURGICAL PROBLEMS OF INTEREST TO RHINOLOGISTS

By GEORGE M. DORRANCE, M.D., NEW YORK, N. Y.

Read at the Joint Meeting of Organized Medical and Dental Professions at Hotel Pennsylvania, New York, November 30, 1931.

AFTER considerable thought, I have decided to limit my presentation today to three subjects of interest to rhinologists, surgeons and dentists, *viz.*, Diseases of the Antrum of Highmore; Adenomas; and the velopharyngeal mechanism of opening and closing in cleft palate.

My hope is to start a discussion from which we will all benefit.

Antrum: Subject No. 1. The antrum of Highmore, because of its situation has been the subject of intensive study by both rhinologists and dentists.

While conflicting views have naturally arisen as to the etiology, pathology and treatment of the various diseases visited upon the antrum, the results of the controversy has been of inestimable value to the patient and doctor. The surgery of the sinuses cannot be standardized, but working outlines can be used and are helpful.

In treating the various inflammations of the

antrum we find an almost universal agreement among rhinologists, oral surgeons and dentists.

When I discuss the treatment of multilocular cysts and cleft palate, I realize I will be in a field where wide diversity of opinion exists.

The antrum of Highmore is a pyramidal air space located within the body of the superior maxilla. It is lined with mucoperiosteum the same being a continuation of the lining of the nasal chamber. It is covered with ciliated columnar epithelium and the cilia move toward the hiatus semiluminaris which you know is beneath the middle turbinate bone. Fluid cannot drain out of the antrum unless the head is held downward and to the opposite side. At birth the sinus is very small, but by the 12th or 13th year it reaches its full development—the adult size varying considerably. The roots of the molar teeth, the bicuspid and not infrequently the cuspids are in close relationship with the floor and not rarely

one or more tooth roots produce elevations in the floor of the sinus. It is generally conceded that all infections of the antrum arising from infections of the periodontal membrane and the surrounding bone at the apices of the teeth lying adjacent to the antral wall should be taken care of by the dentist or oral surgeon. All other varieties of antral infections as well as inflammations of the other nasal sinuses are in the field of the rhinologist.

While acute antrum infection is rarely a complication of periapical infection it does occur. It is estimated that 20 to 40% of subacute and chronic maxillary sinusitis are primarily due to periapical tooth inflammation.

In the acute or subacute stage of antral infection resulting from tooth infection, the proper procedure is to drain the antrum cavity through an opening, made above the tooth. If chronic inflammation is present, permanent drainage of the dependent part with removal of all diseased tissue is essential. This permanent drainage should be secured by an opening through the nose.

Symptoms of Antral Infection: In the acute stage, there is fever and leucocytosis; almost invariably there is pain and tenderness over the antrum; referred neuralgic pains are common; giddiness and vertigo are almost constant factors. Nasal examination will often show local patches of pus at the orifice of the sinus. Irregular discharge of fluid or pus from under the turbinates may occur. X-ray and transillumination will show a blurring of the sinus shadow. A good x-ray picture is almost diagnostic in itself.

The diagnosis can always be made by penetrating the antrum, under local anesthesia, either through the nasal wall under the middle turbinate or through the canine fossa.

Treatment: I do not think that tooth socket drainage is satisfactory. Even if the tooth is to be extracted, I rarely drain through the socket. The best way to obtain drainage is to drill an opening 5 to 7 mm. in diameter just above the apex of the infected tooth. Local anesthesia should be employed.

The cavity should be irrigated twice a day until all signs of suppuration disappears. In all chronic antral infection, I use the Denker or Sluder operation. I do not advise curettage of the walls but do remove any polypi, dead bone or coarse granulation tissue present.

I have been asked what route would I take when a broken tooth or root has been pushed up into the antrum and a chronic infection has resulted. If the nasal conditions are normal, I would use the oral route using the method advocated by Dr. Theodor Blum, *viz.*, an incision through the mucous membrane and submucous tissue down to the bone on the buccal side in the molar region parallel to the free gingiva and about 0.05 cm. above it until the region of the first premolar is

reached. Then it is carried upward toward the apex of the canine. The flap is elevated and a thin plate of bone is removed from the canine fossa. In this way, free access is given to the sinus; irrigation can be carried out and the flap may be sutured leaving adequate bony support on its convexity.

Adenomatoma: Subject No. 2. I am now going to discuss the subject of adenomatoma—frequently referred to as multilocular dentigenous cyst—less frequently called adenocarcinomata. It is a neoplasm of the jaw originating from the enamel organ or the periodontal epithelial debris. It is, as a rule, a multilocular cystic growth with epithelial cells lining the cyst walls. Cystic degeneration may or may not occur in the centre. If it does not, we have a solid growth frequently mistaken for some other variety of tumor.

If the tumor is sectioned, we find a bony wall encasing a cystic or solid growth. The cyst may be unilocular or multilocular and usually contain a yellowish-brown fluid. Inspissated fatty material, gritty substances and often imperfect enamel are present. The walls of the cysts may be lined with papillary projections; bony or fibrous trabeculae traverse the growth. On section the solid portions resemble medullary carcinoma. Under the microscope, we find a variety of epithelial cells, stratified squamous and columnar enameloblasts predominating.

These tumors may occur at any age but the vast majority reported occur in early adult life and women are more prone to have them than men. A careful history will reveal the fact that practically all these tumors begin shortly after full growth of the permanent teeth.

The growth is characteristically slow. In untreated cases, ten to thirty years may have elapsed from the time the growth was first noticed. In the beginning we find a slight enlargement of the alveolar margin; the outer table, being thinner than the inner, is more affected. Teeth in the immediate locality are loosened or displaced. As the growth continues the characteristic egg shell crackling can be felt. Adenomatoma involving the upper jaw because of the anatomy of the parts is a much more serious problem. In the late cases they involve the antrum and may if untreated encroach on the orbit or nasopharynx. In this paper, I am only discussing the cases involving the upper jaw. Most authorities state these tumors are locally malignant but rarely or ever involve the lymphatics or metastasize. This is not my experience. I feel all these cases are potentially malignant and should be so treated from the start.

Treatment. Complete excision. If the antrum is involved we make no attempt to preserve it—we do not hesitate to excise the entire half of the upper jaw just below the orbit if conditions warrant it. Our belief is that every particle of this tumor must be removed just as much so as when

dealing with an adenocarcinoma of the parotid. All structures which prevent the accomplishment of our goal must be sacrificed.

I have under my care at the present time a man dying of metastasis to the spine upon whom the first operation for a multilocular cyst was performed 15 years ago. I operated upon him 10 years ago and reported him as a complete cure 7 years later. It may be said he has had fifteen years of life by conservative treatment. Yes, but he could have been cured by a complete excision and in the early stages a mutilating operation would not have been necessary either.

I am certain that the conservative treatment practised is wrong. It is easy—non-mutilating and the patient will go elsewhere for his recurrence—but it is not good surgery.

My advice is—treat all cases of multilocular cysts as malignant cases—knowing that complete excision in these cases means more permanent cures.

Cleft Palate—My last subject to-day is cleft palate of which I will only briefly speak. It certainly is of interest to rhinologist, oral surgeon and dentist.

I am convinced that until we all realize that cleft palate cases are not properly treated unless we restore proper speech function, we shall not make further progress in our operative procedures.

I do not think minor postoperative procedures are of much value in helping speech. I refer to turbinectomy, removal of tonsils, straightening of teeth, etc. Unless adequate velopharyngeal closure has been accomplished, by this I mean closure of the opening between back part of the mouth and the nose, the operation is bound to be a failure regardless of the anatomical result obtained.

All workers in cleft palate surgery have felt the necessity of obtaining some method of lengthening the palate, but until we devised the "push-back" operation none of the procedures were practical.

The reason for this is simple. They failed to realize that the palatine attachment of the levator palati muscle is placed too far anteriorly and the tensor palati muscle is shorter in all cases of insufficiency of the palate, as a result no matter how much the levator palati muscles pull they could not bring the velum into its normal position and secure velopharyngeal closure.

Unless after freeing the palatine mucoperiosteum, you divide the fan-shaped portion of the tensor palati inserted into the palatine aponeurosis you cannot get sufficient backward displacement and unless you do, velopharyngeal closure is impossible.

Naturally I favor the "push-back" operation in all cases of short cleft palate, be the shortening congenital or post-operative. I do not say it is the last word in cleft palate surgery. Unquestionably it will be improved; but at the present time it is a valuable measure in restoring the normal speech.

Rhinologists and oral surgeons have not realized that there is a circular sphincter between the nasopharynx and oropharynx which acts the same as any other circular sphincter muscle in the body. Like all other sphincter muscles, it is formed of one muscle being the uppermost portion of the superior constrictor. The anatomists have described the superior constrictor as arising from one hamular process, going around to the opposite hamular process. They have missed the main feature. Examining a palate of a patient who has lost the nose and part of the turbinate bones made it possible for me to see this muscle close in this circular manner. Even light or air will not pass through when it is closed. The old idea was that this closure was brought about by the palate being drawn back and grasped by the superior constrictor muscle. I do not know where this idea originated but it is not correct. I had no conception as to how a cleft palate should be repaired until after I realized the correct insertion of this muscle and the correct physiology of this closure.

I have some slides with me to show you where this muscle is inserted. If I can convince you that this superior constrictor muscle is a circular muscle and produces this complete closure, I will be able to correct this false information which has been published in the textbooks.

The simplest of cleft palate cases is a simple division of the velum. In my series, this gave the worst speaking voice. I can easily understand the reason for this with the knowledge I now possess. It is possible now to correct some of these short palates by means of the "push-back" operation. By this, I mean we can improve the speech range about 40%. Undoubtedly, as time goes on, we shall be able to improve it more and more.

THE RELATIONSHIP BETWEEN DENTISTRY AND RHINO-

By LESTER RICHARD CAHN, D.D.S., NEW YORK, N. Y.

Read at the Joint Meeting of Organized Medical and Dental Professions at Hotel Pennsylvania, New York, N. Y., December 15, 1934.

ANYONE practising dentistry must constantly observe the close relationship between the diseases of the teeth and mouth and those of the nose, throat and ear.

The rhinologist's contact with oral disorders is mostly through inquiry as to the possibility of the teeth causing maxillary sinusitis. Many varying percentages have been compiled concerning the number of cases of antritis due to infection arising in and about the teeth. Skillern states that "it was formerly thought that every case of antral empyema was directly due to dental infection. This opinion gradually changed until now the relation is placed at approximately 20%." He then quotes statistics ranging from 100% to 8%. Probably the lowest figures are the truest. As far as my personal observations are concerned I rarely ever find the teeth responsible for maxillary sinusitis. Frequently upon extracting a molar it will be found that one root has penetrated the floor of the antrum. This tooth may have been pulpless for years and consequently badly contaminated and infected and if no probing is attempted and the mouth of the socket protected from food and debris by a light gauze packing, no trouble will follow. I saw a case of acute alveolar abscess in which the pus had entered the antrum and was discharged through the nose, yet after the abscess was incised and the dental focus drained the whole condition subsided without any subsequent antral trouble.

Occasionally extremely large cysts are encountered where the floor of the sinus has been displaced so far upward as to almost obliterate it and yet it has remained uninvolved.

On the other hand, we not infrequently see cases in edentulous or semi-edentulous mouths where the floor of the antrum is almost on the alveolar ridge. Roentgenograms of this condition may resemble a cyst and such a false diagnosis has led to infinite trouble. Upon removing a loose upper bicuspid I encountered a large cavity in connection with the tooth. There were no teeth distal to this one. There was a mass of granulations about the root, a condition commonly associated with pyorrhea. Unfortunately no roentgenogram had been made before the extraction because the tooth being loose no operative difficulty was expected. Some of the granulation tissue was curetted and an x-ray taken, but this left me in some doubt as to whether I was dealing with a low antrum or a cyst, Fig. 1, and I therefore made sections of the curettings. These sections revealed glands, Fig. 2, among the inflammatory tissue indicative that the Schneiderian membrane had been attacked and I realized that I was

in the antrum. No further tempted and the wound healed. Histological examination of the cavity might still have been made and an attempt made to remove the patient's disadvantage.

This case is interesting for three important facts. One, a tooth no matter how simple seem without a roentgenological examination of all should be made regardless as to whether or not. Examination of the set up an obscure condition as Three, here was a tooth sinusitis which was directly sinusitis ever developed removal.

As far as treatment of concerned I am convinced alone is capable of its proper there is an oral cause for it was stated before does it should be eliminated by the geon. It is also wise in need to seek for such a cause, the rhinologist and stomatologist the responsibility for the hal- lons to the former.

Furuncles and abscesses are sometimes of dental origin caused by direct extension of contiguous area as in the case or they may be due to a focus of oral origin. The two illustrative.

Case 1.—A patient had recurrent furuncles in the These boils were lancet obtained for a time. dental examination the were found discolored vitality of the pulp, a copious discharge of pus instead of pus in the gum, as in the tive osteitis, of the nose, the nasal floor place, anal- this was the dent; has been Ca- pid it uns

sufferer from nasal furuncles and that since the tooth had been removed the condition had been entirely relieved and had remained so up till the present, a matter of nine years.

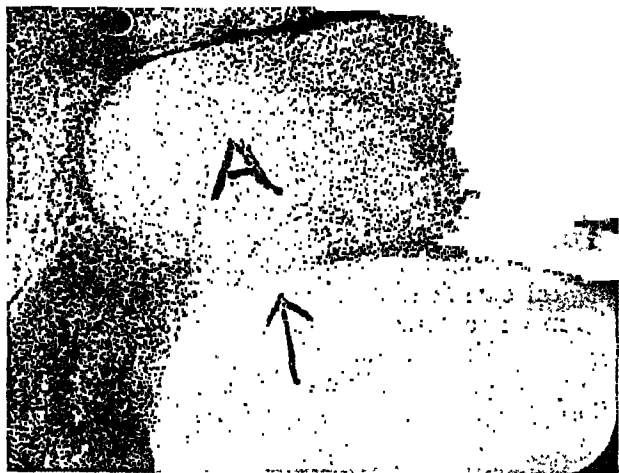


FIGURE 1

From this radiograph it is difficult to tell whether one is dealing with a low antrum or a cyst. In this instance a radiograph of the opposite side was of little help because the teeth were present.

A knowledge of the diseases of the oral mucosa can be jointly shared by the dentist and the laryngologist. The pathology and treatment of the fuso-spirillary infections are the same for the mouth as they are for the throat. However, I believe that the omnipresent diagnosis of Vin-



FIGURE 2

A section made from the curettings removed from the cavity shown in Figure 1. At A we see a gland. The finding of glands in the tissue revealed the fact that we were in the antrum, because there are neither glands in the capsule of jaw cysts, nor in gum tissue.

cent's gingivitis and angina is much overdone. Ulcerative conditions of the mouth and throat are often significant of something more serious than a fuso-spirillar infection. It is wise to have

a blood examination made in all cases of this type as is exemplified by the following instance.

Case 3.—I was asked to see a young married woman who had a small ulceration of the gum directly in back of the lower right third molar. Fig. 3. She had been seen by her family doctor and dentist who diagnosed the condition as a Vincent's infection. A relative of hers, a laryngologist, was also asked to see her and he in turn invited me in consultation. When I saw her her face was somewhat swollen on the affected side and she was having a great deal of pain; her temperature was 102° F. She was in bed but did not seem particularly malaise. She had an ulcerative process distal to the lower right wisdom tooth about the size of a dime which seemed to be spreading to the buccal tissues. I made a smear of the lesion and told the patient to keep up the anti-Vincent treatment for the time being. The smear revealed a great many fuso-

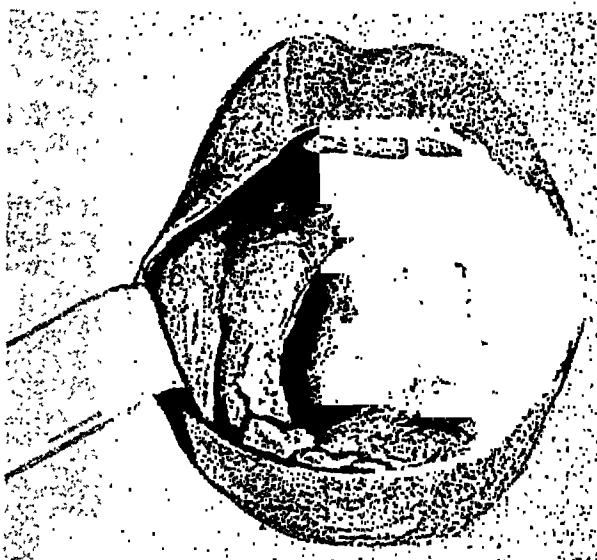


FIGURE 3

A drawing made from the case of ulceration behind the lower molar. This was taken for a fuso-spirillar ulcer (Vincent's infection), and was treated as such for several days before a blood examination revealed the condition as being due to an agranulocytosis.

spirillar organisms. The next day I again saw the patient. There was no abatement of her condition and the ulceration had become much larger, deeper and was spreading rapidly to the inner surfaces of the cheek. I then advised her being sent to a hospital where a blood examination was made and revealed a white count of 1000 with no granulocytes. A diagnosis of agranulocytic angina was then made. Fortunately this patient recovered after twelve blood transfusions.*

Herpetic eruptions of the throat and mouth are also of interest to workers in these fields.

(* Since writing this paper I have learned that the patient had

Their presence is very annoying and their cause obscure. Diet plays a great part in their alleviation. I had a patient who had these lesions for the longest time, and had been seen by physicians and stomatologists without much relief. Wassermann and general physical examinations were negative. When I first saw her her oral and pharyngeal mucosa were stained a bright red and she told me this was due to a treatment advised by a laryngologist. This treatment consisted of painting the small herpetic ulcers with 20% mercurochrome and continually sucking on mercurochrome lozenges. Of course there was no cessation of the condition under this regime. With the discontinuance of the mercurochrome and the establishment of a normal diet to which was added 16 ounces of orange juice daily she became entirely well nor has there been any recurrence in over eight months.

The question of oral sepsis should be of intense interest to every laryngologist. It is inadvisable to ever operate on the throat, unless in an emergency, before eliminating at least the gross mouth sepsis. I believe that this point is too frequently ignored by the majority of laryngologists. Herbert S. Birkett in discussing the preparation of the patient prior to tonsillectomy says: "Should defects exist in the teeth or should the gums be unhealthy, these must first be put right. If any apical lesions be present then these should first be rectified as I have repeatedly found when this is done, although the tonsils may show a co-existing chronic lacunar tonsillitis, the patient had thus got rid of his systemic symptoms."

Oral sepsis undoubtedly plays a great role in malignant diseases of the oral cavity and the throat and certainly should be eliminated before any treatment is instituted. According to Cade: "It is important in all cases of laryngeal and pharyngeal carcinoma to eliminate all sepsis of the mouth before beginning the treatment. All carious or even suspected teeth should be extracted before irradiation." He also finds that there is much less chance of necrosis in edentulous mouths following irradiation for intra-oral cancer.

The dentist and oral specialist are brought in contact with the otologist for two reasons. One is to seek for oral foci of infection as a cause for chronic suppuration of the ear, furunculosis and tinnitus. The other is to find a cause for constant earache.

I believe that most cases of otalgia, where there is no definite cause to be found in the ear, is due to dental disease. It is occasionally brought about by impacted, embedded or mal-

posed teeth but is most frequently due to a diseased dental pulp.

The pathology of the dental pulp can only be considered briefly in this paper. However, it is of interest to note that this small organ is highly innervated and that practically any pathological change within it is liable to involve one or more small nerve trunks causing an interstitial neuritis. Calcification, sometimes wrongly called pulp stones, are commonly found in the pulp and I have demonstrated them engulfing and impinging upon nerves. Local neuritis of the pulp nerves is prevalent and is prone to be reflected as a neuralgia to any area innervated by any branch of the fifth nerve. Sometimes the pain can be localized and sometimes it cannot. The following cases illustrate both the obvious and the obscure conditions.

Mrs. R. suffered from pain in the left ear. The pain seemed to radiate from the lower left third molar. This tooth had a large cervical cavity although the decay did not extend to the pulp. A physician declared the ear to be normal. The tooth was removed and its pulp sectioned. The histological examination disclosed large masses of interstitial calcification. With the extraction of the tooth the pain in the ear disappeared entirely.

In this case there was a distinct reason for the earache. The pain radiated from the tooth and this tooth was diseased. In the next instance, however, the diagnosis was more difficult.

Miss M. had an annoying earache over a long period of time. An otologist treated her symptomatically although there was no apparent disease of the ear. She was finally advised to have her teeth examined. They were found to be in fairly good condition inasmuch as there were no untreated cavities. There was no pain in the mouth and the roentgenographic examination failed to reveal any abnormalities. On the occlusal surface of the lower left third molar there was a fissure that seemed to have some decay. This was opened and found to be superficially decayed. I was not particularly sanguine that this was the cause of her ear trouble. A sedative was placed in the fissure and surprisingly the earache disappeared. The defect was subsequently filled and the patient had had no recurrence of the otalgia.

I have tried to show the close relationship between the mouth and the nose, throat and ear and that an interchange of ideas between practitioners in these fields will do an inestimable amount of good to the patient and add to our common knowledge.

DENTAL CARIES AS AN ETIOLOGICAL FACTOR IN THE TOXEMIAS OF PREGNANCY

By GEO. W. KOSMAK, M.D., NEW YORK, N. Y.

Read at the Joint Meeting of Organized Medical and Dental Professions at Hotel Pennsylvania, New York, November 30, 1931.

IN the search for the causes of the general group of disturbances to which the term toxemia of pregnancy has been applied, local foci of infection have been noted among the many etiologic factors included in various lines of research. Arguments have been advanced, both for and against this theory, and while there is still a great deal of doubt as to the actual connection between dental infections and toxemia much evidence has been adduced which points to the probability of this relationship.

It may be of service perhaps to summarize what evidence we have of the relation of pregnancy to disturbances of the teeth. The old assumption of "a tooth for every child" was probably true in former days when the abstraction of calcium salts from the mother by the fetus was a matter unknown. However the clinical fact was recognized that pregnancy did have in many cases a deleterious effect on the teeth and that so-called "softening" was not unusual. A carious process already present might extend and thus lead to further trouble. Permanent dental repair was therefore not countenanced as a general rule, but this idea has been superseded fortunately by the more sensible one that whatever dental work becomes necessary during pregnancy should be carried out within certain limits. This applies particularly to the eradication of foci of infection either in the teeth, or their immediate environment, provided this can be done without stirring up further trouble.

The toxemias, particularly in the latter months, constitute one of the most serious complications of pregnancy. The uncertainty as to whether the condition is a mere derangement of physiologic function; whether it has an underlying pathologic and anatomic basis, or whether we are dealing with an infectious disease, makes it essential to investigate every possible angle of the etiology.

While no satisfactory attempt has been made to isolate a specific organism in explaining the possibly infectious character of eclampsia, various sources for the development of such a process have been described. Among others, we find the suggestion of Talbot, of Boston, who believes that the fundamental cause of eclampsia is not to be sought in the products of conception, but in a focus of infection. He was prompted to this theory by the findings revealed in an x-ray examination of the teeth of one of his cases of eclampsia. Talbot then subjected a series of 97 cases of toxemia to thorough dental examination and claims to have found evidences of chronic sepsis in the teeth of all without a single exception. The presence of a chronic septic process admittedly has a

secondary effect on the kidneys. The toxins of an acute infection produce an inflammatory reaction in the kidneys with an inhibition of their excretory function, which in turn reduces normal elimination. It has been assumed that the symptoms of the toxemia of pregnancy may be caused by the retention of the normal physiological waste products of the developing pregnancy and the retention due to damaged functional power of the kidneys. A vicious circle seems thus to be established;—the toxins of chronic sepsis by their inhibition of the kidney function cause a retention of the normal waste products of the body. These waste products are again injurious to the excretory function of the kidneys when they are present in abnormal concentration in the blood. Nature's endeavor to improve this situation is reflected in the rise of blood pressure which is now generally accepted as one of the earliest evidences of the presence of toxemia. Clearly established cases are on record both in dental and medical literature which demonstrate the good results in cases of arterial hypertension by the removal of foci of infection from the teeth. In fact it has also been reported that certain cases of albuminuria have been cured by the same means.

Talbot has gone even further in this hypothesis by claiming to show that the placental infarct is the result of hematogenous infection of the placental site, dating primarily from a point of absorption in the teeth, or tonsils. Whether this claim will be substantiated remains to be seen, but undoubtedly it calls for further study and observation.

Definite proof of the connection between infectious dental foci and the production of toxemias of pregnancy, particularly those of the latter months, demands further study. However the reasonableness of the theory has prevailed sufficiently to bring about a common acceptance of the direction to keep the teeth of a pregnant woman clean and to take care of all caries and root infections. In fact, examination of the oral cavity has become a routine procedure in antepartum examinations and specific directions to remedy any errors are generally insisted upon. There is no doubt that the restoration of a clean mouth contributes not only to the comfort of the patient but also to her general well-being in preventing the absorption of infectious material and possibly other toxic substances. In addition to caries, diseases and disturbances of the gums should be noted and directions given by every obstetrician to his patients regarding the treatment because of the undoubted satisfactory results which attend this precaution. Unquestionably in

the course of time the pregnant woman will be impressed with the importance of a healthy dental condition, as she has already been impressed with the need of normal functioning kidneys and other organs.

The literature on this subject is not very extensive and much of it is characterized by expressions of opinion and beliefs, but there are a few outstanding contributions in which there is an attempt to produce experimental in addition to clinical proofs. John E. Talbot, as already noted, has made probably the most outstanding and satisfactory references to the association of focal necrosis in the toxemias of pregnancy. Dr. Talbot has submitted very satisfactory clinical evidence from cases in which immediate relief from toxic symptoms resulted after the extraction of definitely infected teeth. However, he believes that the discovery of septic teeth in the latter months of pregnancy does not demand their removal, but, on the contrary, if the tooth is extracted, or even drainage instituted, this treatment may throw more toxins into the system and thereby inhibit the functional powers of the kidneys further, with the result of bringing on convulsions or other serious symptoms. Palliative treatment during this period is indicated but after the end of the puerperium such infectious foci should be eradicated before the advent of another pregnancy.

Another valuable and interesting account of focal infection in eclampsia is that presented by Johnston, Johnson & Nichols (*Texas State Journal of Medicine*, December, 1929). These authors call attention to the finding of tyramine in the blood, vomitus, gastric contents, and urine of an eclamptic patient, and in explaining the origin of this substance believe that it was due to a combination of factors, including the presence of bacteria or their enzymes, acting on certain amino acids circulating in the vascular system of a pregnant woman. It is believed that usually only minute quantities of poisonous amines are formed in the general circulation, but when the amino acids of the blood are in excess, due to the absorption of a recent placental infarct or to the ingestion of a large amount of meat; or to an accumulation of such acids from retention, as in cases of nephropathy, then, provided infection co-exists, amines may be formed in amounts sufficiently large to produce symptoms of toxemia of pregnancy. The authors lay stress on the following points: The placenta is the most plausible source of the toxin; infection is necessary for the production of amines, and kidney dysfunction and the ordinary circulatory handicaps of pregnancy make for a more probable development of the toxemia. They therefore stated that in their belief a *Bacillus coli* infection is present in practically every case of toxemia of pregnancy and in supporting their claims refer to the work of numerous investigators. Furthermore it was noted

that the chemical properties of tyramine are the same as those associated with the circulatory disturbance and symptoms of late toxemias. Actual tyrosine contents of a placenta were determined and from that the possible tyramine content of an infarct was estimated. The amount of tyramine available from a moderately large infarct would be more than ample to produce severe symptoms of toxemia. The influence of focal infection in this process depended upon lowering the general resistance which gave the colon bacillus a better chance to invade the organism. Among the sources of local bacterial invasion the teeth and tonsils may be regarded as the chief offenders and constitute apparently in the theory just referred to the indirect cause of the pathologic process. Naturally the confirmation of other observers is desirable.

Dr. William Kerwin of St. Louis, Mo. (*Jour. Missouri Medical Association*, 1925) believes that pregnancy claims a high toll in teeth expenditure because of the acid saliva which is usually present, and therefore he urges the use of alkaline mouth washes during pregnancy, carefully supervising the diet, prescribing calcium and giving all necessary attention to the teeth during this period.

R. T. LeVake (*Journal-Lancet*, 1916) in commenting on the theory of Young of Edinburgh, that toxemia is due primarily to placental infarcts caused by thrombosis of uterine vessels and consequent concealed hemorrhages, believes that a focal infection is the underlying factor in the production of these lesions. Obstetrical histories rarely contain data regarding dental infections and LeVake truly states that if we found foci of infection in other parts of the body of half the magnitude of many dental infections, they would be constant and insistent sources of anxiety. Positive cultures of streptococci and staphylococci from diseased teeth are not unusual and can lead to further trouble. LeVake in his article presents 13 personal cases of eclampsia in which an infectious process was found.

W. N. Rowley (*Bull. Lying-In Hospital, New York*, 1922) in describing the dental findings in a series of patients, claims that the removal of teeth with peri-apical infections and extensive caries can be safely done during pregnancy, although care must be taken to watch for reactions. McIlroy, Rushmore, Miller and others, including a number of foreign observers have all indicated their belief that dental infections constitute an important rôle in the production of pregnancy toxemias and urge upon the medical and dental professions a closer cooperation in the handling of these conditions.

In view of the evidence on hand, both clinical and pathological, that a probable relationship exists between the toxemias of pregnancy and a focus of infection, further confirmatory experimental study is definitely indicated. Whether as claimed by some, the disturbance is due directly

to the absorption of toxins from the septic focus, or whether the effect is secondary through the involvement of the kidneys or the placenta, is yet to be determined. However, in view of the good results which have attended the assumption that either one or both of these theories is correct, it would be advisable to further the cooperation between the doctor and dentist in such cases. This means that as the doctor sees the patient first, he should include in his antepartum examination a careful inspection of the patient's teeth, and if there is any doubt in his mind, either from the subjective or objective findings, that the dental apparatus is not normal, consultation with a dentist should be had. If discovered sufficiently early in pregnancy the consensus of opinion seems to be that prophylactic dentistry is always effectual. On the other hand, if advanced caries are present, or apical abscesses and other infective lesions are discovered, these must be treated according to accepted standards.

Talbot's observations would lead one to hesitate about eradicating active foci although this

would appear in line with the hesitancy which every dentist displays in extracting abscessed teeth. However it should be possible to reduce at least the absorption from such foci by a variety of palliative measures with which the dentist is necessarily more familiar than the doctor.

There is one other point to be considered by the physician, namely the effect which bad teeth, so-called, have on digestion, whether from a mere inability to masticate properly, or whether bad results do not attend the ingestion of an infected saliva. These are important things to bear in mind in every case and should govern the decision as to how much dental treatment may be necessary. The extraction of teeth should not be done in a haphazard fashion and patients often bewail the rapidity with which extractions were done to the detriment of their mastication and the troubles associated with later artificial teeth. However that need not deter one from insisting that the dental apparatus be put into as good a condition as possible in order to preserve a proper health balance of the entire organism.

THE CONTRIBUTION OF PEDIATRICS TO DENTAL HEALTH

By ROYAL STORRS HAYNES, M.D., NEW YORK, N. Y.

Read at the Joint Meeting of Organized Medical and Dental Professions at Hotel Pennsylvania, New York, November 30, 1931.

AS a pediatricist, I may, perhaps, be permitted to wonder whether pediatrics has contributed and is contributing to dental health. It seems to me that until now the initiative towards arousing an interest in dental health and awakening an appreciation of its importance in relation to the general health of the community has been taken almost solely by the dentist. It is natural that this should be so; because the dentist is confronted daily by the results of dental ill-health and has to attempt to combat them from the standpoint of repair and cure. For him there is no escape, no shifting of responsibility possible. But I am sure that the pediatricist can and should contribute to dental health; and I am convinced that he will contribute when once he realizes that it is a part of his function so to do and that all that he is doing toward making stronger and healthier children may be made to serve this cause if he will become, as we might say, "dental health conscious".

It is greatly to the credit of the dental profession that it has stepped out of its antique rôle of curative and reparative dentistry and has taken up both the prevention of dental defects and caries and the building of sounder teeth. The surveys which have been made of dental conditions throughout the country have shown appalling figures. It has

been estimated that of our 45,000,000 children, 95% have dental caries and 85% have defects of occlusion. To take care of this situation, which leaves out of account the adult element of the population who must also be treated, there are, in this country, but some 70,000 dentists. Not discouraged, however, by the impossibility of properly handling this present dreadful situation, Organized Dentistry has set about to investigate the causes which have produced it, realizing that if ever dental defects and caries are to be eradicated, it will be by prevention rather than cure, by the building of healthy teeth rather than by treatment of those persons whose teeth have become affected. So, paralleling the changes which have taken place in the medical profession where the recognition and treatment of disease has yielded in prominence to the prevention of its occurrence, and where the sentiment is toward the idea that the doctor should be a builder of health, in the dental profession, too, its function if filling teeth and correcting mal-occlusion is having added to it the prevention of these ills through an understanding of how they come to exist.

Now there is no one better suited to cooperate with the dentist in the prevention of dental defects and the building of dental health than the pediatricist. He is primarily

and fundamentally interested in producing health in the growing child. His activity covers the ages during which, as a separate entity, the young organism manufactures the teeth which must serve as organs of mastication throughout the life of the individual. His situation is somewhat different from that of the obstetrician. The obstetrician is concerned with teeth more from the standpoint of the preservation of the teeth of the mother than from that of creating good teeth in her offspring. If he supplies the mother with a reasonable diet containing an adequate supply of mineral salts and vitamins; and keeps her free from, or treats constitutional disease, he can be pretty sure that the deciduous teeth of the infant will be well formed. For such is, the so to speak "parasitic" relationship of the unborn child to its mother that a fetus will take what it needs of bone and tooth building material from its mother even if it be at the expense of the mother's own tissues. Quite otherwise is it when the fetus becomes the infant. The infant is passive in regard to his nutriment. His intake of building materials and consequently his strength and vitality depend in large measure upon the directing mind of the pediatricist; and the constitution of his teeth as one of the growing organs of the body will be related to the degree of appreciation on the part of the pediatricist of his responsibility for this element of the child's growth.

The pediatricist realizes how important are good teeth in relation to the general work he does for children. He knows that for a child to grow properly he must have a good nutrition; the child's digestive tract must function properly as well as receive an adequate amount of the proper food elements. Part of the function of the digestive tract is mastication. Mastication implies the use of the jaws and the teeth and a normal dentition is necessary that a child may have a normal digestion, a normal nutrition and a normal growth of the body as a whole. Deviation from a normal dentition from the mechanical standpoint of mal-occlusion may also produce detrimental effects on the bones of the face and jaws, bringing about deformities which interfere with respiration and predispose to infection of the accessory sinuses. The pediatricist is aware that positive harm may come to the child because poor teeth, which become carious, may favor infections, of themselves or of the gums and jaws, which infections lower the child's health, if not actually causing, as they may, disease of internal organs by extension. And his study of some of the common affections to which children are liable has taught the pediatricist that these may affect the development

and the health of the teeth and therefore militate against normal nutrition and growth.

He is therefore conscious of the important part played by the health of the teeth in the health of the child. But I fancy that he has been accustomed for so long to regard bad teeth—and he *must* do so when it is a question of cavities and mal-occlusion which require the attention of the specially trained person—as coming exclusively into the field of the dentist's activities, that he does not always realize how much he can do, himself, to prevent the occurrence of these conditions which he is not prepared to treat. It may not occur to him that the principles of hygiene and dietetics which he commonly applies toward the general health of the child can be directed toward the creation of healthier teeth and the prevention of dental illness if only he will have the teeth in mind when he is thinking about the development of the rest of the body. Nor does he see how the modern dentist who has come to know much about the factors underlying the health and resistance of teeth looks for aid to him—the pediatricist—as a specialist in the realm of nutrition.

For the admirable work by research workers in dental problems during the past decade has shown that the health of the teeth is a question of nutrition. The child with dental caries is a child with imperfect nutrition; and such a child, in the mind of the pediatricist himself, is a child with poor health. The saying "a carious tooth means a sick child" is not greatly an exaggeration.

As pediatricists we are constantly searching for earlier and finer indications of improper nutrition. We are not content to wait for bony deformity or even a "rosary" to reveal to us the condition of rickets, nor for bleeding gums and sub-periosteal hemorrhages to proclaim the existence of scurvy. We use the X-Ray. Now one of the things which dental research has shown us is that the tooth, the only part of our bony system which we can see, is one of the earliest indices of nutritional deficiency and that it is affected by smaller degrees of deficiency than are other and more commonly regarded organs.

The correlation of dental caries, which as we know occurs in such a large percentage of our children, with nutritional deficiency has widened the scope of the effort for child health for it has brought into the pediatric field as subjects for better feeding countless children whom the pediatricist, without the delicate standard of dental health might, on the basis of growth in weight and height, have regarded as coming within the limits of normal. A realization of this can only stimulate the pediatricist to greater activity and to further studies in

the great field of nutrition and in these studies he will find much to enlighten him and extend his present knowledge if he will acquaint himself with the existing dental literature on the subject of the cause and the prevention of dental caries and the effect of diet on the development of the teeth and jaws.

There is not time to enter into detail regarding the dietary elements necessary for the proper development of the teeth. I would like, however, to mention certain salient points.

One is the existence of excellent dentition among races who practice little or no dental hygiene. Sound teeth have been found among peoples on widely differing diets, some preponderantly protein, others largely carbohydrate. The skulls of aborigines of this continent, dying before the advent of the white man and the white man's diet have shown beautiful teeth and jaws. At the present day in Hawaii the usual prevalence of caries is found in these communities which have adopted what might be denominated the American dietary, while in remote districts where the children still have a native manner of eating there is little or no caries. Filipinos coming to Hawaii as adults have sound teeth while their children who eat a good deal of rice and little or no milk have extensive dental decay.

There are qualities in primitive diets which modern methods of food production diminish or destroy. We are largely city dwellers and often far from the source of supply. Our cereals are prepared so that they will keep and often in the milling essential substances are removed. Our vegetables are carried far; we buy them instead of raising them and expense is an element which cuts down the consumption. We produce a great deal of sugar in the refineries and consume it as such instead of making it in our bodies from more complex carbohydrates. We choose muscle meats and scorn the viscera which are preferable. Our food in general is such that it requires very little tearing or chewing which are good for the physical strength of our teeth and jaws. All these factors, commercial economic and esthetic tend to affect our civilized diet toward insufficiency.

A sufficient diet is made up of approximately thirty-five essential substances. About eighteen are digestive products of protein; one is the sugar, glucose; ten are mineral elements; six are vitamins. "So far as we know"—to quote from McCollum—"any food supply which provides all of these thirty-five principles in the proper proportion will supply proper growth in the young and maintain health in the adult provided it contains nothing deleterious."

The consensus of opinion as I interpret it, is that for dental health the whole diet must be considered and not any of its parts to the neglect of the rest. Analysis of deficient diets, however, discloses that they lack, in regard to the health of the teeth, in their content of calcium and the supply of the vitamins A, C and D; and that they tend to provide an acid rather than a basic ash.

To neither dentists nor pediatricists is it necessary to stress the need of calcium—and its associate phosphorus—for the building of teeth, which, like bone, consist essentially of compounds of calcium and phosphorus in a protein matrix. We are both aware of the need and we teach that an adequate supply must be taken and that nowhere can calcium be obtained to greater advantage than in milk, the universal food. We may not be aware, however, that growth can take place according to normal standards of weight and height with less than the optimal quantity of calcium, the bones and the teeth maintaining the normal form but being constantly deficient in their calcium content. This is an apparent exception to the law of minimum and it may be that it is an important cause of dental defects when the success of a diet is measured by ordinary standards.

We are all familiar almost to surfeit with Vitamin D and its effect on the growth of bone. It is likewise important in the growth and health of teeth.

Vitamin A, which is again coming into its own among advertisers following the recognition that irradiated substances containing Vitamin D cannot replace the time honored cod liver oil, has been shown to have a profound effect on the structure of the teeth and to be necessary for their proper constitution.

From the dental research worker investigating Vitamin C has come new light upon the importance of this vitamin so long the pet possession of the pediatricist in the cure and prevention of scurvy. It is now known that scurvy as commonly seen is a late manifestation of Vitamin C deficiency; that long before symptoms of scurvy become apparent, deprivation of Vitamin C makes itself manifest in injury to or lack of development of the supporting tissues of the teeth. Further it has been shown that for the proper growth of the teeth a larger intake of Vitamin C is advisable than has been thought necessary to prevent scurvy. Inasmuch as teeth start growing long before birth, Vitamin C is necessary very early, even during pregnancy.

I have adduced these few details from nutritional experience not because they are unknown to any of you but because they are so

well known. I hope that they may suggest to you first: that there is a great common ground of interest shared by the dentist and the pediatricist which should make them both eager to co-operate in the attempt to bring about a condition of dental health and second: that the pediatricist needs only to modify a little his point of view in regard to his nutrition work, to include the teeth as a part of it, using the means he now employs, in order to bring to the effort for dental health the

precious aid which the dentist is in all sincerity seeking.

I feel that the pediatricist yields to no other practitioner of the art of healing in unselfish effort to promote health, to help toward that goal of a good physician—the ultimate disappearance of the human ills by which he gains his livelihood. So, speaking for the pediatricist, with all confidence I pledge to his confrere, the practitioner of dentistry a loyal co-operation in the cause of dental health.

THE RELATION OF DISEASES OF THE MOUTH TO PEDIATRICS

By LEROY M. S. MINER, D.M.D., M.D., BOSTON, MASS.

Read at the Joint Meeting of Organized Medical and Dental Professions at Hotel Pennsylvania, New York, November 30, 1931.

REGARDLESS of our approach, whether dental or medical, to the problems of the oral cavity and despite variations of opinion as to method and detail of attacking these problems, we can all probably agree as a starting point that the mouth is an integral part of the body and that mouth tissues, like other body tissues, are influenced by the same fundamental factors of health and disease.

In other words, efforts to promote health in the body will create favorable environmental influences for health in the mouth and subnormal physical states are likely to effect unfavorably the tissues of the mouth.

For some years I have insisted that the tissues of the mouth are sensitive to physical changes in the body and, thus to a degree, may be regarded as a barometer of health. Since tooth structure does not replace or repair itself when a part of it is lost from any cause, the apparent inactivity of cellular life in teeth has favored for many years the development and retention of the concept that teeth are essentially inanimate structures having no important relation to the other tissues of the body.

Experiments in the last few years, however, have demonstrated an active efferent and afferent circulation in tooth structure. Notable was the work of Weisberger who, in 1929, placed foreign protein, in the form of horse serum, in the dentin of guinea pigs' teeth and demonstrated by its effect on the smooth muscle of the uterus that it had passed into the circulation. Important also was the work of Howe, who fed ferrous acetate to laboratory animals and recovered iron in the teeth within thirty minutes. These and other researches in various fields of medicine and dentistry have largely dissipated the old idea that teeth are inanimate structures,

and they have also precipitated a broad biological approach toward dental problems. In the acceptance of a biological point of view, not only the pediatrician but all others engaged in any branch of the healing art must share with the dentist the responsibility for reducing the appalling prevalence of dental disease through the development of true preventive measures. The dentist, like his confreres in medicine has always been chiefly engaged in the treatment of disease. The repair of damage to teeth and their supporting structures has been his principal function. More recently, however, prevention of disease, or to use a better term, maintenance of health, in the mouth, has received vigorous attention, not only from the clinical but from the research aspect as well. This phase of the subject may well be emphasized, for in the prevention of disease in the mouth, the pediatrician has an important function to perform, and also a great opportunity.

Dental caries, the most prevalent disease afflicting human beings and the fore-runner of other disturbances, is distinctly a disease of childhood. Such evidence as is available indicates that the curve rises from the age of two, reaching its peak between ten and twelve years of age, then falls gradually with the exception of an occasional increase about the seventeenth year.

Various local measures, including rigorous hygiene, aimed to prevent or control dental disease, have not been successful enough to warrant the expectation that the solution of this problem rests with this type of activity. Oral hygiene undoubtedly has served a useful purpose because it has focused attention on the great needs for preventing tooth decay, and also because it has stimulated more concentrated study of causes,

which is vastly more important. Yet it has not materially reduced the incidence of the disease, and accumulated evidence indicates that the attack must be more fundamental.

Various researches devoted to dental disease have carried us to the point where it seems evident, first, that the development in teeth of cell health or cell resistance to disease is primarily a problem of nutrition and, second, that the building up of cell health cannot be started too early. From the dental point of view alone, the efforts being made now in pre-natal clinics, through nutritional and hygienic measures, to maintain for the prospective mother not only good health for herself during pregnancy but to supply to the offspring those elements essential to cell growth and the development of healthy tissues, both soft and hard, offer bright prospects for a material reduction in the tremendous incidence of dental disease.

It is important to remember that the first cells of the deciduous teeth are laid down about the ninth week of fetal life, that at about the seventeenth week the germs of the first permanent molars are formed and, finally, that the teeth are calcifying actively during the first two years after birth. In this period the dentist does not come in contact with the child at all. To the obstetrician and pediatrician we must turn for cooperation in our efforts to insure good foundations for the normal growth and development of the teeth and jaws.

Prevention of disease in the mouth is so closely related to normal growth and development of the child's body tissues that the whole matter, in the early stages at least, becomes more a pediatric than a dental problem per se. New knowledge constantly being developed in the field of mineral metabolism, especially the rôle played by the vitamins in this fundamental process, offer such hopeful prospects from a dental point of view that liberal support should be given this work.

Until this knowledge is developed to a point where prevention can become a practical matter, however, we will continue to face the insistent problem of dental disease, which must receive due attention.

There are two ways in which the pediatrician may be concerned with the control of disease in the mouth: First, through the effect produced in the tissues of the mouth by changes from normal in the body of the child, and, second, through the results produced in various parts of the body of the child by disease present in the mouth.

Unquestionably many physical factors exert an influence upon dental tissues, thereby predisposing them to disease. The classic experiments of Erdheim, who made a sub-total extirpation of the parathyroids in rats with the interesting sequel of the eruption of teeth devoid of enamel, suggest that defective calcification of teeth may

be the result of varying degrees of hormone dysfunction. The quality of tooth structure has only recently been given consideration. This matter was studied by Mrs. Mellanby, who found that 856 deciduous teeth out of 1036 examined had structural defects, and in 266 permanent teeth, 92 per cent were defectively calcified. Children whose six-year molars are devoid of enamel on the coronal surfaces and whose incisors and cuspids show the characteristic pits devoid of enamel, are not uncommonly seen. In many instances these children are found to have had a serious interference with nutrition during the first two years of life.

The effect of deficient diets on gum tissue in children is another demonstration of the intimate relation of body health to health in the mouth. Various degrees of gum inflammations from infantile scorbutus are still occasionally seen. Dentition is a normal physiological process, but when that process is disturbed physical causes should be looked for. This is distinctly the function of the pediatrician.

Physical disabilities, on the other hand, arising from disease in the mouth, are more spectacular and usually more readily recognized. Decayed temporary teeth have not been regarded as being of much importance. Yet it is a fairly simple matter to demonstrate various abnormal physical reactions attributable to such a condition. The irritation from decayed teeth on the nervous system of the child is common. Fretfulness and irritability are natural developments. The elimination of chorea, which sometimes yields to the removal of peripheral irritation in teeth, is a most satisfactory clinical experience. Furthermore, if a tooth is decayed, it is painful to chew upon and the child will either bolt its food or revert to a slop diet. In either event, disturbances of the gastro-intestinal tract, mal-assimilation and mal-nutrition are likely to follow in turn. This lack of masticatory function also favors lack of proper development of the jaws and nasal spaces, with the result of crowded permanent teeth, narrow arches, mouth breathing, diseased tonsils, enlarged adenoids, and subnormal respiratory function. Later, with infection developing at the root-ends, we find increased susceptibility to general infections. Some of the acute pyelitis cases in children are undoubtedly the result of dental infection. The relation of apical abscess to some of the heart infections also challenges attention.

With what we already know and with so much that needs illumination, no one can deny that complete cooperation between dentist and pediatrician is essential if we are to make any notable progress in the great task of controlling and preventing dental disease.

What may be done through this teamwork is demonstrated by the work of Boyd and Drain, a

pediatrician and a dentist. In one of their articles the following summary is quite worthy of attention:

"The intake of a diet rich in mineral salts and vitamins was found to result in arrest of dental caries in a group of twenty-eight well controlled diabetic children, 82% of whom had shown definitely progressive caries prior to the establishment of the dietary control. This indicates the dependence of dental caries on recent dietary inadequacies such as might be associated with the usual food intake of the average child."*

The relationship of diseases of the mouth to pediatrics is not only a research and clinical problem, it is an important educational one as

well, requiring a coordination of medical and dental education before much of a constructive character can be achieved. Important modifications of the curricula of both medical and dental schools must be made to accomplish it. Already it appears that the evolution has begun. An attitude of isolation on the part of the dental profession will delay accomplishment. Complete inclusion of dentistry in medicine cannot be expected at this time nor in the immediate future, but better coordination can be made, which means more medicine for the dentist and greater knowledge of mouth problems by the physician. With both groups meeting together for purposes of mutual help, many of our present difficulties will disappear.

* Journal A. M. A., June 9, 1928.

THE RELATION OF DISEASES OF THE MOUTH AND TEETH TO PEDIATRICS AND INTERNAL MEDICINE

By WILLIAM DWIGHT TRACY, D.D.S., NEW YORK, N. Y.

Read at the Joint Meeting of Organized Medical and Dental Professions at Hotel Pennsylvania, New York, November 30, 1931.

A STUDY of this interesting subject may lead an essayist into devious ways and into many ramifications of cause and effect, but it will be the object of this brief paper to touch upon those obvious departures from the normal which definitely influence the health index of the infant and the growing child. Regarding the oral cavity as the chief portal of entry to the human organism and realizing that all nutrient material passes through this portal into the digestive system it is evident that a healthy mouth containing a normal and efficient complement of teeth is a primary factor in the well being of the child.

One of the most critical defects encountered in infancy is congenital cleft palate usually accompanied by harelip. This distressing malady frequently results in difficulty in nursing and infants so handicapped are often undernourished and become a problem for the pediatrician. The surgical reduction of this deformity has been developed to a fine art, and much credit belongs to members of the dental profession for their contributions to this evolution in surgical procedure. Early operation upon infants is now standard procedure and the restoration to normality in form and function and freedom from serious outward blemish places this operation in the class of great human benefaction.

Diseases of the mucous lining of the oral cavity, such as aphthous sores and thrush, and the preliminary symptoms of measles, are disturbing influences which the pediatrician is much more likely to be called upon to treat than is the dentist. Vincents Infection, distressing and disagreeable when it does occur, is rarely reported

among infants and usually responds to standard treatment with agents rich in oxygen. If infection of this type is not discovered early in its course and if the fauces become involved treatment and control of the trouble are difficult and complications of a serious nature may occur.

Teething—Teething of infants is a physiological process and in the case of a normal healthy child is usually accomplished without complication. Instances of difficult dentition accompanied by irritation, inflammation, pressure and swelling are not infrequent and are sometimes overlooked in the search for the cause of the secondary symptoms that are evident in these cases. On the part of some specialists there seems to be a tendency to ascribe any one of many symptoms exhibited by the infant from six months to two years of age to teething while others pass lightly over this possibility on the basis that it is a normal physiological function and should, therefore, be causing no disturbance.

As a matter of fact the disturbances incidental to difficult dentition of the deciduous teeth in certain cases are very real, and can assume a serious aspect. Reflex disturbance of the vegetative nervous system may throw the digestive functions entirely out of balance interfering with nutrition and causing a general upset in the orderly process of the child's natural routine. The present day well trained specialist in children's diseases recognizes these conditions and understands how to meet them and when called in consultation the experienced dentist can readily locate the trouble and administer relief.

After dentition of the deciduous set is com-

plete and all twenty of the deciduous teeth are in place the child should normally enjoy dental comfort and efficiency without material change up to the sixth year. This enjoyment, however, is based on the premise that the teeth have erupted in proper position and that normal occlusion has been established. It is also based upon the premise that the teeth themselves have normal resistance to those influences which induce dental caries.

If on the other hand the growth of the jaws has been inadequate and the temporary teeth are in malposition these defects interfere with proper mastication of the food and may be a real handicap to the little patient. It is true also that teeth which are in malposition and which are difficult to keep clean are predisposed to caries.

It is the consensus of opinion among practitioners of dentistry that every little child should be examined at two and a half or three years of age in order that incipient caries may be caught in its early stage and cared for before serious damage has taken place. It also provides opportunity to note congenital departures from the normal or unfavorable changes brought about by habits of childhood such as thumb or finger sucking or similar adverse influences. In an effort to prevent serious damage to the teeth dentists in private practice urge patients to arrange for examination and cleaning at least twice a year. In many cases more frequent calls on the dentist are necessary.

It seems pertinent here to point out the fact that neglect of the deciduous teeth may have a far-reaching influence upon the health, strength and development of the growing child. Normal digestion and metabolism are the birthright of the child, but when the function of mastication and incidentally the proper insalivation of food become impossible for the child because of deep-seated and painful cavities of decay normality ceases. Chewing becomes a lost art with the patient; food is bolted, the appetite wanes, the weight index goes astray and growth is restrained.

When a child presents showing a listless bearing, a pasty complexion, dull eyes, lustreless hair, dry lips and a coated tongue, these symptoms are not always due to dental defects of course. It is safe to say, however, that in seventy-five per cent of such cases an examination of the oral cavity will disclose a deplorable state of affairs; teeth broken down through the ravages of caries and in partial or complete dysfunction, gums turgid, spongy and inflamed, interdental spaces packed with fermenting food pabulum and debris, pus oozing from one or more chronic abscesses and mucous membranes red and congested. Orange juice, cod liver oil and sunshine may be of some benefit to such a patient, but until the lesions in the oral cavity are recognized

and treated with a view of eliminating infection little can be hoped for as a result of general treatment.

When the conditions involving the oral tissues and the teeth are cleared up and such teeth as can be salvaged are properly repaired the rebound toward health in the majority of these cases is most gratifying. Proper hygiene and dietetic measures applied to such a child at this juncture will be an important factor in restoring it to normal. We are, therefore, constrained to admit that the deciduous teeth are an important factor in the health of the growing child and that every effort should be made to keep them intact and capable of performing their normal function until exfoliation takes place.

After six years and up to the twelfth year of age the deciduous teeth are being shed and their permanent successors are coming into place. There are usually no dental complications affecting the general health of the patient during this period, but in case orthodontic treatment is necessary when a child is below par, the advice and council of the family physician is invaluable.

It is perhaps needless to say that constant watchfulness and periodic examination are essential to discover dental caries in its incipient stages and thus safeguard the integrity of the dental pulp. The death of a pulp in the mouth of an adolescent patient which used to be considered as one of the unavoidable events in dental practice is now regarded as nothing short of a tragedy and while much advance has been made in the treatment of these cases the pulpless tooth is still a problem in which both dentistry and medicine are necessarily much interested.

The third molars are more or less erratic in the time of their eruption, but are usually found in position between eighteen and twenty years of age. Delayed eruption of these teeth is common and the complications that arise from impaction may be serious including extreme discomfort, swelling and trismus, not infrequently accompanied by infection. Incidents of this type may result in systemic disturbance necessitating hospitalization and treatment at the hands of the physician.

Assuming now that all teeth of the permanent denture are in place we will review briefly some of the conditions wherein there is an interrelation between dental and oral lesions and the systemic condition.

Pyorrhœa—One of the most trying maladies with which the dentist has to cope is periodontoclasia or *pyorrhœa*, and while local factors in the cause of this disease usually predominate there are frequently systemic conditions which may be present as causative and perpetuating factors. Faulty habits in general hygiene, defective elimination, unbalanced diet, inadequate intake of fluids, are all factors which have a definite bear-

ing on the incidence of this disease and upon its control and cure. The advice and council of the internist is of great assistance in the management of these cases. It is well known that diabetic patients and patients having Brights Disease are predisposed to periodontoclasia and as a class respond less favorably to local treatment than do those in whom such diseases are not a factor. And here again collaboration with the physician is essential.

Focal Infection—The study of focal infection of dental origin from which secondary symptoms may arise, perhaps brings physicians and dentists more frequently and more closely together than any of our other numerous and perplexing problems. This subject, however, is so profound and so broad that anything more than a brief comment upon it is quite outside the bounds of a brief paper of this sort.

In a search for the causes of loss of energy, debility, and malaise the oral cavity and teeth must not be overlooked. Foci of infection at the apices of pulpless teeth are not the only lesions to be observed, as a low grade infection may exist as a chronic gingivitis from which bacteria may readily enter the blood stream through the inflamed and engorged tissues which are rich in their vascular supply. The disagreeable pockets which are found about and between teeth which are affected with periodontoclasia and which are frequently bathed in pus must receive due consideration and treatment. When all possibilities of primary infection in the oral cavity including a study of the tonsils have been canvassed and the sinuses have been eliminated from the diagnosis the case then becomes a problem for the internist.

In cases of difficult and obscure diagnosis it is interesting to note that many medical practitioners nowadays desire to eliminate all possibilities of infection above the "collar line," as one prominent diagnostician has said, before proceeding further. Thus the dentist and medical practitioner have been drawn more closely together in a common interest. While there seems to be no literature on the subject an internist reported to the writer that he had gained the impression that there was a direct relation between chronic pyorrhœa and stomach ulcers, and that he felt this was a subject worthy of special research in which the physician and dentist could advantageously cooperate.

Caries—Dental caries is undoubtedly the most prevalent and widespread of all human diseases. It is without question one of the most potent factors in the cause of reduced vitality, lowered resistance and systemic disease. Physical inefficiency and ill health are costly to the individual, to the community and to the nation, and while many of the keenest minds in dentistry have been devoted to a study of the causes and pre-

vention of caries for a great many years it is still, in the last analysis, an enigma.

Many students of the subject seem to feel that the food habits that are incidental to our super civilized methods of living are at the root of the trouble, but even when controlled groups are placed upon a so-called correct diet and kept under supervision for long periods of time the results are none too salutary. Among the many types of research which are constantly being carried on in dentistry in this and other countries the problem of caries is probably receiving more attention than all other activities together and among those who are studying caries the dietetic approach seems to be the dominant idea.

While the problem is one in which all members of the healing art are interested your essayist is impressed with the fact that it is quite as much the obligation of the medical fraternity as it is of dentistry to aid in solving the enigma. In other words, medicine must share the responsibility of carrying on intensive and continuous research along any line that gives promise of shedding new light on a major problem still shrouded in mystery. We are well aware that many workers who hold no dental degree and some who have neither medical nor dental degrees have made valuable contributions to research in dental problems, but the time has come when medicine and dentistry should muster jointly all their research possibilities in a common effort to discover the actual basic cause of dental caries and to seek its prevention.

Since writing the foregoing an important paper on the Etiology of Dental Caries by Alfred F. Hess and Harold Abramson has appeared in the Dental Cosmos from which it seems appropriate to quote as follows: "Dental caries is the most important nutritional disorder in this country today; it is a universal problem. It is futile to hope that it can be solved by the dental profession alone. Like rickets, it will probably require the combined investigation of biochemistry, animal experimentation and clinical medicine. In order not to fall into the same errors which have occurred from time to time in connection with investigation of vitamin deficiency, it should be constantly borne in mind that the final criterion is the clinic and not the laboratory and that, if experimental results do not coincide with dental experience, they must be judged erroneous."

We know and appreciate the value of oral hygiene, of reparative and restorative dental operations, but while a small percentage of those needing such treatment are receiving it, we are staggered by the incoming flood of dental defects in the mouths of the rising generation with which we know we cannot begin to cope.

One of the most encouraging signs pointing toward medical interest in dental problems is the work now going on at Yale University in which

medical and dental men are working together in joint research. If, from all the work now being done and still to be carried on, science, aided by

medicine and by dentistry, should find a way to prevent dental caries it will be one of the greatest benefactions that could come to the human race.

THE BACTERIOLOGY OF DENTAL INFECTIONS AND ITS RELATION TO SYSTEMIC DISEASE

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Read at the Joint Meeting of Organized Medical and Dental Professions at Hotel Pennsylvania, New York, November 30, 1931.

DURING the last twenty years much has been written about dental infection and considerable research has been carried out in this field, yet comparatively little is known about the real pathogenesis of these infections. We need to ask only one or two pertinent questions to realize how ignorant we still are along these lines. What causes dental caries? Is it primarily an infection, or do bacteria simply invade the careous areas and lead a saprophytic life there? Why do people get pyorrhea? Again, are we dealing primarily with an infectious process, or is some fundamental disturbance in the metabolism responsible for the condition? Tonight I wish to sketch briefly our present knowledge of dental infection and give you a résumé of its bearing on systemic disease. Most of this information is familiar to you, but we go to medical meetings as we go to church or the opera, to hear what we already know.

Focal infection is now a well-established principle in medical practice. The careful physician examines the teeth as thoroughly as he does the lungs and heart, and one of the most difficult problems that confronts the medical man today is when he should, and when he should not, have a pulpless tooth removed. But before discussing this point, let us review briefly the common bacteriology of dental infections.

Technic of Taking Cultures—Haden's method of culturing an extracted tooth is the one the writer has usually followed. The field of operation is prepared by first rubbing with gauze the tooth to be extracted. The tooth and gums are then painted with iodine, the iodine removed with alcohol, and the area of operation walled off with sterile gauze. The tooth is then extracted with sterile forceps. After extraction the apex of the tooth is cut off with a sterile instrument and dropped directly into a tube of culture medium. Haden prefers to drop the apex of the tooth into sterile salt solution which contains a small amount of sand. The tube is then well shaken to macerate the tissue on the tip of the tooth, and cultures are made from this material. In taking cultures from pyorrhea pockets, the teeth and gums should be sterilized in the same manner. The field of operation is protected with

sterile gauze, a platinum loop is inserted well into the pus pocket and cultures made from the material removed. It is needless to say that all cultures taken from the abscesses of teeth or from pyorrhea pockets should be plated out on blood agar plates in order to separate the various species of bacteria present.

Bacteriology of Caries—Dental caries still remains one of the great mysteries of medicine. It has been attributed to calcium deficiency, vitamin deficiency, acid mouth, faulty mouth hygiene, bacterial infection, etc. Caries will probably be found to result from a combination of etiological factors. The infectious theory of dental caries was first advanced by W. D. Miller, who thought that caries resulted from the activity of certain bacteria in the oral cavity. These bacteria were supposed to produce acids which injured the enamel of the tooth, and thus gained access to the dentine which, by reason of its organic nature, they were able to attack directly. In 1922, James, Macintosh and Barlow isolated an organism which they called *bacillus acidophilus odontolyticus*. When sound teeth were placed in broth cultures of this organism, white opaque spots appeared on the surface of the teeth, indicative of decalcification of the enamel. In 1924, Clarke described a streptococcus which he found almost constantly present in careous dentine. When the careous material was spread on blood agar plates, small gray colonies resembling those of streptococci were found in considerable numbers. The organism was an aerobe and microscopically grew in typical streptococcal chains. Clarke called this organism *streptococcus mutans*. The exact relationship of these bacteria to dental caries still remains to be determined, but there is no reason to doubt that bacteria do play an important part in the etiology of caries.

Bacteriology of Pyorrhea Alveolaris—Pyorrhea alveolaris is really an infection of the dental periosteum and the alveolar process, characterized by purulent discharge from the alveolus and, if not checked, by loosening and eventual loss of the teeth. The bacterial flora of pyorrhea is nearly always mixed. The commonest pathogen is *streptococcus viridans*, though occasion-

ally streptococcus hemolyticus is encountered. The plates in most cases will also show a few colonies of staphylococcus albus. By the use of stained smears and anaerobic cultures, it can be shown that fusospirochetes are nearly always present and often in large numbers. It is the presence of these fusospirochetes which give the unpleasant odor to the pyorrheic mouth.

Bacteriology of Alveolar Abscesses—Acute alveolar abscess, or "gum boil," as it is called by the laity, usually but not always arises from a pulpless tooth. The bacteria invade the pulp, escape through the apex of the tooth to the periodontal membrane, and excite acute inflammation. Sometimes the alveolar abscess arises from extension of a pyorrhea pocket. Those due to apical infection usually yield a pure culture of streptococcus viridans or hemolyticus. Those that result from periodontal infections are often caused by staphylococcus aureus.

Bacteriology of Apical Abscesses—Chronic apical abscesses have received considerable bacteriological study. Perhaps the most recent and most careful studies are those of Russell Haden who, in 1926, reported on cultures from the periapical tissues of 1,500 teeth. Streptococci, either alone or mixed with other organisms, were present in 92.5 per cent of the positive cultures; gram positive bacilli alone were found 58 times; staphylococci alone 19 times. According to Haden, the nonhemolytic streptococcus was by far the most commonly found organism. Hemolytic streptococci were comparatively rare. These findings differed somewhat from those of Henry, Sniffen and Doyle who, in an extensive study of chronic apical abscesses also found streptococci to be by far the predominant organism, but who found hemolytic streptococci in a considerably higher percentage than that of Haden. All observers are agreed, however, that streptococcus viridans is by far the commonest bacterial agent in chronic apical abscesses. Some of the streptococcal strains isolated from apical abscesses are intermediary in character, that is, they have some capacity for producing hemolysis when first isolated, but after prolonged cultivation on culture medium, they lose their hemolytic quality and become typical viridans strains. Apical abscesses frequently contain fusospirochetes as shown by the frequency with which a putrid sinusitis develops when an apical abscess extends into one of the antra.

Bacteriology of Devitalized Teeth—Rosenow, Haden, Henry and Doyle, and many others, have recovered streptococci from a high percentage of pulpless teeth, irrespective of whether x-rays were positive or negative for periapical infection. For this reason Rosenow believes that all devitalized teeth should be extracted. Furthermore, he believes that devitalization of teeth and filling of root canals should be discon-

tinued, and that for the present at least it is wiser to remove teeth that have become infected than to retain them at the risk of their becoming an insidious infection later.

Bacteriology of Vincent's Angina—This is a gingivitis beginning in the free margins of the gums and characterized by acute necrotic inflammation which spreads rapidly. The gums are tender and painful, the breath is foul and there is some systemic intoxication as evidenced by fever and general malaise. Fusospirochetes are found in large numbers in the ulcerated margins of the gums and the condition is readily diagnosed by means of a smear from the ulcerating surfaces. These fusospirochetes are originally anaerobic and do not show on aerobic cultures. Most of them were first cultivated in pure form by Hideyo Noguchi.

Experimental Focal Infection—Focal infections about the teeth have been produced experimentally by Rosenow, Haden and others. Rosenow and Meisser devitalized and infected the teeth of dogs with the staphylococcus from a case of nephritis. One dog developed pyelitis and cystitis with marked calcareous deposits in the pelvis of the kidney. The same authors recovered streptococci from the infected teeth of patients with nephrolithiasis. The teeth of healthy dogs were then devitalized and the pulp chambers of these teeth infected with heavy suspensions of the streptococci. The infected teeth became discolored, but remained firmly in place in the alveolar sockets. These infections caused rarefaction and absorption of bone in the periapical region without swelling or tenderness. Renal calculi or lesions in the medulla of the kidney developed in a high percentage of the dogs whose teeth were infected in this manner. Later Meisser produced experimental ulcer of the stomach by the same procedure, that is by injecting into the root canals of dogs streptococci obtained from the infected teeth of patients with gastric ulcer. Strangely enough this experiment failed when an attempt was made to produce experimental arthritis by this method. Rosenow thought that this failure was due to the fact that streptococci from patients with chronic arthritis were less virulent than the other strains. I think it more probable, however, that his failure was due to the high natural immunity which dogs possess against infections of the joints. In most of the experimental work, the streptococci recovered from infected teeth have not been injected into the tooth sockets of animals, but directly into their veins. A large amount of experimental work has been done along this line. Henrici, Moody, Rosenow, Price, Meisser and Gardner, Haden and others have all made extensive studies of the lesions in rabbits which follow the injection of streptococci from infected teeth. This of course leads us to

Rosenow's well-known theory of elective localization following the intravenous injection of streptococci. His theory is that the streptococci which are present in infected tonsils, teeth and sinuses have a special affinity for certain organs. Some localize in the joints, some in the heart, some in the appendix, gall-bladder or kidney, some in the gastric mucosa, etc. Rosenow found that as a general rule streptococci which have been obtained from various foci of infection tend to localize and produce lesions in animals corresponding to those in the patients or in the animals from which the micro-organisms were originally isolated. In other words a streptococcus from the teeth or tonsil of an arthritic tends to produce arthritis when injected into a rabbit. The streptococcus from a focus in a patient with pyelitis tends to produce pyelitis in the experimental animal, etc. Rosenow's doctrine of elective localization has not received universal acceptance, though I believe there is more evidence in its favor than there is against it. The carefully conducted experiments of Henrici, Haden and others have corroborated in great part Rosenow's findings.

Dental Infection and Systemic Disease.—The theory of selective affinity of bacteria naturally leads us to a discussion of systemic disease in its relation to dental infection. The relation of infection to systemic disease began to receive recognition from medical men as early as 1900, when William Hunter of London wrote several articles on the subject. Shortly after this there appeared the studies of Billings, Camac, Kinnicut and others, all of whom reported cases of arthritis or some other systemic disease which were etiologically connected with foci of infection about the teeth. It was largely through the influence of Billings that Rosenow took up his bacteriological studies of focal infection and made his important contributions in this field.

The distant effects of dental infection are usually caused by the streptococcus, but before referring to streptococcal infections, a word should be said about the relation of fusospirochetes to pulmonary infections. It is a well-recognized fact that bronchiectasis and lung abscess are much commoner in hospital than in private patients. It is particularly common in the Bellevue type of patient, that is, in the type of patient whose mouth hygiene is proverbially bad. The studies of Smith indicate pretty clearly that bronchiectasis and putrid abscess of the lung are caused at least in part by the fusospirochetes. The fusospirochetes are present to some extent about all healthy teeth, but they are particularly numerous in patients with pyorrhea and gingivitis. It seems reasonable to suppose that the prevalence of lung abscess and bronchiectatic cavities in patients with pyorrhea is related to the presence of these micro-organisms, and the lesson to be learned is that proper mouth

hygiene will considerably diminish one's susceptibility to bronchiectasis and lung abscess.

When we come to a consideration of streptococcal infections about the teeth and their relation to systemic disease, we think first and foremost of infectious arthritis and justly so, for so many cases of arthritis in middle and later life are due to dental infection. In our studies on arthritis at Bellevue Hospital, we have frequently succeeded in isolating streptococci from both the blood and joint fluid in patients with infectious arthritis. In some of these patients a streptococcus has also been recovered from the apex of an infected tooth. It was very significant that in these cases cultural and agglutination tests established the biological identity of the three streptococci.

Associated with infectious arthritis there is often involvement of the muscles, tendons and bursae by the same organism. Likewise these tissues may be infected without involvement of the joint. Brachial neuritis, sciatica and facial neuralgia not infrequently are due to dental infection. I have found in private practice that most cases of neuritis are due to either trauma or focal infection. We must assume that an arthritis due to a focus of infection in the tonsils or teeth results from the direct localization of bacteria in the joints. Bacterial allergy probably plays an important part and influences the course of the disease, but the actual process in the joint is an infection analogous in every way to gonococcal infection in the joint which results from a gonococcal focus of infection in the prostate gland.

Next to arthritis one would naturally think of endocarditis of either the rheumatic or bacterial type. I have several cases of bacterial endocarditis in mind where the pre-existence of marked periodontal infection seemed to point to a close association between the two conditions.

Another interesting group of metastatic infections are those of the iris and uveal tract. De Schweinitz states that there is no better established etiological relationship than that between septic foci in dental areas and certain diseases of the eye, especially those of the uvea. Rosenow has reported cases of eye infection from dental pulpitis with reproduction of the lesion in animals. Haden has also reported a group of ocular disorders due to dental infection.

The most striking example of connection between focal infection and the kidney is that of glomerular nephritis which follows scarlet fever with the tonsils as a focus, but no doubt the root abscesses around teeth can also excite renal irritation, particularly in the pelvis.

The relation between focal infection about the teeth and gastric ulcer, appendicitis and infections of the gall-bladder is a little more difficult to establish, but Rosenow and others have brought forward considerable evidence in sup-

port of such a theory. Certainly streptococci can be recovered from most of these infections.

The relation of dental infection to mental disease has received extensive investigation, particularly at the hands of Cotton, who has made elaborate studies in this field and has written a monograph on the subject. Cotton believes that a great many of the so-called toxic psychoses are the result of focal infection, particularly in the teeth. In his work at the New Jersey State Hospital for the Insane, Cotton found that by removing infected tonsils and teeth he was able to bring about recovery in a great many psychotic patients who otherwise appeared incurable. Cotton believes that by far the most important focus of infection in the insane is the apical root abscess. He feels, however, that the infection often spreads from the teeth to the tonsils, stomach and intestinal tract, and that these secondary foci may persist after the teeth have been extracted and cause a continuation of symptoms. Cotton also believes in the therapeutic value of autogenous streptococcus vaccine. He has been criticized as being too optimistic in his ideas concerning the prevention and cure of mental disease by the removal of focal infections, but even granting that he is perhaps too sanguine, I doubt if anyone will question the statement that every mental case should have adequate attention given to his tonsils, teeth and sinuses. Henry, Sniffen and Doyle have recently reported their findings in the bacteriological study of root canal infection. They found streptococci with equal frequency in the extracted teeth of both psychotic and nonpsychotic patients, and in their investigations at the Bloomingdale Hospital, no specific relationship could be established between dental infection and any particular type of psychosis.

One of the most interesting phases of focal

infection is its relation to bacterial allergy. The studies of Swift and his co-workers at the Rockefeller Institute have shown that the experimental production of a streptococcal focus in a rabbit produces a state of bacterial allergy in the rabbit. In other words, the rabbit is more sensitive than normal to this germ. If the rabbit is then given intravenous injections of streptococcus vaccine, the allergic state can be transformed into an immune state in which the rabbit is entirely resistant to streptococcus infection. In other words, there appear to exist three different states of resistance to bacteria, both in animals and in man: First, the normal state of resistance in a healthy organism; second, the allergic or hypersensitive state; third, the immune state. Clawson has corroborated the work of Swift and has shown that in the animal artificially immunized, streptococcal agglutinins are present in the blood. From these studies we can begin to understand the method by which focal infections set up infections in other parts of the body, and we also have the basis for a rational vaccine therapy. In our arthritis clinic at Cornell, our first task in the treatment of rheumatoid arthritis is the discovery and removal of all foci of infection; second, the immunization of the patient against the germ, usually the streptococcus, with which he is infected. Most of our vaccine is now administered intravenously, as this seems the method of choice both in theory and practice. The treatment of systemic disease secondary to focal infection does not end, however, with the removal of the focus and the use of vaccine. The patient's general health must be built up in every way by rest, exercises, diet, vitamins, etc. With proper handling these patients respond quickly and usually make a complete recovery.

ORAL DIAGNOSIS AND DISEASE IN OTHER PARTS OF THE BODY. WHAT HAS ORAL DIAGNOSIS TO OFFER?

By EDWARD H. HATTON, M.D., CHICAGO, ILL.

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THE field of oral diagnosis is relatively, though not wholly new. Like every new enterprise, it has been received with lively enthusiasm by some, with a bored attitude of distrust and suspicion by a great number and with actual resentment by those settled in conservative methods of practice. There are others who are totally ignorant of it or, who, if dimly aware of its intrusion into the healing art, have no conception of its objects and the service that it proposes to render to patient, physician and dentist.

From the standpoint of the true oral diagnostician this situation is the challenge to his skill,

to his training and to his motives that governs his activities and supplies the guiding principles for the conduct of his practice. He must not be carried off his feet by undue enthusiasm which in no sense is a substitute for ability. He is obliged to overcome the handicap imposed by those who have entered this new field because it promises easy profit for a service but little understood or standardized and therefore easily exploited. This is important, for the activities of the latter have served in no small way to convert the attitude of watchful waiting into one of total distrust of the value of the services which can

be rendered by the oral diagnostician. He is under great pressure therefore, to produce results that justify his existence, to cooperate in every way with practitioners in the field of medicine in order to supply a service that saves the patient both in the prevention of pain and prolonged illness and in the reduction, if possible, of the cost of medical care. An excellent illustration of the extent to which this is possible has been supplied by Dorrance.¹

To no slight degree, success in this field is a factor of the degree of confidence and respect that both the patient and physician may have in the character, ability and judgment of the oral diagnostician. This is not a new situation and in this sense this statement is trite and commonplace. But it is so lamentably and, even frequently justly true that it deserves emphasis. Lamentably true in the instance that the majority of physicians prefer to select teeth for extraction rather than to rely on the judgment of the dental diagnostician, and justly true because many so-called oral diagnosticians do not deserve any degree of respect or confidence. Such a situation has arisen because dentistry as a profession traditionally does not have the high standing that is accorded to medicine and partly because but few of the medical schools have included such subjects in their courses as tooth and jaw anatomy, histology and pathology. Even the subject of focal infection has been handled for the most part superficially and in a way to hamper rather than facilitate its use as a diagnostic and therapeutic resource. A recent text on pathology states:—"The importance of the teeth as sites of focal infection has been overemphasized by many physicians. Latent dental infections (root granulomas) are seldom responsible for metastatic lesions. Hypertension is not due to focal infection, and the practice of extracting suspected teeth in this condition is to be condemned. Obscure anemias are usually not caused by focal infection."² I am not questioning the correctness of this statement, it is offered merely in justification of my belief that this subject is not adequately covered in the medical courses.

On the other hand this state exists because dentistry as a profession does not have the high standing that is accorded to medicine and because, to a certain degree, the dental schools have not been in a position or willing to teach their students the fundamental principles of disease and have substituted for that an entirely superficial and totally inadequate picture of the nature and genesis of sickness. The methods in vogue even in some of our most ambitious dental institutions in selecting students have placed *undue emphasis* on the *length of their preparation rather than on native ability*: Social and economic prejudices have operated to further reduce the number

of desirable applicants for dental training. The budgets of dental schools have not been large enough to provide faculties competent to function adequately both in technical training and instruction in the nature of disease so that the former has been emphasized at the expense of the latter. The physician is cognizant of this state of affairs in a general way and has but little respect for the dental practitioner in this sense. The dentist unconsciously becomes the victim of his "little knowledge," forgetting in his comparative ignorance that it is "a dangerous thing." And in a way he can hardly be blamed for his confidence in his little knowledge and the necessity for making the best possible use of it, at least after one experience with a physician who has stubbornly interpreted a mental foramen shadow as an alveolar abscess in reading a Roentgenogram, or with one who is totally ignorant of recent discoveries in the field of nutrition and unable to formulate a therapeutic diet. Fortunately there are outstanding exceptions to these general statements that are most promising for the future graduates in both medicine and dentistry. For the present we shall have to do the best we can to remedy this bad situation, a solution that has been found in a number of outstanding instances where profitable relationships between the two groups have been established over long periods of time. Certainly the situation is much better in large urban centers, such as the one from which the audience has been drawn, although I suspect that even in this group those who could profit the most from meetings such as this are conspicuous by their absence.

May I address some remarks to the physicians in the audience, to justify the belief of the oral diagnostician that it is highly important to preserve the natural structures of the mouth as far as is consistent with the health of the patient. Or to put this in different language, preservation of the mouth structures in active function is highly consistent with the maintenance of general health and, in many instances, actually is responsible for the prevention or cure of conditions that we are prone to believe due to diseased teeth. I shall comment on only one phase of this problem which has to do with work of a very competent physiologist of the younger group, A. C. Ivy. He has traced a series of digestive disturbances to incomplete and improper mastication such as, cardiospasm, chronic dilatation of the esophagus, delayed emptying of the stomach, stomach indigestion, hyperacidity, gastric ulcer, pylorospasm, etc. He has produced typical gastric ulcer in experimental animals, such as rabbits, by appropriate methods based on this hypothesis. This seems to me to be important as we are prone to think that gastric ulcer is to be considered as one of the results of focal infection of the teeth and that it is forerunner of gastric cancer. The *idiosyncrasy* of many indi-

¹ Dorrance, Oral Surgery Clinics, Dental Cosmos. 70:405 (1928).
² Bell Text book of Pathology, p. 112.

viduals to certain articles of food, such as cabbage, onions, cucumbers, etc., in his opinion is not a true idiosyncrasy, but in a large number of instances is due to incomplete mastication, resulting in long retention of large fragments of these foods in the stomach. I speak of this merely to justify this point of view of the oral diagnostician and not to discuss a subject which in itself might serve for a full evening's program. I wish to urge physicians who seek the service of dental consultants to encourage this type of cooperation and to act as energetically in conserving mouth structures where indicated as in eliminating teeth that are inimical to health. It is my thought that such service is much more constructive than that offered by the radical type of dental consultant who is prone to condemn every structure not entirely above suspicion.

It is my impression that the able dental consultant has great faith in the reliability of the Roentgenographic examination although he is keenly aware of its limitations and of the difficulties encountered in its interpretation. He knows that it is only one of a number of diagnostic resources and even under the best of conditions hesitates to press an opinion based solely on the information supplied by it. He is and must be a good judge of what constitutes adequate Roentgenographic examination and of the quality of the films that be submitted for study. It is to be regretted that the Roentgenogram has fallen into a measure of disrepute, because I am quite confident that this has happened largely because a very considerable proportion of the films made are of such a character as to practically nullify interpretation and because routine examinations in many cases are wholly inadequate and incomplete. This is especially true of the Roentgenographic examination of pulpless teeth. I know of a number of papers that deal with the deficiencies of this diagnostic procedure, particularly comparison between Roentgenographic and bacteriological studies of pulpless teeth in which the former makes a rather bad showing. However, on the other hand, equally competent investigation has demonstrated, I believe, that if the Roentgenographic examination is sufficiently thoroughly done, so as to expose the apex at a number of different angles and so as to produce well differentiated films, the discrepancies between the pathologic and Roentgenographic findings can be reduced to a figure lower than that for any other type of laboratory examination. But I do want to emphasize my belief that although Roentgenographic interpretation is relatively simple, it should be made by one who is thoroughly familiar with the anatomic structures of the parts examined, with the pathologic processes that induce changes in these structures and with the limitations and technique concerned with its use. I must repeat that I believe that Roent-

genographic evidence by itself is not a sufficient foundation for an oral diagnosis.

The process of infection which eventually involves the apical space and hence produces changes that can be recorded in the Roentgenogram is ordinarily sufficiently rapid to be seen in the films soon after its beginning. But there is a group of cases that is becoming more common and in which this is not true, because the apical changes are either late or do not appear at the time the case receives clinical consideration. It is in this group that Roentgenographic examination is deceptive. For the most part these are limited to pulp infections under such large restorations as amalgam fillings, inlays and crowns. For some cause, little understood, such infections are often limited to and encapsulated practically within the coronal pulp, particularly of bicuspid and molar teeth and in such forms must be considered as potential foci of infection. Because the Roentgenogram is negative and because of the absence of the vagaries of the clinical symptoms an accurate diagnosis is difficult. All of the signs and symptoms may be associated with neighboring pulpless teeth which are always under suspicion so that one may be led by this kind of reasoning into a serious diagnostic error. A single illustration may demonstrate these points, at least in part. A young woman complained of severe, neuralgia-like pain in the upper bicuspid region and parallel to the distribution of the second branch of the fifth cranial nerve. In this region she had a pulpless bicuspid which was at once suspected as the cause of her trouble, but all therapeutic measures employed to relieve it short of extraction were without effect. After two sleepless nights without any measure of relief despite the use of sedatives, some consideration was given to more remote teeth that might be diseased. A lower bicuspid carrying a large inlay was carefully examined and because of slight variations from normal reactions, it was thought wise to investigate it farther. Removal of the inlay and opening the pulp chamber disclosed pus under pressure, drainage of which promptly relieved all symptoms. It is in the solution of problems such as this that I think that the dental consultant can be of great value.

On the whole, in the interpretation of the information supplied by the laboratory, the average practitioner of internal medicine is a keener judge than the dental consultant. But there are certain phases of this interpretation that present distinct difficulties in the solution of which the former is decidedly handicapped. This seems to be particularly true when it has to do with the pathological examination of biopsy material. In two conditions the clinical findings and the laboratory reports deserve special consideration. Epithelial changes and proliferation in the specimens removed from the mouth are often of a note-

worthy and puzzling character, not only of the mucous membrane covering, but also of the epithelium found in the space between the tooth and the bone, in apical granulomas and in root cysts. They are of such a character that the pathologist without much experience in the examination of such material is prone to make a diagnosis of malignancy. I have come to distrust such opinions as the result of many experiences of this kind. In the same vein, I suspect, many of you are familiar with the opinion of at least one prominent surgeon that all epithelial structures found in apical granulomas are to be diagnosed as suspicious of adamantinoma, a slowly malignant form of epithelial tumor; an opinion that would warrant such excessive surgical interference in treating them that the end results would be ghastly. The prognosis of the giant cell tumor of the gums, sometimes called giant cell sarcoma, is entirely different from the giant cell sarcoma of the long bones. In such cases the interpretation of the oral diagnostician is usually much sounder than that of the general pathologist or general surgeon. In one other respect in the interpretation of laboratory reports the oral diagnostician may be of some service to both patient and physician, and that has to do with the correlation of mouth findings and laboratory reports where the latter are positive for *B. fusiformis* and the spirillum of Vincent. Not all of these are to be accepted as bona fide cases of a specific stomatitis. It must be a matter of great moment to all individuals concerned that early in such diseases as the leukemias, agranulocytosis, etc., the mouth smears are quite typical of an uncomplicated ulcerous stomatitis. I have purposely omitted the subject of syphilis from this paper, although it may well have had a place. But the part played by it is pretty well known by physicians. It may be dismissed with the observation that, as a rule, physicians are more helpful to dentists than vice versa, in solving the problems that arise in connection with its diagnosis and the treatment of the lesions found in the mouth. There is a very interesting association of mouth conditions with many of the skin eruptions treated by dermatologists and well known to the latter group, as some of the best descriptions of these mouth lesions are from the pens of such men as Fordyce, Pusey and Wise. One puzzling property of the mouth lesions is their tendency to persist long after the return of the skin to normal. A corresponding tendency is their appearance in the mouth before the skin is affected. I do not have the space to discuss adequately the possibilities of such an association between the dental consultant and the dermatologist, for any that may be interested, there is a good deal of material in the discussion of a paper of Dr. Gilmer's by Dr. Wm. Pusey, *Journal of the American Dental Association*, Vol. 14, page 774.

All this may seem to have little to do with the relationship of the diagnosis of oral infection to the occurrence and distribution of systemic disease which might be considered by many of you to be either the only or the principal topic to be covered in this paper. No one can realize more clearly than I do the form of the question that is either directly or impliedly asked of the oral diagnostician in connection with this problem each time a case is referred to him. Is this arthritis, this iritis, this nephritis, this stomach ulcer, etc., caused by mouth infection? And this is precisely the form of question that he cannot answer. I feel confident that this is true in spite of belief in certain quarters that with the assistance of highly specialized and rather complicated laboratory tests such information may be supplied with reasonable accuracy. Whether that information is determined by the inoculation of susceptible animals with infected material from mouth lesions, or by the delicate complement deviation test, or by attempting to grow suspected organisms on the patient's whole blood, or by other devices, it is, I believe, only reliable to a degree that merely hints at the possibility of cause and effect. In any case, therefore, the problem is resolved into a matter of opinion and judgment, attributes that are cultivated only by long clinical experience. With such a precarious foundation, one would be foolhardy to claim such omniscience in oral diagnosis as to answer positively and without any reservation the questions propounded at the beginning of this paragraph.

The best that oral diagnosis has to offer is, therefore, qualified. It may be stated in any of the following forms. Infection is present in this mouth. Infection may be present in this mouth. It is probably not present. There is every reason to believe that infection is not present. In any case the removal of all demonstrable infection will be advised, and in no case will the elimination of organs or structures be countenanced where there is every reason to believe infection is not present. The attitude of the dental consultant toward the middle groups should, I believe, be determined by the exigency of the situation, guided by the belief that because the situation is desperate, treatment, though not logical, must be correspondingly radical. I see no other escape from this condition at the present time, as unsatisfactory as it may seem. To promise more is to discredit the whole proposition in the end. The temptation to venture opinions that are not justified by this form of reasoning is great, and some dental consultants are more susceptible to such influences than others and, more or less hypnotized by their altruistic enthusiasm, they issue prognostic promissory notes that are never redeemed.

In the final analysis the urgency and exigency of any given situation has to be determined not by the dental consultant but by the physician;

the former merely supplies all available information as to the condition of the oral structures and the medical consultant determines the type of treatment to be followed. It is my thought in this connection that the ideal dental consultant should be becomingly modest in this relationship and that, if in a certain sense, he knows too much about medicine, he will not function successfully.

The items listed and discussed in the preceding pages constitute a service that is distinctly worth while without any attempt to glorify such a specialized practice. I am strongly convinced

that the men who have been most successful in this field have arrived at this distinction because they have had great ability, fine character and an undivided interest in their work, and not merely because of the character and length of their formal training in educational institutions. We need fewer oral specialists in the field of medicine and more dentists who can work with physicians in an advisory capacity concerning such matters as have been discussed in this paper and, if you please, more physicians who know more about disease processes and the practice of medicine and less about dentistry.

A MODERN HEALTH TRIANGLE—PHYSICIAN, DENTIST, PATIENT

By ALFRED WALKER, D.D.S., NEW YORK, N. Y.

Read at the Joint Meeting of Organized Medical and Dental Professions at Hotel Pennsylvania, New York, November 30, 1931.

THE fact that this program has been arranged to include both physicians and dentists, and also the fact that it is only one of an increasing number of joint meetings of the two professions, indicates an accepted conviction that the mouth and body are very closely related. Therefore, it is unnecessary to elaborate on the need for co-operation between the medical man and the dentist. On the other hand, it seems to be in order to study the respective limitations of the two fields, as well as to consider the opportunities presented to the practitioners of each, to help the other.

The opportunities for co-operation in the two fields, are, perhaps, more numerous than is usually thought. Because of the great interest which has developed in recent years, in the study of focal infection diseases, it has come to be almost taken for granted that the physician sees in dentistry chiefly a means for rounding out his diagnosis in such cases as are believed to have a focal infection background. It is true that such cases are very numerous, and that the incidence of infections of the jaw is so great in our population that the diagnosis of these oral infections is very frequently needed.

We have heard so much about focal infection, and so much investigation, both clinical and laboratory, has been carried on, that we are apt to think there is little still to be learned in this field. However, this is far from being the case. Not only is the pulpless tooth still debatable, but we have many other types of possible foci about which neither the dentist, physician or research worker are in entire accord. The method of trial and error must still be used in a large number of cases, and this situ-

ation makes it clear that much further research in this field is needed. In this connection, it is interesting to refer to a paper by Dr. James L. Zemsky, read at the recent meeting of the American Dental Association, in which he urges that a clinical research on focal infection cases be carried on by general practitioners, who have an opportunity to keep in touch with their patients over a considerable period of years. Such research might also well be carried on in conjunction with a similar study by the general medical practitioner. As a means to such an end, I would urge that all medical records carry the name of the patient's dentist, and that all dental records carry the name of the patient's physician. I have been following this procedure for some time, and have found it to be most valuable.

In this respect, my practice has brought to light a most interesting and unexpected situation, which is that a considerable number of patients, when asked for the name of their physician, have stated that they have no regular family physician. Even those who gave the name of a physician are very often found not to have had a physical examination except when actually ill. Such a situation suggests at once an opportunity for co-operation of dentist and medical man, which may be of inestimable value to the patient.

However, opportunities for co-operation do not center solely in focal infection cases. Dentistry today is concerning itself most actively in nutrition. This is both from the standpoint of prevention of dental disease, but also in its treatment after it has made its appearance. Because of this interest stimulated by the research work of such investigators as McCollum, Mrs. Mellanby, Howe, Hanke and

MODERN HEALTH TRIANGLE—WALKER

others, the dentist is tempted, and in fact, urged from many quarters, to advise and actually prescribe for his patients along the lines of diet.

The research worker studying the fascinating subject of vitamins, for instance, and finding that he can produce certain well defined effects by dietary means, suggests to the dentist that by describing certain diets, he can control dental caries and periodontal disease.

Since most of the suggested diets are made up of foods which have been in use for a great many years, he feels no hesitation in recommending very definite diets to his patients.

Because of the natural limitations of his education and opportunities for evaluating various physical conditions, he is not in a position to go into this field quite as freely as might at first glance seem to be permissible.

I should like to sound a note of warning in this matter. I believe that the variation in individuals, which is so much greater than that in animals, makes it important that the question of diet should be left largely in the hands of the medical men. One reason for this word of caution is, that it may frequently happen that the diet, which is apparently suitable for correcting some dental condition, may have an adverse influence on some condition elsewhere in the body, and might, therefore, produce untoward effects. Carrying this thought a step farther, we find the dentist being urged not only by the research worker, but also by the manufacturers, to prescribe therapeutic preparations. These range from cod liver oil, which has been used in medicine for a great many years, to irradiated ergosterol, iron and calcium bearing compounds, and finally, to light therapy.

All of these may be accepted as having a definite value for the treatment of certain abnormal and diseased conditions of the body. That they may have harmful effects, especially in individual cases, is not so commonly recognized. Their use should certainly be in the hands of the medical man, or they, at least, should be prescribed after consultation with him. Exceptions to this dictum are, for instance, the use of ultra-violet radiation and similar therapy, by the dentist locally and for purely local treatment.

As an instance of the importance of seeking the co-operation of the physician in the field of therapy, for influencing the general nutritional status, I should like to refer to a recent article concerning researches on the effect of cod liver oil and Vitamin D concentrates, carried on in Norway. It was found that these preparations produced a perceptible and possibly harmful influence on the heart, as revealed in the electro-cardiogram. How

serious this influence is, has still to be determined, but it is obvious that the effect on individuals having heart defects, might be serious.

Dentists are becoming increasingly concerned over the condition of the teeth in pre-school children. These children show an alarming incidence of deep, penetrating caries, especially in the deciduous molars. The result is that when they reach the age for entering school, their teeth have frequently become hopelessly involved and require multiple extractions to relieve the child's system of the burden of focal infection. These extractions almost inevitably induce serious irregularity of the permanent teeth, leading to still further dental complications.

Not only is it difficult for the dentist to reach and successfully deal with the pre-school child in a satisfactory way, but even the best efforts of this kind frequently avail but little in checking the extension of the carious process. When we add to this the fact that such workers as Hesse state that their researches convince them that nutritional programs to be effective, must start practically at birth if not before, we see a most important argument as to why the physician should be consulted early in the life history of the individual, for the purpose of guarding against dental disease.

It is unnecessary for me to call the attention of physicians to the researches in nutrition, conducted by those who are so largely interested in dental health. I think it is in order to urge the physician to give this subject earnest thought whenever he is called in to advise the expectant mother, or to supervise the care of the newly born infant. Attention to nutrition at these times, should materially decrease, if not prevent, dental disease at a later period in life.

It may be of interest to refer briefly to an editorial in a recent issue of the Journal of the American Medical Association, in which it was noted that the saliva of some individuals contains anti-bodies effective against diphtheria and other diseases. This opens up an interesting field in its possible relationships to the question of both caries and periodontal disease. A study of immune individuals along this line, might well bring out information of great value.

Another field in which the assistance of the physician is needed, is that of periodontal disease, or so called pyorrhea. This disease manifests itself chiefly in the adult, and while its etiology is very frequently associated with purely local factors, many cases have an undoubted systemic background. Therefore, the assistance of the physician is urgently needed. However, it is a fact that in many instances,

the conventional physical examination, and even very searching blood examinations, have failed to reveal the systemic factor or factors. It is possible that this phase of diagnosis is still a subject for laboratory study, or in other words, that it is beyond the realm of routine medical practice as yet. However, it seems possible that a careful examination of a series of patients having marked susceptibility to periodontal disease, might reveal some condition common to all, which has heretofore been overlooked, but which might constitute the key to this very distressing and commonly occurring condition.

Having briefly reviewed the various relationships in which the interests of physician and dentist have a common ground in regard to the welfare of the patient, it remains only to suggest the limitations of each in regard to the management of their patients. The dentist should remember that he is working in a highly circumscribed field in whose local domain he may well expend all of his ingenuity and knowledge. He should be aware of the inter-relationships of the mouth and body, but when he wishes to influence mouth health by other than local measures, which may have an effect on other parts of the body as well, he should consult with the physician and place that part of his projected treatment in the hands of the medical man.

On the other hand, the physician should realize that the teeth and jaws are made up of structural elements quite different from those

of other parts of the body, and that the treatment of diseases in these tissues, even when it has a partially systemic etiology, is highly local in its nature. For example, efforts to treat periodontal disease by general therapy, are foredoomed to failure, and even the surgery of the mouth has such distinctly local peculiarities and consequences that it should be left entirely to the dentally trained practitioner. As an instance of the need for the limitation of fields of practice, it may be interesting to note that in the medical specialties such as ophthalmology, when a patient is found to have some local disturbance, which appears to be the result of a systemic condition, the ophthalmologist, although medically trained, refers his patient to an internist for physical examination, diagnosis and treatment.

In conclusion, I will say that the consideration of both dental and medical fields indicates that practitioners in each field, can be most helpful to each other, and that the best interests of their patients will be served by even a fuller co-operation and consultation than is customary at the present time.

I am not of the belief that it is necessary or desirable to attempt to define in detail, the limitations of each field, but believe that the training and experience of each practitioner, will enable him to say how far he should go in the treatment of his patients, and also when it is for the interests of the patient that he should call upon his colleague for advice and assistance.

MEETING OF PHYSICIANS AND DENTISTS

The official organizations of the Dentists of Greater New York held a three-day session early in the winter of 1931, the opening day of the sessions of 1931 being held on Monday, November 30. The program was under the joint auspices of the two District Branches of the Dental Society of the State of New York and the five county medical societies located within the limits of Greater New York. The program of the two other days was devoted to dental subjects.

The papers read on the opening day of the meeting were on subjects of mutual interest to both physicians and dentists, and were eleven in number—seven by physicians, three by den-

tists, and one by a practitioner who was a doctor both of medicine and dentistry. These eleven papers compose the scientific department of this issue of the Journal.

The dentists will repeat the plan of last year's meeting, and will conduct a four-day session beginning on Monday, December fifth, 1932, in the Hotel Pennsylvania. The program of the first day will be conducted jointly by the dentists and the physicians, with a program of equal interest to both.

The tentative program of the annual meeting of the Medical Society of the State of New York next Spring includes a joint session with the State Dental Society.

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For list of officers of County Medical Societies, see this issue, advertising page xxx.

INSTITUTIONS AND INDIVIDUALS IN THE PRACTICE OF MEDICINE

Every sick person is an individualist, and demands the individual attention of his doctor. He likes to feel that his physician is constantly thinking over his condition, and is applying every device known to medical science, including that of deep personal concern. Cut off almost entirely from his accustomed associations, his activities are constantly restricted to the four walls of his

room, and a visit of his doctor becomes an expectant event in his life. His individuality is intensified by his sickness, and he demands an individual service to himself along three lines:

1. Release from worry and apprehension.
2. Relief from pain and discomforts.
3. Restoration to health and strength.

Impersonal science affords poor relief from

worry and apprehension when it takes frequent samples of blood for examination, and subjects the patient to uncomfortable tests and delays the answers for hours and days

The patient is dissatisfied with impersonal service when the doctor refuses to apply anodynes for pain, on the ground that they "mask the symptoms" of the diseases

Impersonal science may accomplish the restoration of health, but the patient is likely to say "I have a mighty good doctor, but I have got to do exactly as he says", and in his next sickness he will call a doctor with less science and more sympathy

When a person is dangerously sick, he lays aside his personal preferences and calls the highly scientific doctor; but in ordinary sickness he discredits skill and turns to the doctor who gives him personal satisfaction and relief from worry and apprehension. The personal influence of the physician is a real element in the treatment of the sick

The system of private practice which is dominant in the United States tends to apply a maximum amount of the personal influence to the doctor, for patients choose those physicians whom they like and will obey. On the other hand, the system is sometimes criticized because under it the distribution of medical service is often unequal, owing to the inequalities in wealth, nearness to hospitals, availability of specialists, and also the variance in the ability of the physicians, and also to the prejudice of the people

Social service workers and statisticians propose public clinics and various other forms of state medicine as sure means for applying the highest

grade medical service to all people. There are those who believe that a mass distribution of medical service is possible. These idealists omit to estimate the very great value of the personal influence of the doctor upon the sick patient. Moreover the idealists are wrong in believing that a high grade medical service can be bought off-hand. Civil service examinations often fail to estimate the personal qualities of the doctor, for they do not indicate his friendliness, his common-sense, and his devotion to duty

The Medical Society of the State of New York, and that of other states, are a unit in seeking to maintain the method of private practice as the basic system of distributing medical service. While the scientists recognize the necessity of State care of certain groups of patients, such as the insane and the feeble minded, yet it is seeking to prepare doctors to enter these fields in their private practice

While public clinics are sometimes necessary, as in giving diphtheria immunizations because of the ignorance of the people, yet departments of health are encouraging the people to obtain their treatments from their family doctors

The indigent sick are receiving excellent treatment from their family doctors where the county medical societies have made working agreements with the county commissioners of welfare

The experience of New York State indicates that the personal method of private practice will continue to be dominant, and that institutional, or State, medicine will prevail only in those co-operative forms of service which individual family doctors cannot give

LOOKING BACKWARD

This Journal Twenty-Five Years Ago

Doctors as Office-Holders This Journal of November, 1907, contains an editorial urging doctors to seek to hold office, because of the peculiar value of the service which they can give to the public along public health lines. The Journal says

"The science of medicine has brought about as far as it can the solution of the tuberculosis problem and the typhoid fever problem and a host of other similar problems which are as vital to the people as are the lives of their children, and in fact they are the same. Medicine has shown how these diseases may be exterminated. Now these matters are up to the State. That means their future develop-

ment is in the hands of politics. And shall our profession, after having hunted down the monster of typhoid, and gotten it at bay in its lair, cowed and at our mercy, desist from giving the *coup de grace* because the stroke must be applied with the bloody lance of politics? We need more doctors in our legislative chambers and in our executive offices. Medicine has long ago grown past the function of administering to those who perchance have fallen sick. It has become the most salutary department in the commonwealth, and we are not raising up men fast enough to administer its new offices. We may justly be accused of slothfulness in our duty to the people."



MEDICAL PROGRESS



Psychogenous or Habitual Vomiting.—Within the last few years, says Wilhelm Klimke, cases of "psychogenous vomiting" have repeatedly been admitted to the psychiatric and nerve clinic of Münster University, and the patients subjected to needless operative procedures on stomach and intestines, on the assumption that there must be recognizable changes in the organs of digestion. The result was always negative, because the cause lay in the region of the psyche, and required to be treated by suggestive therapy. Four illustrative cases are detailed, in which no organic changes could be discovered, but which were characterized by a reactive depression of spirits of mild degree, and a more or less psychopathic personality. Here the psychogenic factor was the constitution, and all the four patients were cured by appropriate treatment directed toward influencing the psyche. A dysphoric state of mind was common to all: the psychic experience had an unhappy content, which after long continuation broke down the psychic resistance. We know from physiology that the motility of the stomach is increased by the vagus, and diminished by the sympathetic, and that the afferent fibers for the act of vomiting run through the vagus. Slight irritation of the vagus may, accordingly, increase peristalsis and lead to spasms and complete breakdown of the pylorus. We must believe with Kraepelin that our movements of expression were originally movements of defense, and that ready vomiting, as for example in the dog, is a useful condition, a purposeful reaction, and that accordingly hysterical phenomena have been of use in the evolution of the human race. There are individuals in whom the vomiting center is more easily excited than in others. Kraepelin regards this as a sign of inhibition, of infantile immaturity. And since it is in psychopathic personalities that conditioned reflexes are long maintained, vomiting may serve in these individuals as an inhibitory reflex. In all such cases operative procedures must be avoided as useless. The only measures promising success, as these cases show, are psychotherapeutic influences.—*Deutsche medizinische Wochenschrift*, August 19, 1932.

Lobeline in Urticaria.—E. Moser writes to the *Schweizerische medizinische Wochenschrift* of September 24, 1932, that he has found great relief in his own person from lobeline in urticaria. He says he has suffered since childhood from repeated outbreaks of urticaria, but does not state the cause, whether allergic or not. Early in July of last year he suffered from a severe eruption of wheals, and having recently

noticed a recommendation of lobeline for the treatment of such an attack, he tried the remedy in dose of 0.01 (15/100 grain) hypodermically. Within half an hour the eruption disappeared and with it went the furious itching, and strange to say he has had no attack since. He has treated six patients for urticaria since that date with lobeline (15/100 grain for adults and 7/100 grain for a 12 year old boy), and with one exception successfully. The exception was the case of a woman who was cured of her first attack but suffered from repeated relapses. In looking up the literature of the therapeutics of urticaria the writer found lobeline recommended by A. Frank in the 1932 edition of his "Moderne Therapie."

Congenital Heart Disease in Children.—Although congenital affections of the heart constitute only about 1/5 of the cardiac diseases in children and although the diagnosis of this condition is extremely difficult and there is no specific treatment of it in any case, nevertheless it is by an attempt to make a differential diagnosis that we can learn more of the problems of the transmission of the defect and can give an intelligent prognosis. This is the consideration that has moved Dr. Howard B. Sprague to undertake a study of this subject. He discusses eight types of congenital heart disease which can usually be diagnosed. 1. *Ectopia cordis*. This is easily diagnosed. The duration of life is from one to fifteen months. 2. *Hypertrophy*. The diagnosis of this condition is made by exclusion, namely, by finding a generally enlarged heart in a young child, with no evidence of pericardial effusion or valvular disease. The maximum reported duration of life is four years, and the mean sixteen months. 3. *Dextrocardia*. The diagnosis is obvious if one is on the lookout for this anomaly, especially if it is part of a true situs inversus. When uncomplicated this condition is well tolerated. 4. *Roger's disease*. The diagnostic signs consist of a rough systolic murmur and thrill in the midsternal region or at the third and fourth intercostal spaces near the sternum. The oldest reported case in Abbott's series of autopsical studies was 44 years of age and the average 13¾ years. The author has had a case of this affection under observation for over seven years, in a girl of seventeen who is symptom-free and able to engage in mild athletics. 5. *Patent ductus arteriosus*. Mild degrees of this defect are not uncommon. The diagnosis is indicated by a continuous murmur and thrill maximal at the second left interspace near the sternum. The mean duration of life is 33¾ years, the oldest case recorded was in a man of sixty-six. 6. *Subaortic and*

aortic stenosis The presence of a systolic murmur and thrill at the second right interspace in an infant is strongly suggestive. The oldest reported case was in a person 58 years old, the average age being $22\frac{2}{3}$ years. **Tetralogy of Fallot** This combination of lesions is by far the commonest cause of cyanosis in congenital heart subjects surviving beyond the first few months of life. The average duration of life is $11\frac{1}{2}$ years. The oldest case on record was in a man dying at the age of $59\frac{3}{4}$ years. **Coarctation of the aorta** There is sometimes a narrowing of the aorta at the point where the ductus arteriosus leaves it. This leads to hypertrophy of the heart because of its forced contraction to overcome this stricture. A compensatory circulation is effected by anastomoses of the internal mammary and epigastric arteries and through the dilated intercostal vessels. The latter may at times be seen as strongly pulsating vessels over the chest wall, particularly at the back, and there results a pressure atrophy of the lower margins of the ribs which produces a characteristic scalloping in the x-ray plate. The x-ray also shows a small aortic knob. There may be a long systolic murmur over the upper part of the back. The condition has been observed up to the age of 92 years, but the average duration of life is $33\frac{1}{2}$ years.—*The New England Journal of Medicine*, September 22, 1932

Dental Sepsis and Cardiac Pain.—Donald Hall, writing in the *British Medical Journal*, September 24, 1932, II, 3742, cites a case which affords a striking example of the danger of the pulpless and painless tooth. The patient, an obese, flabby man, aged 52, when first seen in October, 1930, was in very poor condition. Since December, 1929, he had become progressively dyspnoic and for a month had been subject to attacks of retrosternal pain on exertion. The electrocardiogram gave abundant evidence of coronary thrombosis brought about by the massed effect of repeated minute infarctions. The outlook was discouraging, but as all his remaining teeth were carious or dead their removal was decided upon. They were extracted under local anesthesia, one at a time, while he was kept in bed on a high protein diet, with three tablets of calcium diuretin daily. When seen again, in June, 1931, he had lost three stone in weight and was wearing temporary dentures. His pain had nearly disappeared though he still had reminders of it out of doors when he walked quickly. In the house he could move with perfect comfort and had no pain on walking upstairs. The apex of the heart had moved in half an inch and was now in the fourth space, four inches from the mid sternal line. The electrocardiogram showed a striking change, having become physiological the only abnormality being a small bizarre QRS in Lead III of no pathological significance. He had since contin-

ued to do well and had resumed his professional work.

Harmful Effects of Nitroglycerin—In the course of a study in which therapeutic doses of nitroglycerin were given to 110 patient under direct observation, Samuel H. Prodigar and David Aymn observed alarming reactions to the drug in four instances. The reactions in these patients were similar in many respects. There was a marked and rapid fall in blood pressure, and the pulse rate was greatly diminished. The constitutional symptoms consisted chiefly of cold perspiration, weakness, restlessness, anxiety and pallor. In two cases the blood pressure became indeterminate and the pulse could not be palpated. In one of these heart block developed, and in the other the course of a cardiac infarction appeared to be unfavorably influenced. A record was made of the electrocardiographic changes which occurred during the reaction in these two cases. In the first case there occurred, in succession, sinus bradycardia, atrio-ventricular nodal rhythm, and finally, complete heart block. With the return of the blood pressure to a normal level, the heart block disappeared and an electrocardiogram taken several months later showed no evidence of it. In the other two cases there were marked slowing of the pulse rate, great drop in blood pressure, and severe constitutional symptoms. The authors point out that the fact that patients do not complain of unusual symptoms following the taking of nitroglycerin is not an indication that they have not experienced a toxic or unusual reaction. As a result of their experience they believe it should be made a rule in both private and hospital practice never to give nitroglycerin for the first time to patients without personal supervision, and observation of the blood pressure and pulse. Usually a small initial dose (1/200 to 1/300 of a grain) is given. Epinephrine is kept readily available. As the harmful effects of nitroglycerin may be easily overlooked in coronary thrombosis, the drug should be discontinued at the earliest indication of this condition.—*American Journal of the Medical Sciences*, October, 1932 CLXXIV, 4

The Treatment of Hypertony—Recently C. L. G. Pratt and I. Harris (*The Lancet*, Sept. 19 1931, p. 629) showed that the administration of certain drugs in cases of hypertony caused an increase of blood urea and non protein nitrogen a depression in the water excretion function, and a decrease in the cardiac reserve. Writing in *The Lancet*, September 10 1932, CLXXXIII, 5689, Harris reports the results of an attempt to compare certain methods of treating hypertony in relation to their action on blood chemistry. The patients were kept in bed with no treatment during the first week. During the second week collosol sulphur was injected, 3 c.c. daily. During the third

week six pints of water were given daily. In other cases a salt-free and sugar-free diet was taken in the second week, mainly carbohydrates in the third, and a pure meat diet in the fourth week. With the sulphur treatment reduction of blood pressure was accompanied by an accumulation of deleterious substances in the blood. The same phenomenon was observed when the pressure fell as the result of heart failure. This suggests that in cases of hypertony high blood pressure is needed to maintain a normal blood chemistry. Under the water treatment the blood pressure was definitely reduced, while the blood chemistry remained normal. The large amount of water lessens the viscosity of the blood and thus diminishes cardiac strain. It also enables the kidneys to excrete urea and allied substances more easily. A salt- and sugar-free diet reduced and a protein diet increased the blood pressure. The blood urea was somewhat increased under the salt- and sugar-free diet and somewhat diminished under the meat diet. The low blood urea after meat may be due to the diuretic properties of this substance. The increase of blood urea after a salt-free diet was by no means so pronounced and constant as when pressure-reducing drugs were given. After venesection there was a pronounced temporary reduction of blood pressure, while the blood chemistry remained normal. Harris concludes that it is undesirable to employ drugs for the purpose of reducing blood pressure. On the other hand, the drinking of large quantities of water should be encouraged. The diet should be of low protein content, and excessive amounts of salt should be avoided.

Coronary Thrombosis.—John Parkinson emphasizes the essential unity of angina pectoris and coronary thrombosis. He defines angina pectoris as a serious disease of the heart which is manifested by pain across the chest or at the sternum, often extending into the arms, and which is due to deficient coronary circulation or imperfect blood supply. There are two main varieties, but their specific pain differs only in intensity, and their pathology has a common factor in myocardial ischemia. When the pain is brief and depends on exertion, it is known as angina of effort; it rises from the ischemia due to localized arterial spasm. When the attack of anginal pain is unrelated to exertion and sufficiently prolonged, and complicated by symptoms of infarction, it is known as coronary thrombosis, and arises from the resulting necrotic ischemia. Between these two varieties all grades of angina pectoris are encountered, in the main depending on the severity and extent of the coronary disease and the effect on the myocardium—whether the ischemia is transient (arterial spasm) or permanent (infarction). There is thus no justification for the faulty classifications and confusing terminology which has grown up around the term “angina pectoris.”

Angina of effort may be initiated, complicated or terminated by coronary thrombosis. It is fairly inclusive of all cases of angina pectoris excluding coronary thrombosis, patients with spontaneous attacks of pain at rest being almost invariably subject to angina on exertion. Too much stress has been laid on the gravity of angina pectoris. Although it is inseparable from a risk of sudden death, this may be deferred for years. Too little attention has been centered on the anginal life and its management. Patients with angina often find life worth living and that they will live longer than is commonly supposed.

Once the diagnosis of coronary thrombosis is made, there must be quick relief from pain. Morphine is indispensable. Digitalis is indicated directly the signs of congestive heart failure appear. Amyl nitrite and trinitrin have little or no effect in allaying pain, and taking into account the fall in blood pressure they are contraindicated. Ample rest in bed is essential to favor healing of the infarct. Six weeks should be the minimum period in a case of coronary thrombosis. Convalescence should be as long as the patient can afford, at least three months, better still if he can abstain from work for six months.—*British Medical Journal*, September 17, 1932, ii, 3741.

The Physiology of Old Age.—According to Max Flesch, an old age symptom to which little if any attention has been called consists in a failure of the ability to regulate balance. He observed this in himself at the age of 75, when he could no longer ride a bicycle because of inability to find his balance in mounting, 4 to 6 attempts being necessary before he could get into his seat and travel. Also in riding over uneven places on hilly roads he had lost his old assurance and was compelled to go more slowly. There was no question of muscular fatigue, for the author at 81 can walk over a hilly country for 5 hours without the least fatigue. The disturbance seems rather to lie in the field of coordination with reference to control of balance. He had no discomfort from climbing 100 steps to a high tower, but could not, as formerly, gaze down over the country without a sense of dizziness. The first 20 steps of the descent, in the form of a winding staircase, he had to take one at a time, step by step; the next 60, built on square lines, presented no difficulty for the ordinary mode of descent, but again the last 20, in winding form, required the childish mode of taking stairs, notwithstanding all attempts at self-control. Once again upon even ground, all uncertainty disappeared. This disturbance evidently is not due to a peripheral involvement of the sense of balance. It appears rather to be the result of a central change of old age, which is felt first in the field of the gradual decline of memory for events and impressions of recent years. But there is no doubt that this disturbance of the sense of balance is the forerun-

ner and cause of many other old age symptoms. The slow walk and the bowed head of aged persons who are otherwise still robust is attributed by the author, on the basis of his own experience to this balance disturbance, which in his own case at last was the first symptom to appear—*Munchener medizinische Wochenschrift*, September 9, 1932

Treatment of Furuncles and Paronychias with Oxygen—After employing carbon dioxide treatment for some 6 years, C Salzmann states that in December, 1931, he began to use oxygen injections in suitable cases of furuncles and paronychias, and that he now makes use of this method in all cases of this kind and in other inflammatory dermatoses, with most gratifying results. The oxygen under high tension is conveyed from a steel tank through a rubber tube, by means of an apparatus for reducing pressure and measuring dosage, and introduced into the center of the furuncle through a sterile glass cannula of varying form and caliber, or a fine injection needle, according as the furuncle is already open or remains closed. If by cannula into a crateriform opening, it is blown in with the cannula under pressure of $\frac{1}{4}$, $\frac{1}{2}$, or 1 atmosphere, which is controlled according to the effect it produces. In the course of a day 5 to 10 such injections may be given, as needed. The tissue of the furuncle softens up with astonishing rapidity, so that a furuncle is emptied spontaneously within 24 to 48 hours, and not heard from again. Although painful, injections into the center of a furuncle cannot be compared from this point of view with incision. Soon after the first application the pains abate, the fever recedes, and the patient can sleep once more. In the emptied furuncle oxygen is injected again for a few times and so helps to remove the remainder of the necrotic tissue. No kind of medicament is necessary after this treatment. The furuncle promptly diminishes in size, the granulating base becomes dry and the secretion scanty. Oxygen assures a rapid healing process and only slight scars, such as no other form of therapy has left in its wake. Furuncles of the nose and upper lip especially are cured with remarkable speed and without any disagreeable complication. These injections produce an energetic resistance in the inflamed tissue observed by the author in all his cases, which now number about 100. The biologic action of oxygen in the tissues is not fully understood, and as yet no histological investigations of its action have been undertaken, so far as the author knows. While it has a mechanical hydraulic effect it is clear that it also acts biochemically upon the inflamed tissue. The defense of the inflamed tissue is increased by the absorption of oxygen

as is revealed clinically by the rapid breaking down of the inflammatory focus and the prompt arrival of a healing process—*Schweizerische medizinische Wochenschrift* August 27, 1932

Attempts at Treatment of Diabetics with Diathermy of the Pancreas—The accidental observation that patients who for one or another reason were subjected to diathermy of the dorso-lumbar region experienced an increased sense of hunger led Zoltan Rausch to assume that in such cases the pancreas had lain within the field of the diathermy current and that the stimulation of the function of the gland had resulted in a condition analogous to a hypoglycemic reaction. To test the validity of this supposition he applied diathermy to the pancreas of healthy subjects, and found that the blood sugar curve was lower than in those not so treated. He then carried his tests to diabetic subjects applying diathermy for $\frac{1}{2}$ -1 hour upon the region of the pancreas after determining the fasting blood sugar content. He used a 60 sq cm electrode upon the pancreas region and one of 100 sq cm upon the abdomen, suiting the intensity of the current to the tolerance of the patient. In most cases the blood sugar picture fell 0.02-0.04 mg per cent, in a few it rose a little instead, and in a small number it remained unaffected. It was also found that in certain cases a full hour of treatment was necessary to produce a result, while others responded better to a shorter application. Apparently the quality and the quantity of the reaction depend mainly on the extent to which the number of the Langerhans' islands has been reduced. Since this is dependent on the gravity of the diabetic condition, Rausch's further experiments were directed toward determining the influence of diathermy of the pancreas upon the glycolytic property of the blood of diabetic patients. The effect proved to be most favorable in light cases. Here it was possible under systematic treatment to increase carbohydrate tolerance considerably, and even to maintain it for a time without the aid of diathermy. In moderately severe cases the practical value of the treatment was less, for tolerance could only with difficulty be increased any further, insulin doses up to about 40 units being the largest that could be replaced by diathermy. The mechanism of the action of this form of diathermy can hardly be regarded otherwise than as an increase of insulin production. Diathermy causes a hyperemia in the pancreas which improves the oxygen supply of the cells and results in stimulation of glandular activity. This in turn increases the insulin content of the blood and raises the glycolytic capacity of the organism—*Deutsche medizinische Wochenschrift*, August 5, 1932



LEGAL



MALPRACTICE—LIABILITY FOR EXPERIMENTAL DIAGNOSIS AND TREATMENT

By LORENZ J. BROSNAN, ESQ.

Counsel, Medical Society of the State of New York.

The law imposes the duty upon a physician to keep abreast of the times and in his treatment of his patient to use the approved methods in general use among competent practitioners in the locality where he practices. While, however, the law places upon the physician the duty of keeping abreast of the times, it does not permit him to experiment upon his patient; and if he uses means and methods in his treatment which are not "approved" methods and injury results to the patient, the law holds him responsible for the consequences of such experimentation. A malpractice action which recently arose in one of the Pacific Coast States, brought against a duly licensed osteopath, illustrates this principle although the case is an extreme one, and presents a state of facts which should be of interest to the medical profession. In this editorial we shall detail the facts and circumstances so that the ruling of the court may be fully appreciated.

A child about nine years of age had complained of pain, and her mother called in a doctor who diagnosed her condition to be that of osteomyelitis. He advised that the child be taken to a hospital, x-rays taken and an operation performed. It seemed that the child had shown talent as a toe-dancer and the mother, wishing to avoid the possibility of a scar being left on the child's leg from an operation, sought to remedy the condition without operative procedure. A neighbor referred her to a certain Dr. T who was a duly licensed osteopath known to treat various ailments without surgery.

The neighbor communicated with the said Dr. T, asking him whether he could treat the case of a bone ailment of a nine-year old girl. Word was given back by the said osteopath to the effect that in order to determine whether he could treat the case, he required a specimen of the child's handwriting. This was given to Dr. T and with it he proceeded to make his diagnosis, using what he called a radio-diagnostic machine. The said machine was a mechanism contained in a bakelite covered box equipped with several dials, several of which were for measuring the intensity of the disease, and one of which was used for "turning on the different kingdoms, such as animal,

vegetable, mineral, electrical and ether waves." From a terminal on the machine an electrode was provided to be placed over the patient's solar plexus, from which an "emanation" from the patient was supposed to pass to a condenser in the machine, there to be amplified some thousands of times and sent on from the machine by another electrode applied to the solar plexus of a healthy individual. The idea seems to have been that the healthy individual would react in such a way that Dr. T, manipulating the dials and making certain tests with a circular rubber rod, could ascertain the severity of the disease. Each disease apparently was supposed to have a definite wave length and could be detected by a reading of the dials.

In using this machine Dr. T made a preliminary diagnosis by connecting up the machine with a metal plate, against which was placed the paper with the child's handwriting. Dr. T was assisted by his wife, Mrs. T, who, after the machine had been connected to the paper, bared her abdomen. Dr. T applied the electrode and stroked Mrs. T's abdomen with his rubber rod and worked the dials on the "radio." Mrs. T then exclaimed that she felt a pain in the left leg and hip. Dr. T thereupon declared that the child should be brought to him for immediate treatment which would not require an operation.

The child was brought to his office and a further "diagnosis" was made. Electrodes from the machine were placed against the child's neck, stomach and leg, and again Mrs. T bared her abdomen and Dr. T, operating the machine, rubbed the rubber rod over it. Mrs. T was then heard to state: "Yes, this is the pain in the leg. It is a very bad pain." Dr. T advised the child's mother that his diagnosis indicated to him that he could cure her condition in a very few days without operation. He declared that the ailment was meningitis, the germs of which instead of settling in the patient's back had lodged in the leg. The mother of the child turned her over for treatment to Dr. T.

The next step undertaken was to determine what kind of applications were to be used on the child's leg and again the radio device was used in a similar manner, as a result of which

Dr. T determined that hot vinegar should be applied to the affected parts of the child. The child remained in the care of Dr. T and his wife for three weeks. The chief treatment throughout was exposure to the "radio" machine for three or four hours daily. In addition to said treatment the child was placed in what was described as a "vit-o-net or magnetic blanket" for a considerable period during which the patient perspired freely. After several days of treating the child, Dr. T and his wife went on a vacation leaving the child under the care of a Dr. P, who continued the "radio" treatment with the aid of a nurse upon whose abdomen the rubber rod was applied as before. This same device was also used to determine what foods the child should be given and it was read to indicate plums, pears and grapes and to contraindicate oranges.

The child's condition failed to improve as a result of the extraordinary treatment which she received, but on the contrary the pain increased and the swelling spread throughout the left leg. Finally the mother became alarmed and took the child away from Dr. T and his "radio" treatment and consulted another doctor. Examination revealed that the osteomyelitis had become so far advanced that the leg required amputation in an attempt to save the child's life. An orthopedic specialist was called into the case and the leg was amputated near the knee. Drainage was provided and two subsequent operations were found necessary to clear up the infection. After a long period of hospitalization the child was brought out of danger, but she remained an invalid for months thereafter.

Suit was subsequently instituted on behalf of the infant against the osteopath, charging him with negligence and unskillfulness in the treatment of the child, and seeking to recover large damages by reason thereof. The case was tried and the jury found against the defendant in the sum of \$30,000. An appeal was taken which resulted in an affirmance of the judgment against the said Dr. T in the sum of \$20,000, the court stating that in its opinion the verdict rendered by the jury was somewhat excessive although there could be no reversal on the question of liability.

One of the points urged to the appellate court was that the record showed that the defendant had been employed to render treatment to the infant by his "radio" method, and that having done so to the best of his ability he should escape liability. The court, in determining against this contention, said in part:

"When one, with his own inventions, holds himself out as a healer of diseases and accepts employment as such, he must be held to the duty of reasonable skill in the practice of his profession, and when he seeks fields of experimentation he will be held accountable for any damages proximately caused by the unskillful treatment of his patients.

"This court passes no judgment on the theory of his profession, the source from whence it came, nor the appliances with which he works. With these we have no concern, but rather look to the results. The law holds him responsible if he does his work unskillfully although he does the best he can. He assumes the risk of the quality and accuracy of his genius or inventions. On the same principle one who holds himself out as a medical expert and accepts employment as a healer of diseases but who relies for diagnoses and remedies on some mechanical invention of his own, which invention is unknown to all schools of medical science, in like manner takes the risk of the quality and accuracy of such mechanical invention. If these move so imperfectly or inaccurately that he fails to treat the patients with reasonable skill he is liable for the consequence. The law takes cognizance of the question: Did the practitioner render the services he undertook in a reasonable manner? That question as applied to the appellant, the Jury, on sufficient proofs, we believe, have answered in the negative.

"* * * Simply because a person claims or pretends to have invented a machine for diagnostic and curative purposes which is not known or recognized by any school of medical science, which machine possesses certain powers of healing peculiarly within the knowledge of the inventor, is no reason why other persons who know nothing of the workings of such machine but who have knowledge acquired from education, experience and practice, are not competent to judge whether the treatment administered is negligently or carelessly done. Otherwise, as we have heretofore indicated, any non-professional person might undertake to treat certain disorders, and if appellant's position be correct in law, it matters not how carelessly or negligently his acts were performed because no one could be obtained of the same pretensions to testify with respect to such treatment and the injured person would be without remedy.

"This contention we think untenable and has been so held by other jurisdictions."

FEE SPLITTING

At the September, 1932, meeting of the Executive Committee of the Medical Society of the State of New York, the resolution which forms the subject-matter of the following letter was brought up for discussion. Several members of the Committee raised the question as to whether this resolution violated Section 32 of the Prin-

ciples of Professional Conduct of the Medical Society of the State of New York. The matter was referred by the Executive Committee to Legal Counsel for an opinion. The opinion was duly rendered to the Executive Committee, which then ordered the same to be published in the NEW YORK STATE JOURNAL OF MEDICINE.

June 28, 1932.

Dr. Daniel S. Dougherty, Secretary.
Medical Society of the State of New York,
2 East 103rd Street, New York City.

Dear Dr. Dougherty.

At the meeting of the Executive Committee held on June 16, 1932, the following excerpt from the report of the Reference Committee of the House of Delegates on the report of the Committee on Medical Economics was referred to me for opinion:

"In that vast majority of families where there is a limit of ability to compensate professional service if there has been a bona fide participating service and responsibility, then with the knowledge of the patient, the lump sum which is possible should be divided between the participants according to the respective bona fide service rendered by each." (Journal, June 15, 1932, page 751.)

In my opinion, the quoted excerpt violates the letter and the spirit of Section 32 of the Principles of Professional Conduct of the Medical Society of the State of New York adopted June 1, 1931. Section 32 provides as follows:

"Physicians shall not give nor offer nor shall they undertake or promise to give, either directly or indirectly, any gift, gratuity, commission or bonus in consideration of or in return for the referring, recommending or procuring of any patient for medical, surgical or other treatment or in consideration of or in return for the referring, recommending, or procuring of any per-

son, specimen or material for diagnostic or other study or work; nor shall any physician request, solicit, accept or receive any such gift, gratuity, commission or bonus."

The above quoted Section was framed and designed to prevent "fee-splitting," whether directly or indirectly. In my opinion, the recommendation under consideration would permit "fee-splitting" to flourish under the color of legal sanction from the Medical Society of the State of New York.

The vice of "fee-splitting" is not cured by disclosure to the patient that the fee is to be divided, nor does Section 32 of the Principles of Professional Conduct sanction the division of fees with the consent of the patient.

It is true that the excerpt in question provides that the total sum be divided according to the respective bona fide service rendered by each physician, but this only provides a loophole which would certainly be taken advantage of by those addicted to "fee-splitting." This certainly would permit "fee-splitting" under the claim that it was done with the consent of the patient and for bona fide service rendered.

I believe that approval of the excerpt in question would constitute an extremely dangerous precedent. In my opinion, it is repugnant to and in conflict with the aims and purposes of Section 32 of the Principles of Professional Conduct.

With kind regards, believe me,

Faithfully yours,

(Signed) LORENZ J. BROSNAN.



NEWS NOTES



FIRST DISTRICT BRANCH

The twenty-sixth annual meeting of the First District Branch of the Medical Society of the State of New York was held on Friday, October 14, 1932; in the Rockland Country Club House, Sparkhill, Rockland County, New York.

The First District is composed of three county societies of Greater New York—Bronx, New York and Richmond—and four county societies in the lower Hudson River valley—Rockland, Orange, Westchester and Dutchess-Putnam. (See map in Journal of Oct. 1, page 1137).

The President, Dr. Charles D. Kline, of Nyack, presided, and Dr. Isidore J. Landsman, of Bronx County, was secretary. About one hundred members were in attendance. The morning was given over to a golf tournament. Luncheon was served at noon in the Country Club, after which representatives of the State Society gave brief addresses.

Dr. Chas. Gordon Heyd, President, described the economic condition of the family doctor and the growing cost of government resulting from paternalistic services, including those along medical lines.

Dr. Orrin Sage Wightman, Editor-in-Chief of the Journal, emphasized the value of the New York State Journal of Medicine as a record of the activities of physicians and their organizations. If doctors read the Journal faithfully, they would find an answer to most of their perplexing problems.

Dr. James E. Sadlier, Chairman of the Com-

mittee on Public Relations, explained that the objective of the Committee is to demonstrate how doctors may assume leadership in all forms of medical service, both private and public. The members of the Committee are always available to advise county societies in the solution of their local problems.

A telegram was sent to Dr. D. S. Dougherty, Secretary of the State Society, wishing him a speedy recovery from his illness.

The following officers were elected for the next two years to take office at the close of the annual meeting in 1933.

President, C. Knight Deyo, M.D., Poughkeepsie.

First Vice-President, Samuel J. Kopetzky, M.D., New York.

Second Vice-President, Edward C. Podvin, M.D., Bronx.

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Treasurer, John T. Howell, M.D., Newburgh.

The scientific program was carried out as follows:

"Neurogenic Basis for Abdominal Sign Symptoms," Edward M. Livingston, M.D., New York.

"The Adrenals in Health and Disease," Max A. Goldzieher, M.D., Brooklyn. (See N. Y. State Jour. of Med., Sept. 1, 1932, page 1001).

"Compulsory Health Insurance Abroad," Emil Koffler, M.D., Bronx. (See N. Y. State Jour. of Med., April 15, 1932, page 437.)

FOURTH DISTRICT BRANCH

The twenty-sixth annual meeting of the Fourth District Branch of the Medical Society of the State of New York, was held on Tuesday and Wednesday, October 11th and 12th, 1932, in Schenectady, N. Y.

The Fourth District consists of ten county societies, extending from the Mohawk River to the St. Lawrence and Lake Champlain. (See map in Journal of October 1, 1932, page 1137). This District has 512 members of whom 100 were present.

The President, Dr. Frank vander Bogert, presided, and Dr. Sylvester C. Clemens, of Gloversville, was secretary.

The program of the morning session consisted of a series of clinics and demonstrations at the Ellis Hospital. An instrument for

measuring the temperature of the skin was shown. An important use of the instrument is the determination of the site of a thrombus in the leg, by taking the temperature at various points. The thrombus is located at the level at which the temperature of the skin begins to show a decided drop.

There was a demonstration of the Emerson respirator, a new instrument for maintaining artificial respiration for days at a time, as in infantile paralysis.

A skin clinic was held by Dr. A. B. Van Vranken and Dr. C. F. Rourke, both of Schenectady.

Dr. F. J. Garlick showed a case of hemato-genous jaundice, and one of polycythemia, or an increase of the red blood cells.

QUALIFICATIONS FOR HEALTH OFFICERS

The Public Health Council of the State, at its meeting on May 20, 1932, enacted new qualifications for local health officers.

These qualifications classify all local health officers in two grades known as Grade I and Grade II, and apply to all appointments made after June 1, 1932.

To be appointed a county health commissioner or a health officer of a city over 50,000 population the candidate must have the qualifications specified for Grade I.

Candidates for appointment as health officer of a town, village, consolidated health district or a city with population less than 50,000 must have the qualifications specified for Grade Two.

The qualifications for Health Officer Grade I, require not less than four years of full-time experience in a responsible public health position; or not less than two years of such experience and a course in public health approved by the Public Health Council of at least one scholastic year in residence, or other combination of experience and training deemed by the Public Health Council to be the equivalent.

Physicians who have fulfilled any of the four following requirements may qualify for appointment as Health Officer Grade Two:

(a) If they have completed *before* June 1, 1932, a course in public health of less than a year in residence approved by the Public Health Council, and have had four years of experience as a part-time health officer.

(b) If they successfully complete a course in public health of less than a year in residence that has been approved by the Public Health Council as qualifying for this Grade *after* June 1, 1932. This and the preceding paragraph refer to correspondence courses and short post-graduate courses that have been approved.

(c) If they have completed an *undergraduate* course in public health that has been approved by the Public Health Council as qualifying for local health officer this grade.

(d) If they have had other experience, training, and education in public health work which in the opinion of the Public Health Council is the equivalent of any of the above, they may be considered as qualified.

The Public Health Council may waive the qualifications as to any proposed appointment under special circumstances specified in writing.

The Albany Medical College is cooperating with the New York State Department of Health in providing a course in Public Health specified by the Public Health Council as qualifying for Health Officer Grade Two. The course will consist of twenty reading and study assignments which physicians can pursue at their own offices. Once each month, or eight times during the course, a full day will be spent with the District State Health Officer, or the director of the course. At these conferences practical application will be made of the material contained in the reading assignments. The second week of June will be a residence week in which all candidates will meet for a full week of conferences, discussions, and demonstrations.

A special committee of the Public Health Council consisting of Dr. F. F. Russell, Dr. Thomas Parran, Jr., and Professor Henry N. Ogden met with the Deans and the Professors of Public Health of all the medical schools in New York State at the State Office Building in New York City on September 20, 1932. The purpose of the meeting was to endeavor to formulate plans for courses in Public Health for undergraduate medical students so that, when graduated, they would be eligible for appointment as Health Officer Grade Two.

A continuation committee was appointed to give the subject further study and formulate recommendations. These will be considered at an early meeting of the Public Health Council.

PAUL B. BROOKS,
Deputy Commissioner of Health.

COLUMBIA COUNTY

The annual meeting of the Columbia County Medical Society was held at Hudson, on October 5, 1932.

The following officers for the year 1933 were elected:

President, L. Van Hoesen, Hudson.
Vice-President, F. C. Maxon, Chatham.
Sec'y-Treasurer, H. C. Galster, Hudson.
Censors, W. D. Collins, Hudson; H. J. Noerling, Valatie; C. L. Nichols, Philmont; E. Niver, Hillsdale; S. V. Whitbeck, Hudson.
Delegate to State Society, S. J. Post, Philmont,

Alternate to State Society, L. J. Early, Hudson.
Dr. John Dardess of Chatham was elected to membership.

During the afternoon session two scientific papers were presented:

Dr. Arthur F. Holding of Albany gave a paper on the use of the bronchoscope in the treatment of pulmonary disease.

Dr. H. C. Galster described the Vienna Clinics, and related his experience while attending them.

L. VAN HOESEN, M.D., *Secretary.*



NEWS NOTES



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measuring the temperature of the skin was shown. An important use of the instrument is the determination of the site of a thrombus in the leg, by taking the temperature at various points. The thrombus is located at the level at which the temperature of the skin begins to show a decided drop.

There was a demonstration of the Emerson respirator, a new instrument for maintaining artificial respiration for days at a time, as in infantile paralysis.

A skin clinic was held by Dr. A. B. Van Vranken and Dr. C. F. Rourke, both of Schenectady.

Dr. F. J. Garlick showed a case of hemogenous jaundice, and one of polycythemia, or an increase of the red blood cells.

Luncheon was served at the Hospital at 1 p.m.

The program of the afternoon session, which was also held at the Hospital, was as follows:

1. "The Hospital Management of Diabetes," Howard I. Grice, M.D., Resident Physician, Ellis Hospital, Schenectady. Discussion by Dr. L. F. Schiff, Plattsburg.

Among the interesting exhibits shown by Dr. Grice was that of a comparison of lumps of sugar with other foods which equalled them in caloric value.

2. "Treatment of Obstructing Lesions of the Prostate," Joseph F. McCarthy, M.D., New York City.

3. "Acute Appendicitis," A Clinical Analysis of 320 Cases, Denver M. Vickers, M.D., Mary McClellan Hospital, Cambridge, N. Y.

4. "Head Injuries," Lorimer J. Austin, M.D., Kingston, Ontario.

A dinner was held in the evening in the Hotel Van Curler at seven o'clock, after which representatives of the State Society were introduced.

Dr. Chas. Gordon Heyd, President, spoke briefly on the mounting costs of social service, especially those in which public health is associated.

Dr. Orrin Sage Wightman, Editor-in-Chief, called attention to the efforts of the officers and committeemen of the State Society to make the Journal represent all forms of progressive thought of a medical nature.

The subject of "Iroquois Medicine" was presented in a vivid manner by Dr. Eric Stone of Providence, R. I. Dr. Stone showed lantern slides illustrating the means and methods used by Indians, including flint knives, herbs, counter irritation, diaphoretics, diuretics, cathartics, and emetics. These physical methods were used in ordinary cases, but when they failed, the medicine man resorted to dances and incantations.

Dr. Lorimer J. Austin gave an address on the subject of the 18th Century Physician. Dr. Austin illustrated his talk by lantern slides of pictures by William Hogarth, an English caricaturist, painter, and engraver, 1697-1764, whose pictures revealed the office equipment of the 18th Century doctor, as well as that of the quack—such as a crocodile suspended from the ceiling with a lantern issuing from his side.

The addresses by Dr. Stone and Dr. Austin were excellent examples of cultural work—that of a doctor's avocation along lines relating to medicine.

Wednesday morning was devoted to a demonstration of recent scientific developments in the electrical line, held in Rice Hall of the Research Laboratories of the General Electric Company. This exhibit was of a striking interest to physicians, especially that part which had a direct bearing on medicine.

The Schenectady meeting was highly successful, owing to the breadth and variety and practical value of its program.

FIFTH DISTRICT BRANCH

The twenty-sixth annual meeting of the Fifth District Branch of the Medical Society of the State of New York was held on Tuesday, October 4, 1932, in the Elks Club, Oneida, N. Y. This District is composed of the seven counties of Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga and Oswego, located in the north central part of the State. (See map on page 1137 of the October first Journal). The District contains 762 members of whom about 120 attended the meeting. The presiding officer was Dr. E. R. Evans of Utica, President, and Dr. F. C. Sabin, of Little Falls, was secretary. Luncheon was served in the Hotel Oneida, after which officers of the State Society were introduced. The guests were welcomed by Dr. D. H. Conterman, President of the Medical Society of the County of Madison, under whose auspices the meeting was held.

Dr. Chas. Gordon Heyd, President of the Medical Society of the State of New York, called attention to the breadth of the work of the State Society, especially the evolution of scientific medicine, and the development of

methods of the practice of civic medicine by the medical profession as a group.

Dr. Frederick H. Flaherty, President-elect of the State Society, spoke of the growing consciousness of the individual members regarding their responsibility for the reputation of the medical profession as advisers of the municipality in distinction from the individual citizens.

Dr. Thomas P. Farmer, Chairman of the Committee on Public Health and Medical Education spoke of the value of the graduate lectures offered to the members through the county societies, and urged the local officers to indicate their preferences and wishes regarding both the subjects and the lecturers.

Dr. O. S. Wightman, Editor-in-Chief, called attention to the nine departments of the Journal, and the special value of each division to every member of the Society. He stressed the importance of reports of the District Branch meetings, and the recording of the activities of the constituent county societies.

Dr. T. Wood Clarke, of Utica, discussed the present-day status of allergic conditions, and

reviewed each phase of the subject in a concise form that could be easily understood by the family doctor. The paper was discussed by Dr. William A. Groat and Dr. Joseph R. Wiseman, both of Syracuse, and Dr. George M. Fisher, of Utica.

Dr. Harold E. B. Pardee, of New York City, correlated the symptoms and pathology of arteriosclerotic heart disease, and illustrated his points with lantern slides. He traced the development of the disease from the time of the involvement of the coronary artery to the stage of thrombosis and the resulting muscle degeneration, and closed with a discussion of the electrocardiogram. The paper was a general review of the modern concept of heart disease. Discussion was opened by Dr. C. D. Post of Syracuse.

Three papers were read at the afternoon session as follows:

"Surgical Measures for the Relief of Intractable Pain," Byron Stookey, M.D., Neurological Institute, New York City.

Dr. Stookey discussed an operation known as "cordotomy" performed for the purpose of interrupting the fibers of temperature and pain sensation in the spinal cord in cases where there existed no other possible method of relief of pain. He showed slides of sections of the spinal cord illustrating the group of fibers

under discussion and showing the changes in the cord after section of these fibers. Such an operation was shown to be useful in carcinoma and other neoplasms which have become inoperable and are causing pain. Also in *tabes dorsalis*, in eroding abdominal aneurisms and similar conditions. Further discussion of Dr. Stookey's paper was opened by Dr. F. S. Wetherell of Syracuse and continued by Dr. Eugene Boudreau of Syracuse and Dr. Hyser W. Jones of Utica.

"Some Indications for Plastic Surgery," Leon E. Sutton, M.D., Syracuse, N. Y.

Dr. Sutton's paper was an exceedingly interesting one with excellent slides showing the various steps and procedures in the relief of the deforming scars and other plastic work. The discussion of Dr. Sutton's paper was opened by Dr. E. H. Carpenter of Oneida.

"Study of Surgical Complications—Incidence and Treatment," Murray MacG. Gardner, M.D., and Howard N. Cooper, M.D., Watertown.

The third paper was read by Dr. Cooper and referred to a number of common and rare post-operative complications. It met with a very favorable reception by the audience and provoked considerable discussion. The discussion was opened by Dr. Thomas P. Farmer of Syracuse who was followed by a number of others including Dr. Wetherell of Syracuse.

EIGHTH DISTRICT BRANCH

The Eighth District Branch of the Medical Society of the State of New York held its twenty-seventh annual meeting on Thursday, October 6, 1932, in "The Barn," Le Roy, N. Y., with the first Vice-President, Dr. F. J. Schnell, North Tonawanda, in the chair, and 150 members present.

A noon-day luncheon was served, after which representatives of the State Society were introduced.

Dr. Frederick H. Flaherty, President-elect, called attention to the opportunities of the State Society to demonstrate the achievements and ideals of the medical profession in the sight of the people.

Dr. W. D. Johnson, past-President, called upon every member to practice the best possible brand of medicine and surgery, in order to forestall the assumption of leadership by lay organizations, who plan to substitute impersonal mass treatments in place of the friendly contact of the family doctor.

Dr. O. S. Wightman, Editor-in-Chief, urged the members to take a personal interest in the Journal, because it represents the aims and aspirations which dominate every scientific physician in the land.

Dr. Harry R. Trick, Trustee, spoke of the coordination of the activities of the State Society through the Trustees.

Dr. Thomas P. Farmer, Chairman of the Committee on Public Health and Medical Education, spoke of the graduate courses of instruction offered to doctors and the public health activities which the people expect the medical societies to foster.

A minute's silence, with the members standing, was observed in memory of Dr. John A. Card, who died on June 28th while Speaker of the House of Delegates.

The scientific program consisted of four papers, as follows:

"Carcinoma of Colon and Rectum," Frank H. Lahey, M.D., Boston, Mass.

"Lessons from Diabetic Children for Diabetic Adults," Elliott P. Joslin, M.D., Boston, Mass.

"Medical Economics," Charles H. Goodrich, M.D., Chairman, Committee on Medical Economics, Medical Society of the State of New York.

A moving picture, showing the "Mechanism of the Heart Beat and Electro-Cardiography," L. M. Hurxthal, M.D., Boston, Mass.

QUALIFICATIONS FOR HEALTH OFFICERS

The Public Health Council of the State, at its meeting on May 20, 1932, enacted new qualifications for local health officers.

These qualifications classify all local health officers in two grades known as Grade I and Grade II, and apply to all appointments made after June 1, 1932.

To be appointed a county health commissioner or a health officer of a city over 50,000 population the candidate must have the qualifications specified for Grade I.

Candidates for appointment as health officer of a town, village, consolidated health district or a city with population less than 50,000 must have the qualifications specified for Grade Two.

The qualifications for Health Officer Grade I, require not less than four years of full-time experience in a responsible public health position; or not less than two years of such experience and a course in public health approved by the Public Health Council of at least one scholastic year in residence, or other combination of experience and training deemed by the Public Health Council to be the equivalent.

Physicians who have fulfilled any of the four following requirements may qualify for appointment as Health Officer Grade Two:

(a) If they have completed *before* June 1, 1932, a course in public health of less than a year in residence approved by the Public Health Council, and have had four years of experience as a part-time health officer.

(b) If they successfully complete a course in public health of less than a year in residence that has been approved by the Public Health Council as qualifying for this Grade *after* June 1, 1932. This and the preceding paragraph refer to correspondence courses and short post-graduate courses that have been approved.

(c) If they have completed an *undergraduate* course in public health that has been approved by the Public Health Council as qualifying for local health officer this grade.

(d) If they have had other experience, training, and education in public health work which in the opinion of the Public Health Council is the equivalent of any of the above, they may be considered as qualified.

The Public Health Council may waive the qualifications as to any proposed appointment under special circumstances specified in writing.

The Albany Medical College is cooperating with the New York State Department of Health in providing a course in Public Health specified by the Public Health Council as qualifying for Health Officer Grade Two. The course will consist of twenty reading and study assignments which physicians can pursue at their own offices. Once each month, or eight times during the course, a full day will be spent with the District State Health Officer, or the director of the course. At these conferences practical application will be made of the material contained in the reading assignments. The second week of June will be a residence week in which all candidates will meet for a full week of conferences, discussions, and demonstrations.

A special committee of the Public Health Council consisting of Dr. F. F. Russell, Dr. Thomas Parran, Jr., and Professor Henry N. Ogden met with the Deans and the Professors of Public Health of all the medical schools in New York State at the State Office Building in New York City on September 20, 1932. The purpose of the meeting was to endeavor to formulate plans for courses in Public Health for undergraduate medical students so that, when graduated, they would be eligible for appointment as Health Officer Grade Two.

A continuation committee was appointed to give the subject further study and formulate recommendations. These will be considered at an early meeting of the Public Health Council.

PAUL B. BROOKS,
Deputy Commissioner of Health.

COLUMBIA COUNTY

The annual meeting of the Columbia County Medical Society was held at Hudson, on October 5, 1932.

The following officers for the year 1933 were elected:

President, L. Van Hoesen, Hudson.
Vice-President, F. C. Maxon, Chatham.
Sec'y-Treasurer, H. C. Galster, Hudson.
Censors, W. D. Collins, Hudson; H. J. Noerling, Valatie; C. L. Nichols, Philmont; E. Niver, Hillsdale; S. V. Whitbeck, Hudson.
Delegate to State Society, S. J. Post, Philmont,

Alternate to State Society, L. J. Early, Hudson.
Dr. John Dardess of Chatham was elected to membership.

During the afternoon session two scientific papers were presented:

Dr. Arthur F. Holding of Albany gave a paper on the use of the bronchoscope in the treatment of pulmonary disease.

Dr. H. C. Galster described the Vienna Clinics, and related his experience while attending them.

L. VAN HOESEN, M.D., *Secretary.*

RENSSELAER COUNTY

The Medical Society of the County of Rensselaer held its regular monthly meeting in the Troy Health Center on Tuesday evening, October 11, with Dr. J. B. Burke, the president, in the chair, and Dr. Handron, secretary.

Dr. F. Sulzman, chairman of the committee on resolutions submitted a report on the death of Dr. T. A. Hull a pioneer of Roentgenology. Dr. Hull died at the Albany Hospital of coronary thrombosis at fifty-two years of age.

Dr. A. J. Hambrook, delegate to the State meeting, reported on the routine business of the society and its meritorious scientific program. He also reported on the meeting of the Third District Branch held at the Loomis Sanitarium (see the Journal of October 1, 1932, page 1137).

Dr. E. J. Hannan, representing the Troy health department of the public schools, stated that the department only renders first aid and physical diagnosis to scholars and does not give other treatments of any kind.

Dr. C. A. Hemstreet reported for the Public Relations committee that the committee had

met with representatives of the State Department of Health in regard to a study of the maternal mortality. He also recommended that the physicians consider the erroneous impression which seems to exist in regard to the service rendered patients admitted to hospitals as charity patients. Some of such patients were erroneously of the impression that the doctors serving them at such hospitals were paid employees.

Drs. Hemstreet, Green, Kivlin, Rainey, and Hambrook were appointed by the chair as a nominating committee for the 1933 officers.

The scientific program began with a paper by Dr. Charles R. Lewis on the subject "A Consideration of the Late Toxemias of Pregnancy."

The second paper was presented by Dr. S. Curtis on "Tumors of the Breast."

Dr. C. J. Handron read a paper on "Mitral Stenosis and Tuberculosis."

The meeting was well attended and the discussion showed keen interest.

WM. B. D. VAN AUKEN, M.D., *Reporter*.

DUTCHESS-PUTNAM COUNTY

A regular meeting of the Dutchess-Putnam Medical Society was held Wednesday, October 12, 1932, at Vassar Hospital, Poughkeepsie, N. Y. The meeting was called to order by the President, Dr. W. A. Krieger, at 8:40 P.M. Dr. Chas. Gordon Heyd, President of the Medical Society of the State of New York, then presided.

The following physicians were elected to membership:

Dr. F. M. Hedgecock, Poughkeepsie.

Dr. A. A. Rosenberg, Poughkeepsie.

Dr. M. William Lynn, Hyde Park.

Dr. Neil C. Stone of Poughkeepsie was received on transfer from Westchester County.

Dr. J. W. Poucher offered a memorial for Dr. Harris L. Cookingham, who died on June 28, 1932, in his eighty-second year. Dr. Cookingham was a native of Dutchess County. He was graduated from Albany Medical College in 1871, and practiced Medicine in Red Hook, in the northern part of his home county, for a full half century. He was a splendid example of the family physician—doctor, counselor, and friend to three successive generations of the families in that section. He was not only active all his life as a medical practitioner throughout a large circle, but was prominent as a citizen both in the civic affairs of his home town and as an influential layman in his chosen church. He was engaged in his work until a very few days before his death.

Dr. Cookingham was married May 18, 1870.

to Miss Mary G. Nicks, who died a short time before her husband. Four children survive them, one of whom is our fellow member, Dr. Barton M. Cookingham of Rhinebeck.

The members of this society wish to express their highest appreciation of his long, successful career in the medical profession, their sincere admiration for his character, and their deepest regret for the friend and fellow member they have lost.

Dr. James E. Sadlier presented a memorial of Dr. John A. Card, a leading member of the Society, who died on June 28, 1932, aged 55 years. (See this Journal, July 15, 1932, pages 874, 880, and 882.)

Dr. Chas. Gordon Heyd, President of the Medical Society of the State of New York, gave an address on the work of Dr. Card.

Dr. Frederic E. Sondern gave a paper on "Clinical Pathology and Diagnosis."

A letter from Commissioner Parran was read and referred to the Comitá Minorá.

Present: Drs. Heyd, Sondern, Krieger, Rogers, Marks, Peckham, Falliser, Storrs, Chapin, Appel, Breed, Harrington, Cronk, Herndon, Poucher, Deyo, Voorhees, Cavanaugh, Borst, Malvin, Rosenberg, von Tilling, Carpenter, Moffit, Rivnerberg, Green, Corbon, Lynn, White, Stoller, Warren, Sobel, Powell, Leonidoff, Toomey, McGrath, C. E. Lane, George Lane, C. A. Crispell, Thomson, Lewis, Gosse.

H. P. CARPENTER, M.D., *Secretary*.



THE DAILY PRESS



SPECIALISTS AS SEEN BY LAYMEN

Lay opinion of specialists is shown in the following editorial from the *New York Sun* of September 8, 1932:

"One exhaustive survey does not establish a fact, any more than one swallow makes a summer, but it is nevertheless encouraging to learn from the Committee on the Cost of Medical Care that data gathered by Dr. H. G. Weiskotten, dean of the Syracuse University College of Medicine, indicate that the tendency of medical school graduates to seek to become specialists has reached its zenith. As a matter of fact, Dr. Weiskotten's figures show merely that no greater proportion of the graduates of sixty-nine medical schools in 1925 limited their practice to a specialty than did the graduates of the same colleges in 1920. But because the tendency up to

1920 was altogether in the direction of an increasing concentration on specialization, Dr. Weiskotten believes that in the future fewer medical school graduates will deliberately plan to become specialists.

"This is encouraging to laymen, not because they distrust the specialist but because they trust the general practitioner. Physicians themselves would be the first to admit that division of labor in the field of medicine has been carried too far in the United States. The family doctor of old often had incomplete knowledge, but his wisdom was unsurpassed; the family doctor of today is not so common and familiar a figure, not so picturesque or eccentric, perhaps, but his knowledge is greater and his experience as enriching. It is good that the breed is not dying out."

CURED OF CANCER

The daily newspapers are giving considerable space to the American College of Surgeons, which is now meeting in St. Louis. The *New York Sun* of October 20 records the following encouraging evidence of the curability of cancer:

"More than 4,000 authenticated cases of cancer cure by surgery, radium treatment or both were reported by specialists to a session of the clinical congress of the American College of Surgeons here today.

"Added to the 1,263 cases already registered with the college and more than 3,000 others revealed by an incomplete survey of medical literature, these made a total of approximately 8,500 known cures in the United States and Canada.

"In each instance the patient treated was alive and well after five years, the period during which it is assumed the disease would reappear if not eradicated."

PARROT FEVER

The *New York Sun* of October 20th contains the following account of a new laboratory to study parrot fever:

"A parrot fever laboratory in southern California where science may explore mysteries of this disease is planned by the Public Health Service. Surgeon-General Hugh S. Cumming of the service, in announcing this today, said Secretary Mills had allotted \$10,000 to further research in psittacosis out of a treasury fund for preventing the spread of epidemic diseases.

"A very interesting evidence of the close intercommunication of continents, so that one part of the world is threatened by the disease in any other part," Dr. Cumming said in describing psittacosis from his personal acquaintance. His acquaintance began, he said, about three years ago, with a Sunday supplement story, which told of an opera troupe in the Argentine attacked by a strange disease, after a performance in which

birds were used as 'props,' Dr. Cumming said. 'I read it, with no particular sense of significance, and an Annapolis doctor read it the same way.

"But the very next day he noticed a sick parrot in the home of two patients whose ailment he had been unable to analyze exactly. He asked information of the health officer, and the Governor's office called me about it. I sent Dr. Armstrong over, and from that day on we've been finding out about—and fighting—psittacosis."

"The parrots brought into the Public Health Service laboratories here caused an epidemic in which eleven laboratory workers were stricken, one fatally. From its course, the scientists discovered that virus, not bacilli, as had been thought, was the cause of the disease; that parakeets as well as parrots were responsible; and that its best treatment was 'convalescent serum,' the injection into the blood vessels of the patient of serum from one recovered from the disease."

CHARITY, PRIVATE AND PUBLIC

Walter Lippman former editor of the *New York World*, writing in the *New York Herald Tribune* of October 20, discusses the field of public charity as distinguished from private giving Mr Lippman says

"In some cities sharp controversies have been brought on by those who insist that the starving have first call on the money available and that other kinds of social work must give way. In Denver, for example, there is an agitation demanding that the Y M C A, the Y. W C A, the Boy Scouts and Girl Scouts, and other organizations generally known by the depressing name of 'character-building' agencies, be excluded from participation in the funds of the Community Chest. The argument against them is in essence that the people have to be fed and that their characters can, for the time being, be left unattended.

"Those who have had long experience in the task of raising money for Community Chests say that, leaving aside all consideration of the value and necessity of normal social work, the fact is that the so called 'character-building' agencies are generally the pet philanthropies of well to do people. They believe in these agencies, and if they cannot support them through the general fund, they will support them outside the fund and give much less to it. The net result will be chaotic giving, in which some philanthropies will receive more than they absolutely need, and others for lack of powerful friends, will be grossly neglected. The expert in these matters concludes, therefore, that while the character builders ought properly be compelled to reduce their demands to the minimum of necessity, it would be a great mistake, from the point of view of raising the largest amount of money possible, to ignore them.

"However, it is not on this narrow basis that the problem ought to be considered. The social work of modern times is an attempt to deal with the physical, mental, and moral maladjustments of the young, the helpless, and the unknowing who are unprotected by their families and friends. The uprooting of human beings from the land, the concentration in cities, the breakdown of the authority of the family, of tradition and of moral conventions, the complexity and the novelty of modern life, and finally the economic insecurity of our industrial system have called into being the modern social work.

That in dealing with the consequences of modern life the social agencies are often be wildered, fussy, or pedantic in spirit and bureaucratic in method no one would deny. But their

usefulness is beyond all question, and will be denied by no one who takes the trouble to look into the matter. Life in the cities would be even more cruel and more destructive of human values than it is but for the social workers and their infinite gallantry and patience. They perform a function in modern society which is not a luxury but an absolute necessity.

"In times like these they are more necessary than ever. That applies most particularly to the 'character building' agencies. For the supreme evil of unemployment is that it is demoralizing. To provide food to keep men alive is an easy task in a country suffering from overabundance. The food exists, it can be had, it can be distributed, and if that were all there was to the problem of relief it would be a simple problem.

"But to keep men and women, young boys and girls from despair, from the hideous boredom of having nothing to do, from the crushing sense of not being wanted, of having no place in society and no work to do, of being a problem and not a human being—that is the real task of philanthropy in these long dreary days.

"The safeguarding of these human interests is the office of private philanthropy. Emergency relief of destitution caused by a general breakdown of industry is a public duty, and should not be allowed to destroy or seriously impair the work of private philanthropy. In so far as voluntary giving is not sufficient to take care of normal social work and of emergency relief as well, the burden of emergency relief must be shifted to the taxpayers."

Physicians will agree with Mr Lippman as he suggests that the burden of philanthropic service shall not be borne by private persons, as it would be by doctors treating the poor for nothing, but that it shall be borne by the community. Mr Lippman closes his article.

"The policy of depending upon private charity in the emergency has no foundation in principle. In so far as private gifts are adequate it is expedient not to raise the political question involved in a resort to public funds. But as the depression has continued and deepened, as the need has grown and private resources have diminished, the burden of emergency relief has in fact been shifted more and more from private donors to the taxpayers. It will undoubtedly have to be shifted much more this winter, and wherever the continuance of normal social work is threatened by the need for emergency relief, there the point has been reached where public money is unmistakably necessary."



OUR NEIGHBORS



GRADUATE COURSES IN NEW JERSEY

The supplement to the September issue of the *Journal of the Medical Society of New Jersey* contains the annual report of the Special Committee on Post-Graduate Medical Education which outlined the plan and courses given as follows:

"Professor R. H. Light, of the University Extension Division of Rutgers University, was designated by that Division to be in charge of Post-Graduate Medical Courses, and Dr. Harry H. Satchwell, a member of your State Society Committee, was appointed by the University as 'technical adviser' in Post-Graduate medical matters.

"By reason of the interest in and realization of the importance of this work, by the State Board of Regents last year, there was made available to the University Extension Division of Rutgers, for the prosecution of this year's work, sufficient funds to permit the University to reduce materially the fees for our courses. As a result of this, and of interest aroused by the study courses provided in previous years, your Committee has the gratification of reporting, for the instruction year just closed, the most successful year's work in its history in point of enrollment, number and variety of courses provided, and generally favorable reaction as expressed in the answers to questionnaires submitted by students. As a result of this policy of fee reduction, there has been, however, a small operating deficit, which has been generously absorbed by the University.

"Eight hundred and twenty students enrolled, for 25 classes, conducted in 13 centers, by 77 different teachers, 33 of whom came from New York, 1 from Newark, 1 from Boston and 42 from Philadelphia. Detailed lists of these courses, and of the faculty, and a financial statement are appended hereto."

The financial report of the courses in 1931-1932 is as follows:

"Expenses:

200 lectures @ \$50.00 each	....\$10,000.00
Travel Expenses of Lecturers...	1,071.47
Lantern and Rental Expenses...	301.00
Printing and Mimeographing....	490.41
Postage and Stationery.....	325.00
Telephone	295.00
Travel Expenses of University Extension Staff, Chargeable to Project	1,138.81
Salaries and Stenographic Services of University Extension Division Directly Chargeable to This Project	7,060.00
Proportionate Share of Office Overhead, etc., Not Including Administration, Which Is Carried on General Budget.....	795.00
	<hr/> \$21,476.69

"Income:

Twenty-five classes—	
675 Initial Enrollments	
@ \$15.00....	\$10,125.00
105 Duplicate Enrollments,	
@ 10.00....	1,050.00
40 Intern Enrollments	
@ 5.00....	200.00
	<hr/> \$11,375.00
820 Total Enrollments	10,101.69

"State Appropriation Allocated to Post-Graduate Medical Program 10,000.00

DEFICIT\$ 101.69"

STATE MEDICAL JOURNALS IN MAINE LIBRARY

The *Maine Medical Journal* of August pays its editorial compliments to the Journals of the Medical Societies of other States, in the following editorial:

"It seems to us a good idea to inform our readers that in the office of the *Maine Medical Journal* and in the library adjoining, a large number of medical journals from as many as thirty states in the Union are available at all times to medical men to read and think about. These magazines can be borrowed or read on the spot. More use, we insist upon it, should

be made of these exchanges. They keep us up-to-date as to American and foreign ideas and methods and thoughts on modern medical and surgical progress. We commend, for instance, regular reading of the *British Medical Journal*, and the journals of New York, Illinois, Indiana and other states are of great value. Thus in the June 18th number of *British Medical* we read a most promising paper on the abatement of the smoke nuisance existing all over the civilized world and a historical note on the obesity of

(Continued on page 1270 *adv. xvi*)

AN IMPROVED TREATMENT OF ARTHRITIS — A COMPARATIVE TEST

In a carefully controlled clinical investigation* of the comparative merits of Mono-Iodo-Cinchophen (Farastan), Cinchophen and Sodium Salicylate, the following results were obtained:

	FARASTAN Group I	Cinchophen Group II	Sodium Salicylate Group III
Pain:	Complete relief 90% Moderate relief 10%	No relief 90% Slight relief 10%	Complete relief 10% Marked relief 20% Moderate to slight relief 50% No relief 20%
Swelling:	Complete relief 75% Marked reduction 25%	No reduction 75% Slight reduction 25%	Complete reduction 10% Marked reduction 20% Moderate to slight reduction 45% No change 25%
Motion:	Complete restoration 80% Marked to moderate improvement 20%	Slight improvement 20% No improvement 80%	Complete restoration 10% Marked improvement 20% Moderate to slight 40% No improvement 30%

The author concludes that the marked relief of pain, reduction of swelling and restoration of motion is apparently due to the combined effect of cinchophen and iodine, made possible in the formula of Farastan.

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* P. G. Potenciano, Med. Jr. & Rec., Feb. 18, 1930.

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(Continued from page 1268)

good old Henry VIII. The annual address of the President of the Illinois State Medical Society, in their June number, is really noteworthy, with its frank statement of the causes of depression of the day and valuable remedies suggested. Then the *New York Journal* has every fortnight a number of small items of great value, for instance, in cases of malpractice, whilst an item on big fees in California, on page 768, demands attention from all practitioners. Last of all, at this time we notice a brief account in the *New England Medical Journal* of a small epidemic of tonsillitis arising from a single cow in Topsfield, Mass.

"Again we say, fellow members, widen your outlook by making closer acquaintance than of old with the files of the foreign and State medical journals on file in the office of our Medical Journal and the medical library adjoining.

"This office will gladly assist you in locating special articles and magazines."

The department of "Our Neighbors" of the *NEW YORK STATE JOURNAL OF MEDICINE* has quoted from the *Maine Journal* seven times during the past year, mostly records of the activities of the Maine Medical Association.

MAINE PUBLIC HEALTH ASSOCIATION

Lay public health activities in Maine are supervised and directed by a voluntary organization called the Maine Public Health Association, which was described in this *Journal* of June 1, 1930, page 676. This Association works in co-operation with the Maine Medical Association, as is shown by the publication of its annual report in the September issue of the *Maine Medical Journal*.

School health education has been conducted along the following lines:

Health habits promotions.

Six Point children (for conditions of grading see this *Journal* of November 1, 1930, page 1332).

Better teeth campaigns.

Contests in habits and health essays.

Public health nursing work was described as follows:

"Our staff nurses were carrying 32,774 individuals in our State for health supervision. These patients were distributed in 15 of our supervised services. Calls and demands for the nurses show a marked increase this year, many of them being for material relief or social welfare."

Tuberculosis work is described as follows:

"The only full-time worker is a registered nurse with Public Health Nursing Training. She

(Continued on page 1272—adv. xviii)

Modern diets often lack minerals

To-day, authorities are stressing the importance of the essential mineral salts. In addition to building sturdy bones, and blood rich in hemoglobin, these mineral elements aid metabolism and contribute to nervous stability.

Yet many modern diets cannot be depended upon to furnish the proper quota of minerals, and therefore millions of people suffer from the effects of demineralization. Cooking destroys a variable amount of the mineral value of foods—in some instances as high as 76 per cent.

To correct this loss and to remedy demineralization—with its attendant symptoms of nerve fag, neurasthenia, lowered vitality and loss of energy—a tonic rich in mineral salts is needed.

Fellows' Syrup contains the mineral salts of sodium, calcium, potassium, manganese, iron and phosphorus, together with the added metabolic stimulants—strychnine and quinine. Sixty years of clinical experience the world over testify to its value as a tonic.

Suggested dosage: A teaspoonful in half a glassful of water three or four times daily.

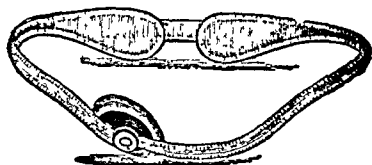
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(Continued from page 1270—adv. xvi)

has also had special instruction in the use of the x-ray machine, in the technique of taking x-ray pictures, and the giving and reading of the Von Pirquet test. The clinic program is sponsored and directed by a committee of physicians who are specialists in diagnosing tuberculosis. These physicians approve of all policies governing the set-up of the program and also make a substantial contribution in other ways.

"During the period July, 1931, to July, 1932, the following is a summary of the work of the Clinic Nurse:

Von Pirquet skin tests given.....	3,472
Positive reactors to above tests.....	636
Patients x-rayed	715
Chest examinations	191
Active cases of pulmonary tuberculosis...	

"It is difficult to evaluate our accomplishments through the Health Educational Service. During the past year we have been sending Tuberculosis Abstracts to 18 physicians and 32 nurses monthly. We have circularized these physicians to see if they wished the abstracts to be continued. In order to increase our list for this coming year, we have written the various County Medical Societies, and our list now includes 70 physicians and 30 nurses.

"Each month the *Journal of the Outdoor Life* is sent to a selected group of tuberculosis patients."

Social Hygiene work was conducted as follows:

"The nurses of the Maine Public Health Association coöperated with the Social Hygiene Section by taking patients to the hospital for treatment, securing needed tests for diagnostic purposes, providing opportunities for programs on Social Hygiene for High Schools and Parent-Teacher Associations. This group of nurses and Miss Buck of the School Health Education Service arranged for some of the talks given by Dr. William Holt and Miss Herrick of the State Department of Health.

"Talks were given to high school groups in 16 cities and towns."

Dental clinics are described as follows:

"The Dental Clinics in both the urban and rural communities have nearly doubled during the past two years. These clinics meet the need of children whose parents have more than they can do to supply food, shelter and clothing. Dental Clinics reported by the Maine Public Health Association Nursing Services number 97, with an attendance of 706 school children, 2,120 examinations, 11,892 dental defects and 4,208 corrections."

Extensive work was also conducted by the sections on eye, ear, nose and throat, mental hygiene, orthopedics, cancer and heart.

More Effective . . . Safe! In Colds and Rheumatism

Because they combine the important factor of **safety** with powerful analgesic antifebrile effects, the salicylates continue to offer the classical treatment for rheumatic and arthritic conditions, as well as the physician's best weapon for fighting colds and influenza.

However, it is important to note that modern medical opinion stresses the need for combining alkalis with salicylates as assurance of optimum results and better tolerance.

Hence the introduction of

ALYCIN

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Alycin combines the therapeutic advantages of Merrell's Natural Salicylates—increased tolerance even in massive dosage—with the correct proportion of a carefully balanced alkaline base to secure safe and effective alkalization.

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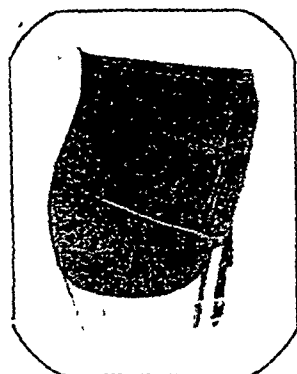
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THE MINISTER AND THE DOCTOR IN TEXAS

The Texas State Journal of Medicine for August contains the following editorial on the doctor as seen by the minister of the Gospel:

"We are pleased to present herewith a very excellent discussion of the physician from the standpoint of the ministry. We deem the item worth the space it occupies in the editorial section of the Journal, because of the importance of the cooperation of the doctor and the preacher in dealing with the sick, particularly the seriously sick.

"The author, the Reverend W. R. Hornburg, pastor of the Coggin Avenue Baptist Church at Brownwood, has prepared this little sermon for the good it might do, and with no thought of its publication in a medical journal. It follows:

"*'DO YOU WISH TO GET WELL?'* Certainly that is your wish. Every one wishes to enjoy good health. It is true that every one is liable to become ill. Disease germs are everywhere. We breathe them, eat them, drink them, "catch them" at every turn of life's way.

"Is it God's will that I should be sick? No. He has provided a remedy for every disease. Where may I find a remedy for my trouble? It is provided in Nature. Many men have made it their life business to find such remedies and apply them. They spend years and years in painstaking study seeking to know what others have learned, and exploring new realms of Nature, seeking out the cases of diseases and their remedies.

"We do not yet know all the causes for disease, nor have we yet discovered a remedy for every known disease. But be assured of the fact that there are men toiling day and night, leaving no stone unturned, that they might discover Nature's secrets of healing. These men are soldiers in the war on disease. Heroes, many of them, ready to lay down their lives that others might be saved. Money is being spent by the millions. Libraries are collected, laboratories are equipped, colleges and universities are built and endowed. Men of much learning and experience, specialists in their field, are brought together that they might teach others what they themselves have learned. Men and women of high intelligence must spend years in school and college equipping themselves that they might join in the war on disease.

"Your physician is a man of this type. He has spent years in patient preparation for his life's work. He has had competent teachers. All the best knowledge that has been accumulating through the centuries has been at his disposal. He has proved himself a master in his field and his services are now at your disposal. He knows

(Continued on page 1275—adv. xxi)

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This long renowned naturally alkaline mineral water assists in neutralizing excess acid and in regularizing functions of the digestive tract.

Bottled at the Spring in Vichy, France, under Government supervision, it meets the great need of the physician for constancy of composition.

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(Continued from page 1274—adv. xx)

your trouble better than you can possibly know yourself. Your case is not peculiar. He has seen many other cases just like it. If there is a remedy, he knows it. If there is none, he will tell you so. Of course, some people do not get well, but most people would get well and live to a ripe old age, if they would follow the advice of their physician. Your physician is your big reason for getting well. Believe in him. Trust him. Be frank with him and tell him all the facts. Follow his instruction, and, then, "Commit thy way unto the Lord. Trust in Him, and He will direct thy paths."

"It is true that the doctors cannot cure you. They do not claim to cure. Only Nature can heal. But your physician knows how to produce conditions that will enable Nature to do her work. Nature brought us into the world, and Nature must keep us fit while we are here. And it will be into the arms of Mother Nature that we will fall when we reach the end of life's way.

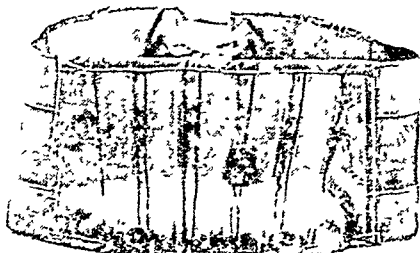
"Remember that the Laws of Nature are the Laws of God. Nature is God at work in plain sight. How beautiful to know that when Nature

speaks her healing, soothing word, it is the voice of God we hear.

"That in every breath of fresh air, in every life-giving ray of sunlight, it is God expressing His desire that we might be well and strong.

"There are four factors in your healing: God, who is the Author of your life, and who must sustain your life. Nature, who if God be our Father, is mother of us all. It is from her that we draw the healing streams for all our ills. Your physician, who knows Nature's laws and how they operate. He has discovered her secrets of healing and will use them for your benefit. Last of all, and most of all, yourself. Do you wish to get well? Then resolve to get well. Believe that you will get well. Every tender ministry that kindly hearts can devise have been provided for you. Lay your head trustingly upon Mother Nature's breast and feel the gentle inflow of her healing power. It is a long, hard climb to the City of Good Health, but we must resolve to make the climb. Remember that the very stars in their courses fight for you when you resolve to reach the heights. Your battle is half won when you say "I will."

(Continued on page 1276—adv. xxii)



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(Continued from page 1275—adv. xxi)

"Now may we breathe this little prayer together?"

"Dear God and Father: I want to get well. My friends and loved ones want me to get well. My physicians and nurses want me to get well. I believe that Thou dost want me to get well. Thou dost control the forces of life. The laws of life are Thy laws. Wherein I have broken those laws, either wittingly or unwittingly, I ask Thy forgiveness.

"I commit my life to Thee. All of my dearest treasures I have received from Thee. I have sought, and others have sought for the remedy for my trouble. God bless those who minister to me, and guide me back to health and happiness. In Thy great love I trust.—Amen."

QUACK HEALTH LECTURES IN TEXAS

New York State is not a promising field for the quack health lecturer although now and then reputable organizations invite them unaware of their quackery. The July issue of the *Texas State Journal of Medicine* exposes such a quack in the following item quoted from the *Dallas News*:

"Use of the city hall auditorium will not be granted to Paul C. Bragg for a series of lectures scheduled for June 10, 11, 12, 13 and 14. Permit to use the auditorium was denied by City Manager John Edy and City Secretary Earl Goforth June 9, when William Collier, manager of the Better Business Bureau of Dallas, and Wilmer A. Rowan, special agent for the Texas State Board of Medical Examiners, brought to the attention of the city officials that a fraud order was issued by the United States Postoffice Department against Paul C. Bragg, the National Diet and Health Association of America, Bragg's Health Center, Bragg Laboratories and their agents and officers as such. This order, forbidding postmasters to pay any postal money orders drawn to the order of any of the individuals or concerns listed, and directed that postmasters return all letters and other mail matter addressed to these individuals or concerns to the senders with the word 'fraudulent' stamped thereon, was issued on December 30, 1930.

"Special Agent Rowan also presented evidence showing that this lecturer has recently concluded a series of lectures in Houston under the name of Paul Chappius, and that he had lectured in other cities, in some as Paul C. Bragg, and in others as Paul Chappius. It developed June 9, that advertisements announcing the proposed series of lectures to be given in the city hall auditorium had been accepted and published by Dallas newspapers before they became aware of the issuance of the postal fraud order against Bragg and his companies."

4 New Concentrated Vitamin Products



Vitamin A alone

Name Smaco Cantol Product No 305

Description: Cantol is a 3% solution of carotene in bland oil, providing a safe, palatable and convenient concentration of vitamin A for therapeutic use

Taste: Entire absence of all fishy taste makes it acceptable to your patients.

Color: Deep red, due to carotene

Potency: Ten drops contain one thousand International Units of vitamin A

Dosage: Three to five drops daily for infants and young children. Five to ten drops daily for adults

Package: 15 c.c. dropper top, protectively-colored bottles, in special cartons to shield it from the light

Cost: Because of its high potency and the small doses required, it is an inexpensive source of vitamin A, in spite of the fact that it is the only product containing vitamin A alone

Indications: For conditions caused by vitamin A deficiency and cured or prevented by adequate vitamin A or carotene dosage

Vitamin D alone

Name. Smaco Concentrated Vitamin D Product No 515

Description. This product is Natural Vitamin D, being a highly potent extract of the antirachitic principle of cod liver oil

Taste: Palatable and free from objectionable taste

Color: Nearly colorless.

Potency: Ten drops are equal in vitamin D potency to three teaspoons of standard potent cod liver oil

Dosage. Average prophylactic dose, ten drops daily. Average curative dose, fifteen to thirty drops daily, depending on severity of case.

Package. 5 c.c. and 50 c.c. protectively colored bottles

Cost: Approximately the same as that current for equivalent vitamin D dosages of plain cod liver oil

Indications: For the prevention or cure of rickets and spasmophilia, and where ever vitamin D therapy is required, such as tetany and osteomalacia

Vitamins A and D together

Name Smaco Vitamins A and D Product No 525

Description Smaco Cantol and Smaco Concentrated Vitamin D are combined in this product, providing both vitamins A and D in concentrated form for therapeutic use

Taste Palatable and free from objectionable taste

Color Red, due to carotene

Potency Ten drops are equivalent to one thousand International Units of vitamin A plus the vitamin D potency of three teaspoons of standard potent cod liver oil

Dosage Ten drops or more daily, depending upon individual requirements

Package. 5 c.c. and 50 c.c. protectively colored bottles

Cost Approximately the same as current prices for equal dosages of other vitamin concentrates

Indications. Wherever vitamins A and D are required together in palatable form and small dosage

Smaco Cod Liver Oil fortified

Name *Smaco Cod Liver Oil (with Carotene and Concentrated Vitamin D) Product No 510

Description. A high grade cod liver oil fortified with vitamin A of vegetable origin (carotene) and natural vitamin D described in the second column

Taste. Although carotene is not a flavoring agent, nevertheless the addition of carotene noticeably improves the flavor

Color. Deep red, due to carotene it contains

Potency. One teaspoon is equivalent in vitamin D potency to three teaspoons of standard potent cod liver oil plus 1,000 International Units of vitamin A per teaspoon in addition to the original vitamin A potency of the oil

Dosage: One teaspoon daily for average individual needing vitamins A and D

Package. Four ounce protectively-colored bottles packaged in special cartons to shield from light

Cost. Approximately one-half as much as the equivalent amounts of vitamins A and D when purchased as plain cod liver oil

Indications Wherever a more palatable, concentrated cod liver oil is indicated. (Only one third as much is required as plain cod liver oil)

*Zucker natural vitamin D

New Vitamin Therapy Possible

Up to this time it has not been possible to prescribe vitamin A alone, as in cases where vitamin D is not required or is already supplied by sunshine, ultra violet light, viosterol etc. Smaco Cantol makes possible the administration of Primary Vitamin A in drop doses thus permitting the physician to regulate the dosage to meet individual requirements

Smaco Vitamin D is natural vitamin D. It is not an irradiated oil and not a cod liver oil concentrate, but rather a highly potent extract of the antirachitic principle of cod liver oil. It is produced for therapeutic use by methods (Zucker Process) developed in the department of Pathology of the College of Physicians and Surgeons of Columbia University

It now becomes possible with these new Smaco concentrated vitamin products to prescribe vitamin A alone, vitamin D alone or vitamins A and D together in drop dosages and palatable form, thus permitting the physician to prescribe any desired potency of these vitamins and any desired combination

Smaco C
A and D
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This Smaco Cantol has the same vitamin content of plain cod liver oil and only one third the dosage is required



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(Continued from page 1279—adv. xxv)

ence. The medical profession is a lifelong career which requires continuous study. You cannot be just to your clients and to yourself unless you make a real effort to keep yourself proficient in the profession. Next to proficiency is the spirit to serve well. There is nothing more convincing or more appealing to a patient than your willingness to respond to his call for your assistance at any time. Treat the rich and the poor, the ignorant and the educated equally. Endeavor always to make your visit at the same regular or appointed time, when your patient expects you. You will save him a great deal of fretting and perhaps prevent him from sending for your rival, who may be a quack, when the patient has grown tired of waiting for you. Punctuality is very important in our practice. Nothing can excuse the want of it, for the busiest people, as you all know, are the most punctual.

"As soon as you have established yourself, do not fail to seek membership in a medical society. We can serve our country better and promote medical practice and the medical profession more effectively if we are united in the form of an association. We can understand better, can help each other in a brotherly way, and can settle our petty differences in a friendly way if we are so united."

FEDERAL CHILDREN'S BUREAU LECTURES IN KENTUCKY

The October issue of the *Kentucky Medical Journal* contains the following editorial on a se-

ries of lectures on obstetrics, sponsored by the Children's Bureau, which is being criticized in the *Journal* of many State Medical Societies:

"We are happy to announce that during the spring and summer of 1933, the Federal Children's Bureau will again offer, through the Bureau of Maternal and Child Health, Dr. McCord's services. Postgraduate lecture courses, covering a period of four or five weeks, will be given. These courses will be sponsored by the Kentucky State Medical Association, the State Board of Health of Kentucky, and the local County Medical Societies. The Federal Children's Bureau will finance the courses; there will be no charge to any local Medical Society.

"At present there are several counties under consideration as suitable locations for the lectures. Announcement will be made later regarding dates and locations.

"Each course consists of five lectures, and usually a lecture is given every afternoon, from 2 to 5 o'clock, as follows:

"Monday: A general talk on the mechanism and management of normal labor, both being carried along together.

"Tuesday: The afternoon is opened with a talk on prenatal care, particularly as it concerns the prevention of the toxæmias of pregnancy.

"Wednesday: The prophylaxis and pathology of puerperal sepsis are discussed at length.

"Thursday: Forceps, version, occiput posterior positions and breech presentations.

"Friday: Abortions, accidental separation of the placenta and placenta previa are studied."

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Included in the course are: anatomy and physiology of the nose, throat and ear; embryology, histology, pathology and bacteriology of the nose, throat and ear (given by laboratory staff); dissection of the head and neck; nose, throat and ear operations (cadaver); daily clinics in a large out-patient department; bronchoscopy; etc. During the last few months the matriculate performs under supervision a number of the more common nose and throat operations in the out-patient department. Laryngology under the direction of Dr. Duncan Macpherson. Otology under the direction of Dr. Warren C. McFarland. For further information, address

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4 New Concentrated Vitamin Products



Vitamin A alone

Name Smaco Caritol Product No 305

Description Caritol is a 0.3% solution of carotene in bland oil, providing a safe, palatable and convenient concentration of vitamin A for therapeutic use

Taste Entire absence of all fishy taste makes it acceptable to your patients

Color Deep red, due to carotene

Potency Ten drops contain one thousand International Units of vitamin A

Dosage Three to five drops daily for infants and young children. Five to ten drops daily for adults

Package 15 c.c. dropper top, protectively colored bottles in special cartons to shield it from the light

Cost Because of its high potency and the small doses required, it is an inexpensive source of vitamin A, in spite of the fact that it is the only product containing vitamin A alone

Indications For conditions caused by vitamin A deficiency and cured or prevented by adequate vitamin A or carotene dosage

Vitamin D alone

Name Smaco Concentrated Vitamin D Product No 315

Description This product is Natural Vitamin D, being a highly potent extract of the antirachitic principle of cod liver oil

Taste Palatable and free from objectionable taste

Color Nearly colorless

Potency Ten drops are equal in vitamin D potency to three teaspoons of standard potent cod liver oil

Dosage Average prophylactic dose, ten drops daily. Average curative dose, fifteen to thirty drops daily, depending on severity of case

Package 5 c.c. and 50 c.c. protectively colored bottles

Cost Approximately the same as that current for equivalent vitamin D dosages of plain cod liver oil

Indications For the prevention or cure of rickets and spasmophilia, and where ever vitamin D therapy is required, such as tetany and osteomalacia

Vitamins A and D together

Name Smaco Vitamins A and D Product No 325

Description Smaco Caritol and Smaco Concentrated Vitamin D are combined in this product, providing both vitamins A and D in concentrated form for therapeutic use

Taste Palatable and free from objectionable taste

Color Red, due to carotene

Potency Ten drops are equivalent to one thousand International Units of vitamin A plus the vitamin D potency of three teaspoons of standard potent cod liver oil

Dosage Ten drops or more daily, depending upon individual requirements

Package 5 c.c. and 50 c.c. protectively colored bottles

Cost Approximately the same as current prices for equal dosages of other vitamin concentrates

Indications Wherever vitamins A and D are required together in palatable form and small dosage

Smaco Cod Liver Oil fortified

Name *Smaco Cod Liver Oil (with Carotene and Concentrated Vitamin D) Product No 510

Description A high grade cod liver oil fortified with vitamin A of vegetable origin (carotene) and natural vitamin D described in the second column

Taste Although carotene is not a flavoring agent, nevertheless the addition of carotene noticeably improves the flavor

Color Deep red, due to carotene it contains

Potency One teaspoon is equivalent in vitamin D potency to three teaspoons of standard potent cod liver oil plus 1,000 International Units of vitamin A per teaspoon in addition to the original vitamin A potency of the oil

Dosage One teaspoon daily for average individual needing vitamins A and D

Package Four ounce protectively-colored bottles packaged in special cartons to shield from light

Cost Approximately one half as much as the equivalent amounts of vitamins A and D when purchased as plain cod liver oil

Indications Wherever a more palatable, concentrated cod liver oil is indicated (Only one third as much is required as plain cod liver oil)

New Vitamin Therapy Possible

Up to this time it has not been possible to prescribe vitamin A alone as in cases where vitamin D is not required or is already supplied by sunshine, ultra violet light, viosterol, etc. Smaco Caritol makes possible the administration of Primary Vitamin A in drop dosages thus permitting the physician to regulate the dosage to meet individual requirements

Smaco Vitamin D is natural vitamin D. It is not an irradiated oil and not a cod liver oil concentrate but rather a highly potent extract of the antirachitic principle of cod liver oil. It is produced for therapeutic use by methods (Zucker Process) developed in the department of Pathology of the College of Physicians and Surgeons of Columbia University

It now becomes possible with these new Smaco concentrated vitamin products to prescribe vitamin A alone, vitamin D alone or vitamins A and D together in drop dosages and palatable form, thus permitting the physician to prescribe any desired potency of these vitamins and any desired combination

Smaco Caritol is a new product. This Smaco product is approximately one half as much as the same vitamin content of plain cod liver oil and only one third the dosage is required



Smaco Products like S M A are ethically advertised and carefully distributed through prescription pharmacies. No dosages are given in the list. Each package carries its statement. Use as prescribed by your physician

Information and prices on crystalline Smaco (up to FIFTY THOUSAND TIMES the vitamin A potency of cod liver oil) for research purposes furnished upon request

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CANCER COMMITTEE IN MISSOURI

The Journal of the Missouri State Medical Association for July contains the following report of the Cancer Committee, that was appointed at the 1931 State Meeting:

"In order to comply with the first duty as outlined in the By-Laws, namely, to investigate the facilities provided for the cancer sufferer in the State of Missouri, a letter and questionnaire were sent to the eighty-eight county medical society secretaries. This questionnaire stated the number of patients who died of cancer within the jurisdiction of the county society during the year 1930 (these figures obtained through the Secre-

tary of the State Board of Health); and then proceeded to ask the following questions: (1) the opinion of the secretary of the facilities for the handling of cancer patients in his county; (2) in what proportion of cancer cases was the diagnosis made within one year after onset and (3) whether or not the following facilities are available in his county: tumor tissue diagnosis, radium treatment, radical cancer surgery, x-ray diagnosis, x-ray therapy and hospitalization of cancer cases.

"These questionnaires were sent out in April. To date sixty-six replies have been received. These replies have been analyzed and tabulated and a map prepared. Roughly stated it made be said that sixteen out of the one hundred and fifteen counties of the State have good facilities for the care of cancer patients; five have partial facilities, and forty-five have poor or in most cases no facilities. No reply was obtained from the questionnaires sent to the remaining twenty-two county medical society secretaries.

"General discussion of the question of cancer control in the State of Missouri at the meeting of the Cancer Committee in Columbia led to the following program to be recommended to the State Medical Association:

"1. The most crying need in the opinion of your Committee is to provide for all doctors in the State of Missouri competent facilities for the free diagnosis of tumor tissue with the establishment of a central laboratory to care for this work. The Committee feels that the State University School of Medicine situated at Columbia is the logical place for this laboratory, provided funds can be obtained for this special work either from the State Medical Association, private sources, or preferably and most logically a special appropriation by legislature for this specific work.

"2. A general educational program should be undertaken in cooperation with the American Society for the Control of Cancer. This program can be carried out by enlisting a number of capable men, members of the State Medical Association, to appear at County Medical Meetings and District Councilor meetings to give Cancer Clinics and to address lay meetings.

"3. Through the cooperation of the editor of the *Missouri State Medical Journal*, monthly articles of the unsigned editorial type devoted to some phase of the cancer problem are to be published in the *Missouri State Medical Journal*. These articles are in the course of preparation.

"4. Further educational work could be instituted by staging an exhibit at the Missouri State Fair under the auspices of the State Medical Association and in cooperation with the Secretary of the State Board of Health. Such an exhibit can be of a popular nature to educate the laity to the importance of the recognition of possible early symptoms and signs which may mean cancer."

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MEDICAL STANDARDS IN THE PHILIPPINE ISLANDS

The August issue of the Journal of the Philippine Islands Medical Association contains an address by Dr E D Aguilar, President of the Association, on July 9, 1932, to the Board of Medical Examiners and newly admitted members of the medical profession. The following advice applies equally well to newly licensed doctors in New York State.

"In entering upon a field of endeavor like ours, the first question that naturally arises is: How shall the young physician start his practice? My counsel is this: If you can afford it and opportunity offers, try to obtain practical experience by associating with an elder brother in the profession who has already acquired a reputation and unquestionable experience either in hospitals or clinics. By so doing you can minimize the possibility of failure and increase your chance for success. If, owing to unfavorable circumstances, you cannot follow this course then there is no other way but to start private practice by yourself. However, before starting you should formulate a plan. I should advise you to establish yourself in a community in which you can practice most advantageously, not only from the standpoint of the profession, but also in accordance with the needs of the country. The tendency to start in a community in which there is already an oversupply of physicians is very detrimental to the profession as well as to our country. At present there is a markedly uneven distribution of physicians in the country. The result is that in some places people cannot help but resort to quackeries, and in others physicians must resort to unethical practices and procedures in order to earn a living. This is one of the main problems confronting our profession and our country as a whole.

One effective way, although a rather difficult one, of reducing to the minimum the practice of quackery is for us to compete with the quacks. The only way to do this is to demonstrate by actual deeds our superiority over them and our sincerity in serving the people. The present problem of unethical practice is one that can be solved gradually by not crowding in one place. You should all make the effort to establish yourselves in places in which there is very little or practically no competition among medical practitioners.

Recourse to unethical practices to take advantage of a colleague or of the ignorance of the people has no legitimate place in our profession. Competition in medical practice should exist only in the form of superiority, by deeds and not by words and signs.

This brings me to another piece of advice that I wish to offer you. For a physician to succeed in his vocation, he should continue his studies and he should not, after graduation, fail to keep pace with the progress of the medical sci-

(Continued on page 1280—adv 1111)

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(Continued from page 1279—adv. xxv)

ence. The medical profession is a lifelong career which requires continuous study. You cannot be just to your clients and to yourself unless you make a real effort to keep yourself proficient in the profession. Next to proficiency is the spirit to serve well. There is nothing more convincing or more appealing to a patient than your willingness to respond to his call for your assistance at any time. Treat the rich and the poor, the ignorant and the educated equally. Endeavor always to make your visit at the same regular or appointed time, when your patient expects you. You will save him a great deal of fretting and perhaps prevent him from sending for your rival, who may be a quack, when the patient has grown tired of waiting for you. Punctuality is very important in our practice. Nothing can excuse the want of it, for the busiest people, as you all know, are the most punctual.

"As soon as you have established yourself, do not fail to seek membership in a medical society. We can serve our country better and promote medical practice and the medical profession more effectively if we are united in the form of an association. We can understand better, can help each other in a brotherly way, and can settle our petty differences in a friendly way if we are so united."

FEDERAL CHILDREN'S BUREAU LECTURES IN KENTUCKY

The October issue of the *Kentucky Medical Journal* contains the following editorial on a se-

ries of lectures on obstetrics, sponsored by the Children's Bureau, which is being criticized in the *Journal* of many State Medical Societies:

"We are happy to announce that during the spring and summer of 1933, the Federal Children's Bureau will again offer, through the Bureau of Maternal and Child Health, Dr. McCord's services. Postgraduate lecture courses, covering a period of four or five weeks, will be given. These courses will be sponsored by the Kentucky State Medical Association, the State Board of Health of Kentucky, and the local County Medical Societies. The Federal Children's Bureau will finance the courses; there will be no charge to any local Medical Society.

"At present there are several counties under consideration as suitable locations for the lectures. Announcement will be made later regarding dates and locations.

"Each course consists of five lectures, and usually a lecture is given every afternoon, from 2 to 5 o'clock, as follows:

"Monday: A general talk on the mechanism and management of normal labor, both being carried along together.

"Tuesday: The afternoon is opened with a talk on prenatal care, particularly as it concerns the prevention of the toxemias of pregnancy.

"Wednesday: The prophylaxis and pathology of puerperal sepsis are discussed at length.

"Thursday: Forceps, version, occiput posterior positions and breech presentations.

"Friday: Abortions, accidental separation of the placenta and placenta previa are studied."

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THE DIRECTOR,

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ADVERTISEMENTS IN GEORGIA JOURNAL

The September Journal of the Medical Association of Georgia contains a report of the Publication Committee given at the annual meeting of the State Association on May 18, 1932, as follows:

"The Chairman stated that the purpose of the meeting was to consider complaints from some oculists who objected to the advertising by opticians in the Journal.

"The objection that is being made to the optometrists is due to the fact that they are advertising in a manner that is misleading to the public, and to the physician, and that is unfair competition to the oculists. It is particularly misleading to the public when they see an advertisement in a medical journal, apparently with the approval of the State Association.

"We have no strictly dispensing opticians. All of them compete with the oculist, and the physicians out in the smaller towns in many instances do not know the difference between a doctor of optometry and an oculist. We have discussed the question of appointing a committee and feel that it would be dangerous to try to distinguish between them for fear of laying ourselves liable in this way. All the advertisements are more or less objectionable. All of them in Atlanta are doing refracting or other work in competition with the oculists. The consensus of the Club is that it is best not to accept such advertisements for the Journal of the Medical Association of Georgia.

"The out-of-town doctors do not distinguish between an optometrist, an optician and a medical oculist. It is very confusing for the average layman or physician when these men are listed as doctors.

"If we refuse to accept these advertisements it will take away part of the income from the Journal. Do you think the wholesale optical houses would advertise with the Journal if these ads were cut out? The advertisements from the oculists have been in existence since 1911 and take care of

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all the mailing expense for the Journal. I am sure they could have no legal course against you if you selected which should be used and which should not. If we had a low-class drug store I do not think we should allow its advertisements in the Journal. If you appoint a committee and it will give us the names of two or three that are not objectionable we will be glad to run their advertisements."

The Committee named seven optical firms whose advertisements would be acceptable. The September Journal carries four optical advertisers, all of which are on the accepted list.

GROUP INSURANCE IN NEBRASKA

The October issue of the *Nebraska State Medical Journal* has the following record regarding group insurance:

"A letter from Secretary Adams of the Nebraska State Medical Association states that 'we have just been notified by the United States Fidelity and Guaranty Company that on October 1st, 1932, they will cancel the group policy under which they have insured our members against malpractice suits. They have been threatening this for the last two years and your Insurance Committee with Dr. Selby as chairman has done everything possible in its power to prevent it. However, due to the fact that the Company has lost money ever since it issued this policy they have decided to discontinue it. This will mean that every doctor will have to look to his liability insurance as an individual and deal with the Company from that point of view.

"Any member of the Association who is insured under our group policy and his policy extends beyond October 31st, 1932, will have the remainder of his premiums returned to him."

"There have always been some doubts of the wisdom of the plan and the members of the profession as individuals did not in sufficient numbers take to it; hence its failure."

blood cells numbered 6,150,000, hemoglobin 130%. White blood cells were 13,400, with 76% polymorphonuclears, 22% small mononuclears and 2% large mononuclears. Blood pressure was 120/70. The urine had a faint trace of sugar by Benedict's. The blood Wassermann was negative and all the blood chemistry readings were normal.

Opinion: (1) Chronic pulmonary tuberculosis with thickened pleura; (2) chronically diseased tonsils.

He remained in the hospital only two days and tonsillectomy was advised against because it was believed he had an active pulmonary tuberculosis. During his stay in the hospital his temperature was 98.6° in the morning and 99.2° and 99.4° on to occasions in the afternoon. He was discharged two days after admission with the final opinion of chronic pulmonary tuberculosis.

After his discharge from the hospital the patient returned to work for a few days, during which time he had no particular complaints. X-rays were taken by an outside physician who told him that he had some pulmonary pathology but did not reveal to him the exact nature of it.

A little less than a month after his discharge he was readmitted complaining of cough with expectoration. The physical signs were the same as those on his previous admission, namely, dullness over the right upper lobe with suppressed breath sounds and numerous medium sized rales. At this time slight curvature of the nails was noted. Eighteen sputa were examined and no tubercle organisms were found. Careful examination for fungi of the sputum was then advised. One month later the bacteriology department reported the growth of actinomyces grown anaerobically, after two weeks incubation. During his stay in the hospital the patient ran a temperature of 98° to 102.4°, which was invariably highest in the afternoon. The pulse was moderately increased, from 80 to 110, showing a definite relation to the temperature curve. The patient continued to complain of cough with whitish expectoration and on one occasion his sputum was blood tinged. At the time of discharge a definite diagnosis of pulmonary actinomycosis was made. Unfortunately neither the original x-ray plates nor the reports of them are obtainable, so we are not able to include them in our case summary.

CASE 2—M. F., male, age 30, married, Hindu. Admitted to the hospital January 2, 1930.

Chief Complaint: Cough with expectoration, pain in the left side of the chest, fever, weakness, insomnia.

Family History: Negative.

Past History: Denies all kinds of infectious diseases.

Present Illness: Began about three months

prior to admission, at which time he began to cough and expectorate whitish sputum. Shortly after this he noticed that the sputum was bloody. Two weeks previous to admission he was taken suddenly ill with sharp pain in his left chest, aggravated by deep breathing. Within a few hours he had a severe chill. He went to bed and thought he had some fever. Since the onset weakness has been progressive and he has been unable to sleep. Because the patient was a Hindu and spoke practically no English further details of his history are not obtained.

Physical Examination: Temperature, 101°; pulse, 80; respiration, 40. Except for slightly irregular pupils the physical findings of importance were localized in the chest and the following is quoted verbatim from his examination at the time of his entrance. "Thorax small and symmetrical, the entire left side lags as compared to the right. A dull note is percussed over the left clavicle extending to the fourth interspace, below which it is resonant. The left axilla is resonant throughout. The entire right front and axilla seem a little hyper-resonant. Fremitus is slightly increased over both uppers, but more over the left. Broncho-vesicular breath sounds are heard over the right upper, suppressed broncho-vesicular breath sounds over the left upper with showers of fine crepitant and sub-crepitant rales. Posteriorly the left lung is dull from apex to base. Fremitus is slightly increased over the entire side. The right side is resonant throughout. Harsh broncho-vesicular breath sounds are heard over both apices, tubular breath sounds over the left lower with a few crepitant rales. Vesicular breath sounds over the right lower and no rales are heard. Bronchophony is heard over the entire left side." The heart, abdomen, and extremities are all negative.

Opinion: Resolving pneumonia, left side; tuberculosis, apical, bilateral.

Course of Illness: During the first month in the hospital the patient's symptoms and physical findings remained about the same. He continued to cough and expectorate bloody sputum with gradually increasing weakness. Pain in the left chest was the one thing of which the patient complained most bitterly; he also had marked night sweats and an occasional chill. The temperature was intermittent with daily variations from 99° to 103°; the afternoon temperature being always higher than the morning the pulse ranged from 72 to 130, averaging about 90. Respirations were from 20 to 30 per minute. Blood pressure was constantly low with an average systolic of 70 mm. and a diastolic of 30 mm. One month after admission a mass the size of a walnut appeared over the left third intercostal space in the mid-clavicular line. It was hard and tender but showed no redness or fluctuation. It was thought to be an empyema necessitatis. The mass

was aspirated on three occasions but at no time was material of any nature withdrawn. It was then suspected that he might have actinomycosis and the sputum was examined for fungi. These were not found on three occasions. Thirty-nine days after admission he developed a frank hemoptysis, following which he went into shock and died the next day.

Summary of the Laboratory Findings and Special Study: Repeated x-ray plates were made and the findings were suggestive of a massive collapse of the left upper lobe, thought to be due to a plugged bronchus and showing complete non-aeration from the apex to the fourth rib. These findings were constant in four studies of fluoroscopic plates taken over a period of forty days. The red blood cells at the time of admission were 4,500,000; hemoglobin, 80%. A secondary anemia developed and the red cells dropped to 3,000,000 and the hemoglobin to 45%. The white cells showed a fairly constant leucocytosis of about 14,000, the highest count being 16,800. The polymorphonuclear leucocytes were increased from 78% to 86%. The urine was negative, on several examinations, for any abnormal findings. The stool was negative for parasites and blood. Twenty-eight specimens of sputa were examined and no tubercle organisms found. Culture of the sputum showed a growth of staphylococcus aureus, hemolytic streptococcus, and pneumococcus of undetermined type. Several blood cultures were sterile. Wassermann reaction was negative. The patient died the 11th of February, 1930, forty days after admission and came to autopsy, the results of which are as follows:

Autopsy, February 12, 1930.

The body is that of a male East Indian, about 40 years old. Muscularly well developed but poorly nourished. The only external abnormality of note is a swelling in the region of the left breast. On reflection of the soft tissues of the thoracic wall this swelling is found to be due to a deep abscess formed by extension of a suppurative process through the intercostal muscles and fascia. About 10 c.c. of a thick purulent exudate are found under the breast and pectoral muscles and in the underlying intercostal muscles.

On removal of the sternum the mediastinal structures are found displaced somewhat to the left. The right lung is markedly emphysematous throughout but otherwise grossly normal. The left lung is firmly adherent over all its surfaces to a dense thick layer of scar tissue which obliterates the pleural cavity entirely. This layer varies from .5 cm. to 2.5 cm. in thickness. The thickest portion is over the anterior margin of the upper lobe and in this region the tissue is riddled with small yellowish areas of necrosis from which a purulent material can be expressed. These abscesses are continuous with those de-

scribed above in the intercostal and submammary tissues. The adjacent pericardium is also densely adherent in this region and several of these abscesses are present on the inner surfaces of the parietal layer of the pericardium. The left lung is markedly reduced in size, very firm in consistency, and its lobes fused. Multiple section reveals an advanced indurative pneumonia involving almost the entire lung (except for a small area at the lower medial aspect and the apex of the lower lobe). The two lobes are separated by a band of the same dense connective tissue encountered over the outer surfaces. The parenchyma of the lung in the consolidated areas is mottled by alternate areas of anthracosis and dense strands of gray-white connective tissue. The walls of the larger bronchi are thickened and many of them contain necrotic exudate. The smaller bronchi show marked bronchiectasis. Occasional bronchiectatic cavities are found completely filled with necrotic exudate and lined by a ragged layer of necrotic tissue. Yellowish abscesses noted in the pleura extend deeply into the lung tissue of the anterior margin of the upper lobe.

The pericardium, in addition to the involvement noted above, contains a smaller amount of fluid and both layers are partly covered by a very recent thin fibrinous deposit.

The heart is of normal size and shape. The myocardium is soft, particularly near the apex of the left ventricle where the deep reddish-brown color of the muscle wall is clearly seen through the epicardium. On incision the left ventricle is found somewhat dilated. The right ventricle shows a marked eccentric hypertrophy. Between the columnæ carneæ at the apex of the left ventricle are found globular grayish-white masses of thrombi. In this region the left ventricular musculature shows an intense hemorrhagic mottling. Occasional thrombosed vessels are also noted. The remaining myocardium is paler than normal. Small compact thrombi are found in both auricular appendages. All of the valves are normal. The aorta, except for early atherosclerosis at the base, is normal.

The spleen is normal in size and shape, slightly firmer than normal and congested.

The liver is of normal size and shape. On surface inspection and cut section are seen the markings of chronic passive congestion.

The kidneys are of normal size and shape. The capsule strips with ease. The surfaces are smooth but congested. On section, except for a moderate degree of cloudy swelling and chronic passive congestion, the renal tissue appears normal.

The adrenals, pancreas, stomach, and remaining abdominal organs are grossly normal.

Smears made from purulent material in the thickened pleural layer show occasional gram-

positive filamentous organs suggesting actinomycosis. Cultures confirm these findings.

Anatomical Diagnosis.

1. Actinomycosis, lung.
2. Pneumonia, interstitial, chronic actinomycosis, left lung.
3. Pleurisy, adhesive, chronic actinomycosis.
4. Empyema necessitatis.
5. Pericarditis, acute fibrinous.
6. Myocarditis, acute suppurative.
7. Thrombosis, intracardiac, septic.
8. Emphysema, pulmonary, alveolar, compensatory—right lung.

Although it is not our intention in a paper of this type to deal too scientifically with the bacteriology and cultural characteristics of the actinomycosis organism, perhaps a brief summary of some of its gross points may be of value. There has been considerable discussion and confusion in the classification and nomenclature in the trichomycetes of which the actinomyces is a subdivision. But it is generally believed that it belongs to the group of true moulds and not bacteria. Inasmuch as the ray fungus is a slow growing anaerobe and the pus from actinomycotic abscesses is often contaminated with other organisms, it is at times difficult to separate this mould from secondary invaders. And it is because of this that it is not easy to culture the fungus from the sputum. Wright* suggests, if the material to be examined is heavily contaminated with secondary invaders, that it be placed on the side of a test tube and after a period of two or three weeks most of the contaminating bacteria will have died, but the actinomycotic granules will remain viable. Great resistance to drying is shown by actinomyces and viability has been reported after a year of drying. Not all the individuals who harbor the actinomyces develop the disease and there is an individual susceptibility which plays a large part. Wright experimentally inoculated 80 animals, of which only 30 developed the lesions. Tonsils and carious teeth are considered as starting points of actinomycotic lesions in man. It is believed that direct transmission from animals to man is not common. Many cases occur in individuals who have never been engaged in handling grains or been in contact with pre-existing cases. The grain on which actinomyces is most commonly found is barley. Many observers believe that the ray fungus is a frequent inhabitant of the mouth and only invades the tissues when trauma makes it possible.

Pathologically, the organism causes a necrosis of tissue with marked leucocytic reaction with liquefaction and pus formation; and surrounding this is a dense fibrous tissue.

Infection of the lungs takes place by aspira-

tion and is probably disseminated along the lymphatics and by embolization to other organs. The disease is more common in males than females the ration being 4:1. It may occur at any age but most cases reported are in individuals from 20 to 30.

The train of symptoms most commonly present consists of cough with expectoration of a mucoid and bloody sputum; loss of weight; night sweats; weakness; emaciation, and chest pain. This severe, persistent, boring type of pain is often the patient's dominating symptom and is emphasized by all writers as being most significant. There is usually a slight secondary anemia, moderate leucocytosis of from 10,000 to 15,000 with an increase in polymorphonuclear leucocytes to about 80%. The temperature is septic with an associated rise in pulse rate.

The physical findings depend upon the underlying pathology. Christison* and Warwick have described four types of lesions in the lungs, namely, (1) bronchitic, in which the infection is confined to the bronchi; (2) pneumonic, in which the infection spreads from the bronchi and alveoli and gradually coalesces to form large abscesses; (3) pleuro-pneumonic, in which the abscess has grown large and burrows to the pleural cavity; (4) metastatic nodules, which they believe are carried to the blood streams. These authors believe the first three of these types are different stages of the same process. It is therefore to be seen that the physical findings may vary greatly from a simple bronchitis to an area of consolidation, or may be those of cavity formation.

Although the x-ray findings are of unquestionable value the benefits derived from them will often depend upon the type of pathology. The roentgenologist perhaps cannot say definitely that the case is one of actinomycosis but an experienced x-ray man will be able to say that the case is not one of tuberculosis, which disease is undoubtedly the one that will cause most confusion in attempting to establish a differential diagnosis, not only from an x-ray standpoint but also clinically. The x-ray findings in tuberculosis are reasonably constant and present to the roentgenologist a fairly definite picture and any slight deviation from these findings is usually enough to put him on his guard and make him suspect that there is some uncommon condition present. Christison and Warwick have drawn up the following table as an aid in differentiating these two conditions.

<i>Actinomycosis</i>	<i>Tuberculosis</i>
1—Lower lobes usually involved.	1—Upper lobes usually involved.
2—Lymph nodes never involved.	2—Lymph nodes involved.
3—Pain common and severe.	3—Pain rare.

* Wright, J.: Public Health Report, 1911, xxvi, 319.

* Christison, J., and Warwick, M.: Actinomycosis of lungs and suprarenals, *J. A. M. A.*, 89:1043, Sept. 24, 1927.

Actinomycosis

- 4—Cavity formation less common
- 5—Spreads by continuity.
- 6—Frequent sinus in chest wall
- 7—Abscess formation frequent
- 8—Often spreads through diaphragm
- 9—Fungus in sputum

Tuberculosis

- 4—Cavity formation frequent
- 5—Metastasis by blood
- 6—No sinuses
- 7—Abscess formation less frequent
- 8—Rarely spreads through diaphragm
- 9—Tubercle bacilli in sputum

Unfortunately the diagnosis of pulmonary actinomycosis is not usually made until the disease is well advanced. The outlook, therefore, from a therapeutic standpoint, is not particularly hopeful. Iodide, in the form of potassium iodide solution, or tincture of iodine, has been considered specific for years. Epstein* and Schoenholz believes that its value is questionable and they have found that 2% of potassium iodide in culture media will not inhibit the growth of this fungus. They believe that the benefit derived from iodine administration is obtained by absorption of inflammatory tissue. Specific vaccine therapy has been highly recommended. Non-specific protein therapy has been suggested, but is probably of little value. X-ray and radium offer little, if any, hope. Surgery of the thorax seems to be the most beneficial procedure, and incision, or curetting with cauterization, have been curative. Ordinary mouth care for apical abscesses and pyorrhea are important prophylactic measures.

* Epstein, N. & Schoenholz, P. Actinomycosis: report of cases. Calif. & Western Med. 30:395, June, 1929.

Summary Pulmonary actinomycosis is a rare disease, but occurs often enough in any large, active, medical service to force clinicians to be at least on the alert for its occurrence. Given a case with the clinical syndrome presented above, namely, cough with expectoration, frequently bloody, night sweats, loss of weight and strength, and chest pain, associated with indefinite physical findings of a bronchitis or partial consolidation or cavity formation, and further associated with an intermittent fever, a moderate increase in leucocytes, and the persistent repeated absences of tubercle bacilli in the sputum, then the possibility of pulmonary actinomycosis should be borne in mind. Add to this x-ray findings which are not definitely those of tuberculosis and the possibility of pulmonary actinomycosis is even more strongly suspected.

It must also be remembered that it is often necessary to make repeated examinations for ray fungus in the sputum before the organism is obtained. We believe that if the clinician bears all these facts in mind a diagnosis of this condition will be made more often.

Conclusions (1) Pulmonary actinomycosis may be diagnosed. (2) Persistent severe pain in the chest, associated with a train of symptoms and physical signs described above, makes a clinical picture which is reasonably definite. (3) A constant moderate leucocytosis associated with an increase in polymorphonuclear leucocytes is among the important means of differentiating this condition from pulmonary tuberculosis with which it is most apt to be confused.

RECENT ADVANCES IN KNOWLEDGE OF THE FUNCTION OF THE OVARY*

By RAPHAEL KURZROK, Ph D, M D, NEW YORK, N. Y.

From the Departments of Obstetrics and Gynecology and Biological Chemistry, and Sloane Hospital College of Physicians and Surgeons, Columbia University. This Research was aided by a fund from The Chemical Foundation. Read before the New York Academy of Medicine, Section of Medicine, May 17, 1932.

THERE are three hormones derived from the ovary, one from the follicular apparatus and two from the corpus luteum. Unfortunately the former is known by many different names, such as, the female sex hormone, theelin, folliculin, estrin, progynon, feminin, sistomensin and many others. This has led to much unnecessary confusion. The name theelin is beginning to be accepted as the name for this hormone. The hormones from the corpus luteum are known as lutein or progesterin, and relaxin.

The names intimately bound up with these hormones are, Schickel, L. Adler, Iscovesco, Fellner, Herrmann, Robert Frank, Stockard, Papanicolaou, Allen, Doisy, Butenandt, Loewy, Parkes, Corner, Hisaw and many others. To them must be added that group of scientists whose work on the anterior pituitary has furthered our knowledge of the ovary, as Philip

Smith, Engel, Zondek, Aschheim, Evans, Long and Allen.

The progress in the development of ovarian hormone was slow because there was no definite test for the qualitative determination of ovarian hormone. Such methods of detecting the hormone, as its effect on blood vessels, hemostasis, and its ability to contract uterine musculature, gave erroneous results, for we now know that the crystalline hormone has no such effects. Furthermore, the methods used in the extraction of the hormone were those used for the extraction of the active principles of other ductless glands. That again is wrong, for every gland has a distinct chemistry, and every active principle a different method of isolation. Clinical studies alone are not sufficient to isolate and identify a hormone, but on the other hand, I wholly disagree with many of our theorists who discredit clinical

observations. Only by the cooperation of the pure scientist and the clinician are the best results to be obtained in this field.

An important step forward was made by L. Adler¹ in 1912, who studied the effect of ovarian extracts upon the genital organs of animals. He made watery extracts of the ovary and corpus luteum and injected them into infantile guinea pigs and produced effects upon the uterus which resembled estrus. Aschner² obtained somewhat similar effects with the use of placental extracts.

Iscovesco³ in 1912, and Fellner⁴ in 1913, independently of one another, realized that the growth of the uterus could serve as a test for the presence of theelin. Fellner obtained lipoidal extracts from the ovary and placenta, which produced uterine growth as well as changes in the endometrium that greatly resembled pregnancy, and also growth of the mammary glands (but never secretion of milk). These studies were an important step forward, in that the infantile uterus as well as the uterus after castration served as a test for theelin, and secondly, that the hormone could be extracted by lipoidal solvents.

Herrmann⁵ in 1913 reported that a lipoidal extract of the corpus luteum and of the placenta when injected into an infantile rabbit produced hyperemia of the genital tract, swelling and secretion of the endometrium, and secretion from the breasts.

Unfortunately, the growth of the uterus alone is not a good index for the presence of ovarian hormone, because there occur distinct seasonal variations in its size, and secondly, injections of proteins and biogenous amines, that is non-specific substances which are carried along by the extracting process, also produce uterine growth.

The specific effect of the ovary can be obtained by an extract of the ovary and also by homoio-plastic ovarian transplants. When an ovary is transplanted it is hoped that the implant will remain alive and continue to secrete its specific hormone. Unfortunately, it is only a rare implant that does this, while the others either become fibrotic or are soon absorbed. It is during this period of absorption that the hormone from the implant is absorbed by the host. Repeated implants would thus be of value, but are not feasible clinically.

The next method for the testing for presence of theelin was the result of the studies of a group of American workers, Stockard and Papanicolaou (1917),⁶ and Evans and Long,⁷ and Allen in 1922. These investigators found that, synchronously with the cyclical changes that take place in the ovaries, there occurs a cyclical change in the uterus and vagina, and, what is most characteristic, the vaginal secretions partake of this change. By studying the vaginal secretions of the rodents it was possible to determine the different phases of the estrus or ovarian cycle. It is

not necessary to operate on the animal or to sacrifice it, but a vaginal smear enables one to tell immediately in what phase of the cycle the animal is. Castrated animals have no cycle. The estrus cycle in an animal is represented by four phases:

1. Dioestrus (interval) = mucous, leucocytes, epithelial cells.
 2. Proestrus = epithelial cells.
 3. Oestrus = cornified cells.
 4. Metoestrus = leucocytes, epithelial cells, cornified cells.
- Castrate = mucous, leucocytes, epithelial cells.

Castrated animals never show cornified cells. If one administers to a castrated animal ovarian extract or female sex hormone then this exogenous hormone produces in that animal an estrus cycle, as manifested by the appearance of cornified cells in the vaginal smear. The least amount of hormone that will produce an estrus cycle in an adult castrated female rat is known as the rat unit. Similarly the mouse unit. One rat unit equals eight to twelve mouse units. The appearance of cornified cells is specific for theelin. Body fluids (except urine), biogenous amines, non-specific proteins or glands of internal secretion, other than the ovary and placenta, never produce cornified epithelium.

By means of ovarian transplants, using the different structures of the ovary, theelin may be localized as follows: It is present in the follicular apparatus (follicle wall and follicular fluid) as well as in the corpus luteum, although the corpus luteum after menstruation contains little or no hormone. There is thus a constant production of theelin in the woman, first, in the follicle, then in the corpus luteum and this can be readily determined by an examination of the urine or the blood. The normal woman is constantly under the sway of this hormone—hence the name suggested by Frank—female sex hormone—is very appropriate.

Theelin is dissolved in the lipoids of the ovary, although the demonstration of lipoids histochemically does not necessarily imply the presence of female sex hormone. For example: The corpus luteum of pregnancy contains very little lipoids, but a considerable quantity of theelin. The corpus luteum after menstruation contains a great deal of lipoids but very little hormone.

With the new test for theelin it is now possible to study the effect of x-ray not only upon the anatomical but also upon the functional changes in the ovary. We are especially indebted to Parkes of London for the study on the mouse. If the mouse is given 300 to 400 R the entire follicular apparatus is destroyed, but in spite of that there is a constant rhythmic recurrence of the estrus cycle for several weeks or months, thus showing a constant rhythmical production of

ovarian hormone. There is therefore in this animal a notable difference between operative and α -ray castration, for in the former there is an immediate loss of estrus and theelin.

The effect of α -ray stimulation is as follows: The administration of 1/10 of a castration dose in immature animals produce slight anatomical stimulation of the follicles. Larger doses stimulate the follicles up to the stage of rupture, but there is never any theelin in them. There is premature follicle growth but not premature hormone production. The effect of the α -ray upon human ovary as far as it pertains to theelin has as yet not been completely studied.

THE ISOLATION OF THEELIN

The chief sources for theelin are follicular fluid, corpora lutea, placenta (500 r.u. in a full term placenta), the urine of pregnancy (500-1000 r.u. per liter, horse 10,000 r.u. per liter). Beginning with the second month of pregnancy there is a constant increase of theelin in the urine, and then it completely disappears by the tenth day post-partum. The cause for this large production is not known. Its source is the placenta, for the production of theelin continues when the ovaries are removed. Normally in the non-gravid state a woman excretes in the urine 10-20 r.u. per liter, per day.

The usual method of isolation of theelin is to extract acidified urine with a lipoidal solvent, in our case ethyl-acetate, and then remove it from the solvent with dilute NaOH. Further purification depends upon solution in benzine, ether and ethyl acetate. In 1929 Professor Clarke and I isolated 40 milligrams of crystalline theelin, containing about a quarter of a million rat units from three tons of pregnant urine.

For clinical purposes Professor Clarke and I have devised the following method of extraction: The urine after acidifying is saturated with NaCl and extracted with ethyl acetate. The ethyl acetate is then distilled off in vacuo and the residue transferred to a given amount of olive oil. Various amounts of this oil are then injected into castrated rats.

PHYSICAL PROPERTIES OF THEELIN

Theelin is a crystalline substance with a melting point of 254. Its formula is $C_{18}H_{22}O_2$. It is a ketomonoatomic alcohol, containing one OH group and a carbonyl group. It contains one double bond. Theelin is stable towards heat and cold. Treatment with acids and alkalis do not injure it. It is water soluble, dialyzable and readily absorbable. It is interesting to note that crystalline testicular hormone has a formula of $C_{16}H_{26}O_2$ and the conversion of this substance into theelin or vice versa by the body is a distinct possibility. (Possibly by the adrenal cor-

tex in cases of virilism—theelin may be converted into testicular hormone and thus the secondary sex characteristics of these women modified.)

THE BIOLOGICAL ACTIONS OF THEELIN

1. Upon the castrate—produce estrus.
2. Upon the immature animal—produces a single estrus cycle. There is no effect upon the ovaries, the action being limited to the uterus and vagina.
3. When injected into a normal adult in large doses the normal rhythm is broken and the animal remains in constant estrus.
4. Upon the human endometrium—theelin is responsible for the post-menstrual or proliferative phase of the endometrial cycle. It never produces the pregravid phase but sensitizes the endometrium for the subsequent action of corpus luteum hormone (progesterone).
5. Upon the senile animal—when theelin is given to an immature animal one estrus cycle occurs and then the animal returns to its previous resting stage. Sexual maturity is never hurried and the animal reaches sexual maturity at the same time as the untreated litter mate. In the senile animal the single estrus cycle thus produced is followed by a rhythm of cycles lasting over a period of weeks (rejuvenation?).
6. Upon the breast—stimulates the growth of the breast. This is further augmented by the corpus luteum.
7. The anti-masculine effect—large doses produce inhibition of testicular growth in young males. (Very large doses of theelin produce degenerative changes in immature ovaries.)
8. Metabolic rate—very moderately increased.
9. Upon the uterus—in the guinea pig theelin sensitizes the uterus to the action of pituitrin. It has been proposed as the etiological factor for the onset of labor, in view of its increasing concentration as labor approaches. I have been unable to demonstrate this sensitization in the human.

THE CORPUS LUTEUM HORMONES

Our knowledge concerning the corpus luteum hormones is more fragmentary than that of theelin. They have not been isolated in pure form, and we know them only through their physiological activities. Two hormones besides theelin have been isolated from the corpus luteum.

1. Progesterone or lutein—a hormone that causes the pregravid changes in the endometrium and probably inhibits ovulation.
2. Relaxin—a hormone causing marked relaxation of the pelvic ligaments in the guinea pig. It may be responsible for the relaxation of the pelvic girdle during pregnancy.

Recently Knaus demonstrated that in the rabbit uterine contractions during the first half of

pregnancy are inhibited by progestin, thus favoring secure nidation of the ovum. Early removal of the corpus luteum of pregnancy is followed by abortion.

Menstruation and estrous have certain features in common, but they are not the same phenomena. The uterine hemorrhage in menstruation is merely an external sign of a process which involves the whole organism. A number of hormones (five, possibly six) are directly responsible for the cyclic ovarian and uterine changes.

Figure 1 gives a tentative idea of the hormones that are involved in the normal menstrual cycle, their probable number, origin, function, cyclical activity and interrelationship. It can be seen that theelin is responsible for only one phase in this cycle, that is, the proliferative or postmenstrual phase. Female sex hormone is produced throughout the cycle, although its action during the premenstrual phase is not clear. In a functional disorder of the genital tract one or more hormones may be involved. It is therefore wrong to give theelin for every functional disorder, and the hormone is only indicated when it is deficient in amount or absent. Furthermore, because of the antagonism between some of these hormones, advantage may be taken of this therapeutically, for, where one hormone is showing hyperactivity, the inhibiting hormone may be used to depress it.

In a previous publication⁸ we have shown a method of approach to the study of some of the functional disorders that is now in use at the Sloane Hospital for Women. The basis for the classification of these disorders is the following group of facts.

1. Every normal woman excretes throughout her menstrual cycle ten to twenty rat units of theelin per liter of urine.

2. This excretion is fairly constant throughout the cycle, with some variation during the cycle, but remains within the above limits.

3. The quantitative demonstration of theelin in the urine as at the present time one of the best methods of determining ovarian (follicular) activity.

4. The follicle stimulating hormone (Prolan A) from the anterior pituitary gland is normally not found in the urine (by the method described), but can be demonstrated when the ovary ceases to function completely (castration, etc.).

The theelin in the urine is determined by the method of Kurzrok and Ratner,⁹ based on a method of obtaining crystalline female sex hormone (Clarke and Kurzrok¹⁰). Prolan A is determined by the method of Zondek.¹¹

If we determine the presence and absence of both theelin and the follicle stimulating hormone in the urine four types of excretion are possible, and based on these different types, distinct forms of therapy are indicated.

TYPE I

1. Theelin—present. Follicle Stimulating Hormone—absent.
 - A. Theelin—10 to 20 rat units per liter. Normal function—usually. Occasionally amenorrhea (isohormonal type).
 - B. Theelin—less than 10 rat units per liter. Hypofunction with hypomenorrhea, oligomenorrhea or amenorrhea (hypohormonal type).
 - C. Theelin—greater than 20 rat units per liter. Amenorrhea (polyhormonal type of Zondek). Poly and hypermenorrhea. Cystic and glandular hyperplasia of the endometrium.

Therapy:

In the isohormonal and hyperhormonal type of amenorrhea theelin is not indicated, for it is produced in normal, or greater than normal, quantities. We have recently given the luteinizing hormone of the anterior pituitary with good effect. The hypomenorrheas give excellent results with theelin and with the gonadal stimulating hormones (Prolan or Follutin). The excessive bleeding in cystic and glandular hyperplasia of the endometrium is due to an excess of theelin, and therefore its use therapeutically is contraindicated. Advantage may be taken of the antagonistic hormones, Prolan B or lutein. The latter is not as yet on the market, but Prolan B is found either in Prolan or Follutin (combined with Prolan A) or in a purer form combined with the body growth hormone. Novak has reported excellent results with this form of therapy and our own results are equally encouraging.

TYPE II

1. Theelin—absent. Follicle stimulating hormone—absent. Hypofunction, amenorrhea, hypomenorrhea or oligomenorrhea. Some severe menstrual headaches.

Therapy:

This type is an extension of the hypofunction already described in Type I, B. In cases of ovarian hypofunction one must remember that the defect may primarily be in the anterior pituitary gland. This gland is the motor of the genital system. Prolan A stimulates the ovary to form follicles, and these in turn produce female sex hormone and the latter acts upon the endometrium. Shall we therefore give ovarian hormone as substitution therapy or give prolان A which will stimulate the follicular apparatus, or both? We usually give both. But it must be remembered that very large doses of theelin may depress the production of the follicle stimulat-

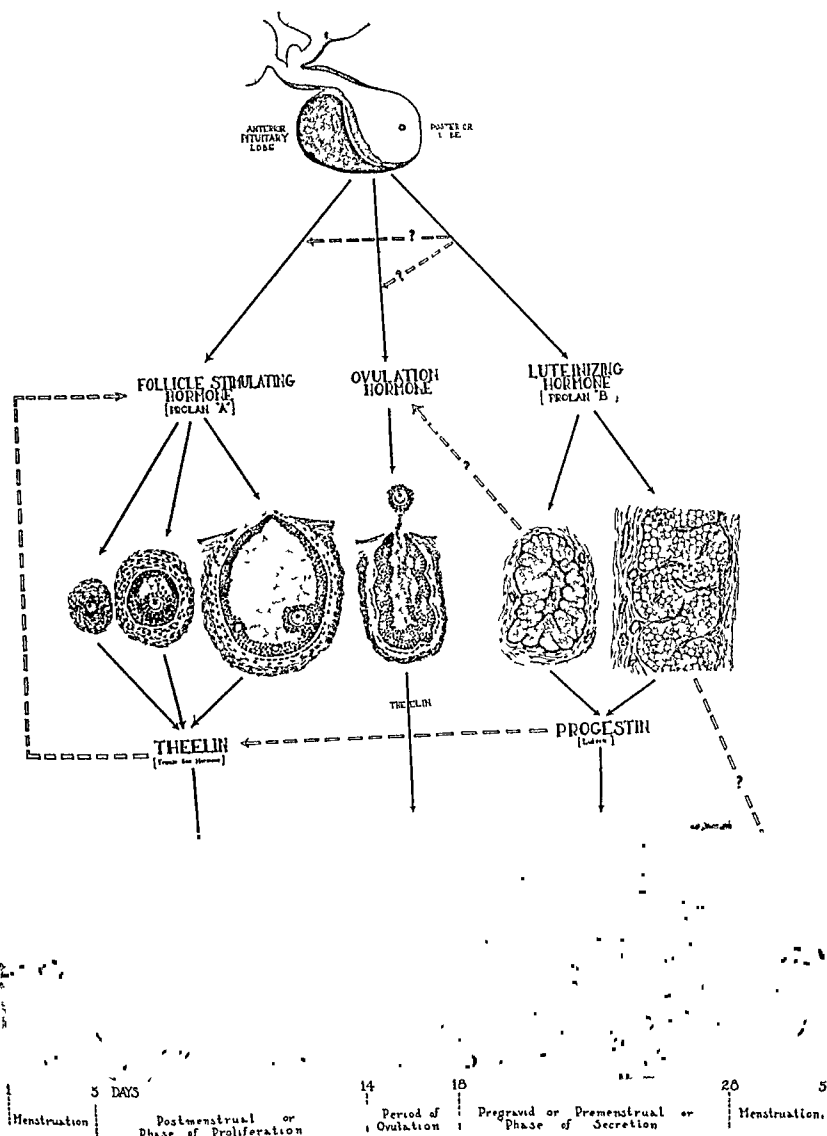


FIG 1 Hormones involved in normal menstruation, and the cycle of ovarian and uterine activities

ing hormone, and may also produce generative changes in hypoplastic ovaries.

TYPE III

1. Theelin—absent. Follicle stimulating hormone—present.
Cessation of ovarian function—castration, radiation, menopause precox, spontaneous menopause.
Very severe headaches.
(Ahormonal amenorrhea.)

Therapy:

Theelin is indicated in all of the above symptom complexes. Prolan A is contra-indicated, for it is already produced in excessive amounts, and is not utilized because of the absence of active ovarian tissue. We have found that there are two types of spontaneous menopause, depending upon the presence or absence of ovarian hormone in the urine. Theelin is only of benefit where no female sex hormone is produced, and one gets the impression that when it is given to those cases that produce it spontaneously the patient's symptoms are often made worse. Our experience has been that a small amount of theelin dissolved in oil is more efficacious in the treatment of menopause than larger doses dissolved in water.

TYPE IV

1. Theelin—present. Follicle stimulating hormone—present.
Pregnancy.
Genital carcinoma in women of child-bearing age.
Occasionally in some glandular syndromes—thyroid, pituitary.

Therapy:

Only the last group is in need of glandular therapy and our experience here is far too limited to express an opinion.

Theelin has been used in almost all functional disorders. This is physiologically wrong. For example, in the amenorrheas in which theelin is involved, it is indicated only in the ahormonal and hypohormonal types, and contra-indicated in the isohormonal and hyperhormonal types. In judging the clinical results of hormonal therapy one must remember that the production of spotting for a few hours does not necessarily mean that a menstrual period has been obtained. Intelligent women can readily differentiate between spotting and menstruation. Several menstrual periods occurring at fairly regular intervals must occur before a therapeutic result can be claimed.

Our knowledge of these hormones is still very fragmentary and often confusing. But enough has already been done to convince us that we are on the right track scientifically and clinically.

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A NEW METHOD OF OUTLINING THE URINARY TRACT BY MEANS OF UROSELECTAN INJECTED INTRAVENOUSLY*

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UROSELECTAN

THE most recent striking advance in our armamentarium for examination and diagnosis of urological cases is the discovery and utilization of Uroselectan. This is a drug which may be injected intravenously under proper precautions and thus far, in the experience of a great many skilled hands, has failed to show any toxicity. Uroselectan is excreted by the urinary organs in sufficient quantity to show fairly well in radiograms taken at certain intervals and gives promise of being a particularly useful method in selected cases.

This drug, oxyiodopyridin acetic acid, was

synthesized by Prof. Bintz and Dr. R  th of the Landwirtschaftliche Hochschule of Berlin (Chemical Institute) in 1927. It contains 42 per cent of organically combined iodine. Its use in outlining the kidney pelvis was developed in the department of Urology at St. Hedwig's Hospital in Berlin.

It is particularly interesting that Professor A. Von Lichtenberg has been influential in this latest development in the diagnosis of renal lesions as he was in the first pyelography taken. In 1905 Von Lichtenberg conceived the idea that it would be helpful to outline the kidney pelvis by injecting a shadow casting solution in the kidney through an ureteral catheter and take an x-ray picture. He discussed the matter with Prof.

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 2, 1931.

Voelker and they decided to cystoscope and pyelograph each other.

Prof. Voelker then proceeded to cystoscope, catheterize, and inject collargol into Von Lichtenberg's kidney. An x-ray revealed a beautiful outline of the kidney pelvis and an epoch-making discovery had been made. Von Lichtenberg prepared to repeat the experiment on Voelker and the latter promptly decided that the experiment was thoroughly successful and they could now practice the method without further experimentation on himself.

This same Prof. Von Lichtenberg is now influential in the latest epoch-making discovery, in the diagnosis of renal lesions, a quarter of a century after his first work.

Others to be mentioned in connection with this study are Binz and R  th who synthesized the drug; and Swick of New York, who working in Von Lichtenberg's clinic, actually made the first successful intravenous pyelogram with Uroselectan.

In this connection it is well to call your attention to the fact that this is not an accidental discovery, but a successful culmination of years of effort by a large number of workers.

In 1923 Osborne, Sutherland, Scholl, and Rowntree were the first to attempt the visualization of the urinary tract by means of intravenous injection of a 10 per cent solution of sodium iodide. In 1924 Rosenstein and Von Lichtenberg repeated the work with iodide in conjunction with the perirenal pneumo-radiographic method of Rosenstein. Volkmann, in 1924, Lenardouzzi and Pecco in 1927, have also given an account of their findings. Hryntschak, at a congress in 1928

and in the Zeitschrift fur Urologie, 1929, reported his work. Finally, Roseno by means of the intravenous use of a substance containing sodium iodide bound to urea, was the first to achieve practical results but apparently associated with some reactions



FIGURE 2.

A. Shows the outline of the two kidneys markedly accentuated by Uroselectan. The pyelogram and the left ureterogram are beautifully shown.

B. A retrograde pyelogram shows the pelvis of the right kidney better than the Uroselectan pictures, but does not outline the kidney shadows at all.

Selectan neutral also synthesized by Binz and Rath in 1927 was used in combating coccus infections on the medical service of Prof. Lichtwitz at the St  disches Krankenhaus, Hamburg, Altona. The study of its excretion and its iodine content (54%) made it seem possible that it might be visualized by means of the x-ray. Animal experimentation made it seem applicable to man, but when attempted, its intravenous administration was accompanied by headache, nausea, vomiting and in two cases diplopia. Oral and rectal administration yielded the same results both as regards the pictures obtained and the toxic manifestations. So it was given up. A modification of Uroselectan called neo-iopex has just been brought out which gives even better pictures than the original drug.

THE TECHNIC OF ADMINISTRATION OF UROSELECTAN

The contents of one bottle of Uroselectan (40 grams) are dissolved in 110 c.c. of double distilled water and the solution is filtered twice through ordinary filter paper. The solution is then sterilized in an autoclave under 15 pounds pressure for 30 minutes. The sterilized solution is then given intravenously by the multiple syringe method using 4—30 c.c. syringes. The total time for the administration of the entire amount should be not less than five minutes. Pictures are then taken at intervals of 10 minutes, 30 minutes, one hour, and two hours, following administration.

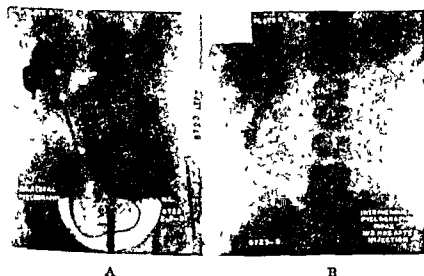


FIGURE 1

A. Shows a bilateral retrograde pyelogram. The left kidney is ectopic, hydronephrotic and contained twenty-one stones. It was removed transperitoneally.

B. Is the same case one and a half hours after the intravenous injection of iopax (Uroselectan). It shows accurately the shadow of the right kidney pelvis but only a little of the solution is collected in the enlarged left ectopic organ. This is due to the great diminution in its function and demonstrates one of the limitations of the method.

These intervals may be varied however, depending upon the kidney function. In case of very poor kidney function it may be advisable to take pictures several hours following administration of Uroselectan.

The preparation of the patient consists of giving a dose of castor oil about 24 hours preceding administration and one glass of water about half an hour preceding administration.

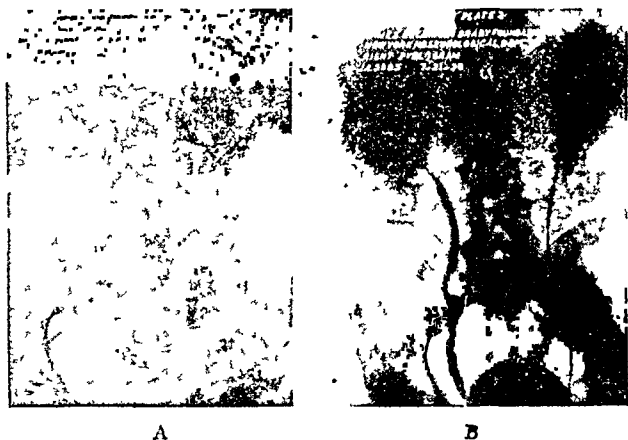


FIGURE 3.

A. This was a particularly helpful Uroselectan picture. The tumor of the right kidney is very poorly shown, but the fact that there was a hydronephrosis of the left kidney was unknown until this picture was taken. Dilation of the left ureter and proper drainage of the left kidney made it possible to remove the cancer on the right side with impunity.

B. Shows the tumor of the right kidney beautifully by retrograde pyelography.

The solution may also be sterilized by boiling for ten minutes; but in this case there is a loss of about 10 per cent of the Uroselectan.

Uroselectan is absolutely non-toxic, neutral in reaction, readily soluble in water, and its tolerance is exceedingly great.

Under normal conditions, 95 per cent should be excreted within 6 to 8 hours. About three-fifths of the substance is excreted during the first 2 hours, one-quarter during the next hour, and the remainder in another 4 hours. In the case of diseased or damaged kidneys, the rate of excretion is proportionately decreased, and the substance has been found in the urine as late as 6 to 8 days after injection when stasis has been present. The specific gravity of the urine in normal kidneys is greatly increased, often reaching as high as 1040 or 1045 within a few hours after injection, whereas such is not the case in the presence of diseased organs. A child of 7 years of age receives one-half the adult dose which is 40 grams; and a patient of 2 years, one-quarter of the dose. The youngest patient ever injected was an infant of five months. Compression by means of an inflated rubber bag over the bladder region 10 minutes prior to and during the time

of roentgenographic exposures, markedly intensifies the pyelograms.

The cases examined in this study consisted of men, women and children of all ages. There were 167 altogether of these, six were youths and children. About 60% of the cases were males and 40% females.

There was a great divergence in the ages of the patients, the youngest a child of 5 months and the oldest was a much talked of personage, the famous old man of Turkey, Zaro Agha, 156 years of age. The average age of all patients examined was 36 years.

This method was of great aid in making a correct diagnosis in 117 cases, and apparently of no assistance in 50 instances.

It seemed to be of great importance to determine the best time for making the radiographic exposures. We therefore took pictures at 5-minute intervals after injection, until the end of an hour. Again at 2 hours, 3 hours, 4 hours, and 5 hours. It was found that only on the rarest occasions did one secure any worthwhile picture in 5 minutes. Frequently a 15-minute exposure would be excellent, but in most instances where there was no obstruction the best radiogram was obtained between the 20 and 30-minute period. In cases of hydronephrosis or other obstructive lesions, the shadow may be observable for very long periods of time, frequently as long as 5 hours after injection.

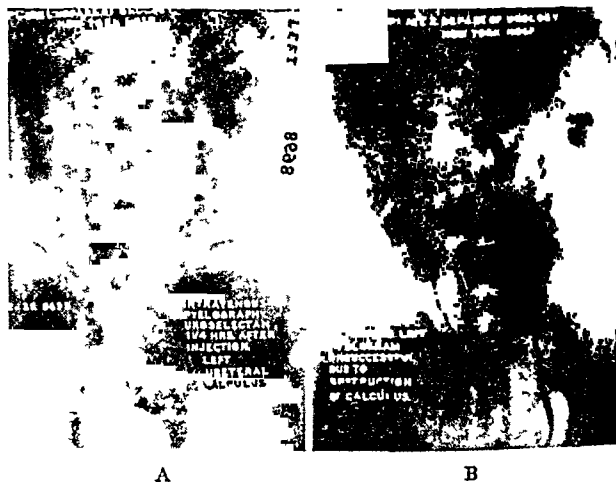


FIGURE 4.

A. Shows the dilated ureter pelvis, and calyces above a calculus in the left ureter opposite the transverse process of the third lumbar vertebra by the intravenous method which it was impossible to delineate by the retrograde method as shown in B.

Untoward Results. There have been no serious accidents of any sort connected with the injection of Uroselectan and the untoward results have been very slight. Two cases had no unusual sensations whatever. 165 mention a sensation of warmth pervading the body. Nine patients ex-

perienced nausea, but only two of these vomited. Thirteen experienced a choking sensation. One patient had an excess of mucus in the throat, another noticed a frequency of urination and 41 in the entire series experienced pain in the arm during the injection of the solution.

The results of our experience with this drug indicate that intravenous pyelography will in no way displace cystoscopy as a diagnostic procedure, nor will it in the ordinary investigation relieve us from doing a pyelogram by means of injecting solutions through the ureteral catheter when indicated.

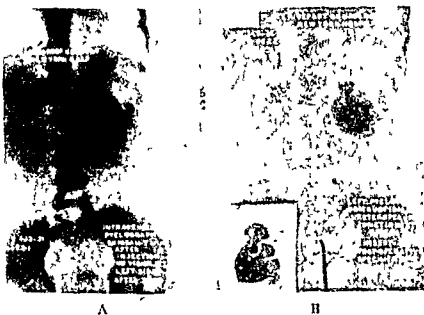


FIGURE 5.

A. Shows the Uroselectan picture of a child. The left kidney is destroyed. The right kidney and ureter are well within normal limits.

B. Shows a retrograde pyelogram of the diseased kidney. The insert shows the pyelogram of the kidney pelvis after removal. This is particularly helpful in showing the normal right kidney and is an illustration of the saving of an extra cystoscopy.

There are certain cases, however, in which cystoscopy would be considered a major procedure and distinctly contra-indicated except under the gravest necessity. Such cases might be subjected to intravenous pyelography without harm and with the possibility of decidedly beneficial information being obtained. In children suffering from upper urinary tract lesions, cystoscopy, even with the splendid Butterfield's child's cystoscope, requires a general anesthetic, thus making it a major surgical procedure. In certain aged or very ill patients cystoscopy is contra-indicated also.

In patients who have had the ureters transplanted into the bowel, catheterization of the ureters is impossible, and intravenous Uroselectan becomes the only method of visualizing the urinary tract.

Pyelograms made with Uroselectan and sterile water in equal parts by injecting the solution through a ureteral catheter give fair pictures and do not cause as much irritation as sodium iodide

Also in the presence of hematuria Uroselectan is particularly helpful.

Contra-indications for its use. In case of grave renal dysfunction, it is not advisable. Two deaths of children have been reported after its use, but the deaths cannot be specifically ascribed to its administration.

By the use of Uroselectan delay in visualization and excavation of the kidney cortex may be noted, as well as granular encroachment on the lumen of the kidney pelvis and ureter. In this manner a very good idea of the presence and extent of tuberculosis lesions may be estimated.

Most cases of urinary tuberculosis come to the surgeon because of vesical irritation as symptoms occur early, persist throughout the disease, and are not amenable to any form of treatment except in rare instances. The vesical irritation which accompanies these symptoms makes cystoscopy painful, and in some instances dangerous, as several cases of vesical rupture have been reported.

Various types of anesthesia are used, all of which are accompanied by a certain element of danger. Also there is edema of the vesical mucosa, particularly in the region of the ureteral orifices, which makes catheterization of the ureters difficult and in some instances impossible. In such cases Uroselectan is of inestimable value.

In cases of bilateral tuberculosis of the kidneys, it is frequently deemed advisable to remove the worst kidney; and the patients often profit from such a procedure. The use of Uroselectan to visualize the condition of the remaining kidney is a very great addition to our armamentarium.

Certain tuberculous patients are in such serious general condition that any investigation as rigorous as a cystoscopy is precluded. The information obtained by intravenous pyelography is frequently so useful that further investigation is unnecessary. The case shown in Fig. IV is one of this sort and is an excellent example of the marvelous efficiency of the method. Uroselectan is particularly helpful in the differential diagnosis between stone in a kidney calyx, a calcified renal cortical abscess, and an extra-urinary shadow. Indeed, in such a case this method is superior to any other, because a pyelogram does not accentuate the renal cortical structure as Uroselectan does, thus making a tubercular abscess in the cortex stand out in a most interesting manner.

It is unquestionably true that intravenous pyelography does not give as clear cut pictures as those obtained by injecting sodium iodide from below; but the circumstances which allow the use of the intravenous method are so numerous when the old fashioned method is dangerous or impossible that this drug opens up a new field of diagnosis which is epoch-making, and is one of the most important contributions ever made in urological diagnosis.

THE VALUE OF AN EQUILIBRATED SALT DIET IN THE TREATMENT OF VARIOUS DERMATOSES

A Modification of the Herrmannsdorfer-Sauerbruch-Gerson Diets.

By JOSEPH JORDAN ELLER, M.D., AND CHARLES ROBERT REIN, M.D., NEW YORK, N. Y.

WITHIN recent years renewed attention has been directed to the restriction of sodium chloride in the treatment of various diseases. The impetus was given several years ago by Max Gerson, who proposed salt-poor nutrition in the treatment of tuberculosis. His results attracted the attention of Sauerbruch and Herrmannsdorfer, who subjected Gerson's dietary proposals to wide experimental and clinical research and subsequently modified them in certain respects. To Sauerbruch belongs the credit for having perceived the true import of Gerson's proposals and for their introduction into medical practice.

It may be well to summarize briefly the characteristics of the Gerson^{1, 2} and Herrmannsdorfer-Sauerbruch^{3, 4} diets, whose chief differences are shown in the accompanying table. It is necessary to bear in mind that Gerson has also modified his original diet so that when we now speak of the Gerson diet we mean the modified and not the original form of the same.

Both diets are salt-poor. No table salt is added to the foods either in cooking or on the table and no manufactured foods containing table salt are employed. The diets therefore contain only the relatively small amounts of sodium chloride naturally present in the raw foods. The sodium chloride content of both diets is probably about 3-4 grams daily and will vary with the raw materials and the total food intake.

Both diets prepare the foods by methods which assure a high vitamin and mineral content. Both are fat-rich but carbohydrate-poor. They differ greatly as regards protein, which is low in the Gerson diet and moderately high in the Herrmannsdorfer-Sauerbruch diet. There are certain minor differences in respect to permitted and prohibited foods and the preparation of certain foods. The fluid requirement is covered mainly by milk in the Herrmannsdorfer-Sauerbruch diet and almost entirely by juices extracted from raw vegetables and raw fruit in the Gerson diet. The Gerson diet makes use of occasional raw food days on which only uncooked foods are permitted. The Gerson diet is alkaline-ash, while the Herrmannsdorfer-Sauerbruch diet claims to be acid-ash and to be capable of shifting the tissue reaction feebly to the acid side of the equilibrium. Both diets employ similar medication, consisting of the oral administration of a mineral mixture proposed by Gerson, and a phosphorized codliver oil containing vitamins A and D. Besides these medicaments Gerson also employs at times certain hormones and an irradiated codliver oil.

A distinctive feature of the Herrmannsdorfer-Sauerbruch diet is that the relative proportions of protein, fat and carbohydrate are fixed. The proportion now employed in this diet is as 1.5:2.7:4 per kilogram of bodyweight, exclusive of codliver oil.

Both diets seek to dehydrate the tissues and to modify the body's mineral balance. Sauerbruch and Herrmannsdorfer have confined the use of their diet almost entirely to the treatment of tuberculosis while Gerson employs his diet not only in tuberculosis but also in other diseases including various dermatoses.

Gerson,⁵ Sauerbruch and Herrmannsdorfer,⁶ Schueller⁷ and others reported favorable results in bone, joint and pulmonary tuberculosis. Volk,^{8, 9} Jaffe and Steffens,¹⁰ Blumenthal,¹¹ Wichmann,¹² Jesionek,^{13, 14} Doerffel¹⁵ and Bommer^{16, 17, 18} have reported favorable results in skin tuberculosis.

There is considerable controversy in Germany over the value of the salt-restricted diets in pulmonary tuberculosis. In this country Emerson¹⁹ and Banyai²⁰ used modified Gerson-Herrmannsdorfer-Sauerbruch diets in the treatment of pulmonary tuberculosis with fair results. Mayer²¹ employed the original Gerson diet on a selected group of patients with pulmonary tuberculosis with apparently good results. He has reviewed the question of salt-restricted dietary in tuberculosis and concludes that although it offers a distinct therapeutic advance in the treatment of lupus and is capable of raising the resistance of pulmonary patients, considerably more investigative work must be done before definite conclusions regarding its value could be reached. The Herrmannsdorfer-Sauerbruch diet is now being tried out in several institutions on pulmonary patients.

Jesionek and Bommer^{10, 17, 18} have reported striking curative results with the Herrmannsdorfer-Sauerbruch diet in the treatment of a large series of lupus vulgaris cases and other types of skin tuberculosis at the Giessen Lupus Clinic.

More recently Doerffel²² has carried out the Herrmannsdorfer-Sauerbruch diet in 51 patients with skin tuberculosis. Careful microscopic, macroscopic, chemical and cultural studies were made. In the great majority of these cases the results were reported excellent. In the favorable cases the lesions healed with remarkably good cosmetic results. Characteristic healing changes, decreased virulence or complete disappearance of tubercle bacilli and a favorable effect on the entire organism were noted. The skin

showed dehydration and alteration of the ionic balance associated with an increased potassium content. Doerffel concludes that the change produced by the diet on the mineral ratio was an important factor in healing.

The difficulties attending the use of a diet in which all sodium chloride must be excluded are well known. The desire for salt is deeply rooted in nearly all races in every quarter of the globe, and its withdrawal causes great and undeniable hardships. Rendering unsalted foods acceptable to patients for prolonged periods demands skillful culinary procedures with pleasing and varied presentation of the foods. In such a diet the kitchen assumes decisive importance. But besides this there must be constant vigilant supervision by the physician as well as strictest co-operation of the patient to attain successful results. If these pre-requisites be difficult to fulfill in institutions, that difficulty becomes vastly accentuated in ambulatory patients.

Attempts to render unsalted food adequately palatable by means of table salt substitutes have proved unsatisfactory. These preparations contain no sodium chloride but other substances with a more or less salty taste. Some of them possess but feeble seasoning power or leave an unpleasant after-taste; others with better seasoning power cannot be used except in very small quantities.

The necessity for assuring palatability and the failure to find adequate table salt substitutes led to increasing use of various other seasoning and flavoring agents and special culinary procedures to make up for the lack of table salt. Strauss first suggested many seasoning and flavoring agents and procedures. Gerson has given many directions for securing palatability, and M. Herrmannsdorfer⁴ has worked out additional skillful methods which largely mask the withdrawal of table salt.

In regard to the loss of palatability from table salt withdrawal, a recent new development is of considerable interest to dermatologists and may possibly prove of great value.

Keining and Hopf^{23, 24} recently investigated the role of table salt in nutrition in relation to the so-called sympathetic dermatoses. They found that various dermatoses show marked hypersensitivity toward sodium chloride. When eczema and urticaria patients were flooded with sodium chloride by mouth, following several days' salt-free feeding, they nearly always showed a marked exacerbation of symptoms. This procedure often gave the patients severe shock and the salt-flooding had to be promptly discontinued. The itching usually became unbearable. In addition it was shown that intracutaneous injection of isotonic salt solution produced wheals at the site of injection, while no wheals were produced with osmotically equi-

brated glucose solution in the same patients. Experiments to determine whether the sodium or the chlorine was responsible, demonstrated that the cation and not the anion was the irritating factor. Consequently the authors attempted to remove the irritative action from table salt. Proceeding from the known antagonism between certain cations they developed what they term a physiologically equilibrated salt-mixture. This is based on the fact that sodium is the harmful component and that it can be rendered perfectly harmless to the organism by bringing it into definite proportional relationship with sodium-detoxifying cations, viz., potassium, calcium and magnesium cations. The cation relation of this mixture was found to correspond very closely to the cation relation of the blood serum.

When Keining and Hopf injected this equilibrated salt it produced no wheals or only very feeble reactions in the same patients in whom wheals had previously been obtained with injection of isotonic salt solution. Despite the high sodium content of this mixture it failed to exacerbate symptoms when it was given in large amounts by mouth, in those patients who had previously shown great exacerbation following sodium chloride flooding by mouth. Apparently, therefore, this mixture overcame the previous hypersensitivity toward sodium chloride. It has the following formula:

Sodium	32.51%	Chloride	52.63%
Calcium	1.42%	Lactate	3.79%
Magnesium ...	0.86%	Citrate	0.50%
Potassium	2.7 %		

Keining and Hopf²⁵ claim favorable results with the vitamin-rich and mineral-rich diet salted exclusively with this equilibrated salt mixture in a variety of dermatoses such as urticaria, eczema, acne vulgaris, acne rosacea, erythema induratum, Duhring's disease, certain tuberculids and lupus vulgaris. In 18 cases of lupus vulgaris the results were as satisfactory as those obtained by Jesionek and Bommer with the Herrmannsdorfer-Sauerbruch salt-poor diet. Bommer²⁶ treated 33 lupus vulgaris patients with a salt-restricted diet which was prepared precisely as directed by Herrmannsdorfer excepting that the foods were salted with this equilibrated salt. He claims for this treatment the same curative results in lupus as for the Herrmannsdorfer-Sauerbruch salt-poor diet. Langer²⁷ has reported favorable results with the equilibrated salt diet in urticaria, eczema, pruritis, and particularly in dermatoses involving internal hypersensitivity.

The salient theoretical foundations of Keining and Hopf's modification of the Herrmannsdorfer-Sauerbruch-Gerson diets are the following:

Keining and Hopf believe that the chemical composition of ordinary table salt is faulty. In

nature, whether in human or animal blood, in sea-water, or in the sources from which table salt is derived, sodium chloride always occurs associated with potassium, calcium and magnesium combinations. But the refining processes to which natural salt is subjected deprive it almost entirely of these constituents and yield a highly refined artificial product consisting of practically pure sodium chloride. Long continued daily intake of this refined product may derange the normal cation relation in some individuals, with the result that in them sodium is enriched, while potassium, calcium and magnesium become impoverished. Abnormal cation relations affect the colloidal structure of cells, altering the response of these cells to stimuli, disturbing stimuli conduction and leading to sympathetic disturbances. Table salt restriction, which reduces the sodium intake, tends to restore normal cation relations. Similarly, the equilibrated salt mixture likewise tends to re-establish normal cation relations because its sodium content is detoxicated. While the action of a salt-restricted diet and that of a diet salted with this equilibrated salt appears to be analogous, the palatability and assimilability of their constituent foods will differ widely. If it were possible to season foods with a mixture containing 80% of sodium chloride, without however exposing the patient to sodium injury, the use of a diet from which all table salt has to be excluded would be greatly facilitated. This has recently been emphasized by Von Noorden²⁸ from the standpoint of dietetics. Inasmuch as table salt must not be ingested it is necessary to prohibit not only the intake of table salt as a condiment but also foods that have been manufactured with table salt, such as ordinary bread, salted butter, boiled ham, corned beef, etc. If, however, these foods can be prepared with equilibrated salt instead of with table salt their use could be permitted.

The fact that serious health injuries rarely result from the daily consumption of considerable amounts of table salt is believed to show that the body possesses sodium-detoxicating mechanisms. These mechanisms are assumed to depend on the body's capacity for bringing sodium into relation with antagonistic cations.

In a personal communication Keining and Hopf state that they have investigated the action of the equilibrated salt on the water metabolism. They found it does not cause water retention in normal people. Consequently they suggest its employment in sub-acute and chronic nephritic and also in cardiac and circulatory conditions in which table salt is contraindicated. If confirmed, this would do away with the necessity for putting such patients on unpalatable salt-poor nutrition.

Though we have ourselves employed the Herrmannsdorfer-Sauerbruch unsalted diet in skin cases, we felt that the greater palatability obtain-

able by the use of the equilibrated salt mixture would facilitate the application of table salt restriction in such patients. Accordingly we treated various dermatoses with this diet as directed by Keining and Hopf.²⁹ The detailed procedure is as follows:

The patient is put on a salt-free diet for about eight days. On the fourth day of this regimen he is given a sodium chloride "thrust" in the form of 5 grams sodium chloride three or four times daily, by mouth, in little water, masked by menthol. The salt thrust is continued for from 1-3 days, as needed, to observe the reaction. The patient is then put back on salt-free feeding another 3 days. He is then given a physiologically equilibrated potassium, calcium and magnesium cation mixture by mouth for several days, also under salt-free nutrition, whereby the exacerbation which usually occurs due to "salt thrust" fades. Following the cation thrust days, the patient is placed on a diet from which all table salt is rigidly excluded and which is salted exclusively with the equilibrated salt mixture. This dietary treatment is supported by oral or parenteral administration of the aforementioned cation mixture until the acute symptoms have faded. The cation mixture is specifically intended to accelerate a preponderance of potassium, calcium, and magnesium as against sodium. It is important to use a diet which is rich in vitamins and minerals. In this connection Bommer's³⁰ views on the effects of the Herrmannsdorfer-Sauerbruch diet in lupus are of interest. He states that neither salt withdrawal alone nor vitamin-rich foods alone can account for the curative effects but that those two factors must operate concurrently. Blumenthal¹¹ gave lupus patients a vitamin-rich diet salted with table salt and also an irradiated ergosterol preparation without achieving successful results. Bommer on the other hand fed lupus patients a vitamin-poor diet without table salt and had no results that could be compared with those obtained under the vitamin-rich and salt-restricted Herrmannsdorfer-Sauerbruch diet.

While dehydration and mineral balance are the cardinal objectives of the salt-restricted dietaries, the precise mechanism of the latter has so far escaped elucidation. Various theories have been propounded. Bommer believes that simultaneous table salt restriction and vitamin-richness restores the functions of the capillary wall cells, and that all other curative processes may be regarded as following from this action. Only when the ionic environment of the vascular wall cells has returned to normal physiologic relations can the vitamins unfold their full effects. Apparently vitamin intake and salt regulation mutually support and favor each other's action.

Grote³⁰ regards the dehydrating action of salt withdrawal as the leading factor in the favorable

effects of the salt-restricted dietaries. This view is also shared by Strauss²¹ and others. Von Noorden²² assigns great significance to the preponderance of the calcium-ion in the tissues, resulting from the decrease of sodium chloride, and to the antiphlogistic action of the calcium.

In connection with the role of calcium, a personal communication from Keining and Hopf, referring to researches by Dittman and Von Baeyer,²³ is of interest. They showed that the skin's inflammatory capacity is increased when calcium-precipitating agents are brushed into the skin. Keining and Hopf have extended these researches by testing a large number of patients with local applications of definite salt solutions, which were brushed into the skin. When more sodium was thus introduced, or when calcium-precipitating and magnesium-precipitating agents were brushed in, erythema (from regulated ultra-violet radiation) was increased. On the other hand the erythema reaction was not influenced by chlorides, acids or alkalies. That the cation environment directly influences the cell was shown also when novocain solution was brushed into the skin, which paralyzes the sympathetic nerve-endings but does not influence the erythema capacity.

RESULTS

Our personal experience with the equilibrated salt mixture diet was limited to 12 cases including 2 cases with lupus vulgaris, 2 with lichen planus, 4 with chronic eczemas of unknown etiology, 2 with urticaria, and 2 with acne vulgaris.

The patients with lichen planus, urticaria and eczema showed definite improvement under salt-free nutrition but marked exacerbation of the symptoms when the sodium chloride thrust was employed. These patients again improved when they were put on a diet from which all table salt was excluded but which was salted exclusively with the equilibrated salt.

The 2 cases of lichen planus continued to improve for some time. The intense pruritis in both cases had almost entirely subsided. No new lesions appeared but the old lesions remained stationary.

Both patients with urticaria became free of symptoms and have remained free during this study. This favorable response may be due to an influence of the equilibrated salt mixture diet on the calcium metabolism.

The 2 eczema cases had become entirely free of the skin lesions and have remained free during the study. The other 2 cases were unaffected by this diet.

The patients with lupus vulgaris and acne vulgaris showed no change during the salt thrust and were unaffected by the diet. In most of these cases we were unable to obtain the patients' strict and long-continued cooperation.

In attempting to appraise the results we realize the difficulty of making fair comparison of

our results in few cases with those reported by Keining and Hopf on large series. And whereas the German authors were able to hospitalize many cases our own patients were all ambulatory ones. Full allowance must be made for this. Keining and Hopf distinctly stated that their ambulatory patients frequently failed to follow the dietary directions conscientiously and that the percentage of favorable results was considerably higher in the hospitalized cases. Further, it was not possible for us to satisfy all of Keining and Hopf's requirements. For instance, they stress the great importance of a thorough clinical examination of the sympathetic disturbance in order to arrive at a clear conception of its nature before the dietary treatment is instituted. We were unable to carry this out on the ambulatory patients though the salt thrusts and cation thrusts were given whenever possible.

While the equilibrated salt diet offers palatability of all the foods and therefore removes the chief hardships pertaining to table salt restriction, it nevertheless necessitates constant conscientious cooperation on the part of patients. The necessity for excluding all foods containing table salt renders the application of the diet in skin patients who take meals away from home a matter of greatest difficulty, just as in the case of the unsalted Hermannsdorfer-Sauerbruch-Gerson diets. The difficulty may be partly overcome by the regular intake of the cation mixture in tablet form before meals, which to some extent compensates for undesired table salt ingestion. In such patients this dietary treatment will however probably prove unsatisfactory and the results inconclusive. To arrive at a just estimate of its capabilities it will be necessary and desirable to apply it in well-controlled institutionalized patients, though, given proper cooperation, it can be carried through satisfactorily in patients' homes.

From our preliminary study of the Keining and Hopf equilibrated salt diet on ambulatory patients we have nevertheless gained the impression that when properly applied it should constitute a useful and valuable additional form of therapy in selected dermatoses.

We wish to acknowledge the assistance which was rendered to us by Mr. Robert Wollheim in the course of this preliminary investigation of the equilibrated salt diet of Keining and Hopf. Mr. Wollheim has long identified himself with the dietetic aspects of salt-restriction, particularly in relation to the Hermannsdorfer-Sauerbruch-Gerson salt-poor tuberculosis diets. In our work with these and with the Keining and Hopf equilibrated salt diet he worked out suitable regimens and special directions for the different cases and was also instrumental in obtaining for us the requisite quantities of the equilibrated salt mixture (Titro Dietetic Salt) and of the equilibrated cation mixture.

Table* Showing Differences Between the Gerson and Hermannsdorfer-Sauerbruch Diets

	Gerson Diet	Hermannsdorfer-Sauerbruch Diet
Meat	At most 100 grams once a week.	500 grams weekly.
Viscera	Prohibited.	Spleen, liver, sweetbread, brain, kidney are recommended.
Fish	Only about 70 grams per week.	Permitted.
Milk	½ pint per day.	2½ pints per day.

* From "Kochbuch fuer Tuberkulose," by M. and A. Hermannsdorfer, Joh. A. Barth, Leipzig, 1931.

Protein	Daily average protein about 40 grams.	Daily average protein about 90 grams.
Fat	Moderate amounts.	160-200 grams per day.
Cream	Prohibited.	About ½ pint per day.
Carbohydrate.	Generous amounts.	200-240 grams per day.
Potatoes	Generous amounts.	At most 125 grams per day.
Eggs	Only yolk of egg.	Whole egg.
Raw food ...	Predominant constituent 3-4½ pints raw vegetables and raw fruit juices per day.	100 grams raw vegetables and ¼ lb. raw fruit per day.

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UTILIZATION OF TONSIL CLINICS FOR DEVELOPING
BRONCHOSCOPIC ORIENTATION*

By ARTHUR F. HOLDING, M.D., ALBANY, N. Y.

ONE of the difficulties of bronchoscopy is that it is a rare and occasional procedure. It is hard to get enough experience so as to be able to do fast and skillful work in the emergencies when bronchoscopy is indicated. Bronchoscopy is usually conceded to be an emergency, and often a life-saving procedure. Therefore, there is a need of getting more experience in doing bronchoscopy so that the operator's muscle sense is trained, his orientation is natural, and he works without strain.

In the largest cities there are well-trained bronchoscopic teams who keep in constant practice on patients, dogs, rubber phantoms, and other devices, and for them the suggestions in this paper may be valueless. But for that great body of busy otolaryngologists in cities of the

second class and smaller communities who may find themselves called upon to do bronchoscopy perhaps once a month, it is necessary to invent ways to keep themselves bronchoscopically conscious, and in constant state of preparedness against the emergency of bronchoscopy whenever it may arise.

If one were in a medical center where post-tonsillectomy lung abscesses or decanulations after diphtheria or membranous croup were common, one might get some bronchoscopic training from these sources, but in practice we do not find lung abscesses as frequently as scientific medical literature would lead one to expect. Personally in a bronchoscopic experience of ten years we have only seen three cases of lung abscesses and one of these refused to be hospitalized for treatment. We also find that the tendency of the time is for the intubation and

* Read before the Eastern New York Eye, Ear, Nose, and Throat Association, January 9, 1932.

decantulation in cases of diphtheria to be done by the pediatricians, so this experience is lost to the otolaryngologist.

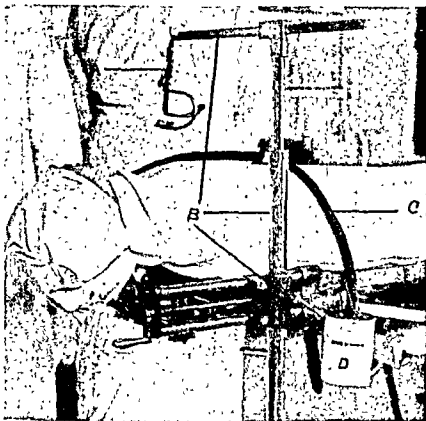


FIGURE I

Suspension mouth gag (a) on Lynch Suspension apparatus (b), with Flagg ether can (d) and ether tube (c) assembled previous to operation.

At our Hospital, as we did not have any member of our team available at all times to act as "head-holder," we early came to rely upon laryngeal suspension for delicate operation on the larynx, trachea and bronchi, and accustomed ourselves to sitting at the patient's head and doing tonsillectomies in this position. (Fig. I and II.) We use the Sluder method as modified by Beck,¹ or the dissection method in the manner

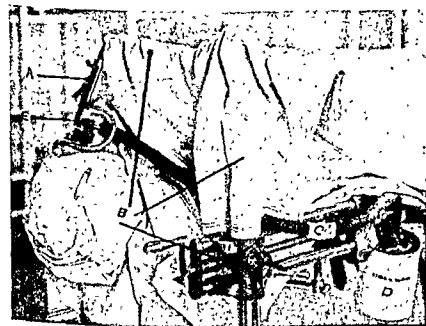


FIGURE II

Patient in position draped for operation. Ether can connected to intra-tracheal cannula. (a) Suspension mouth gag, (b) supports of Lynch's laryngeal suspension apparatus, (c) ether tube, (d) ether can rebreathing chamber, (e) intra-tracheal cannula.

described by Crowe² for taking out the tonsils. (Fig. III.)

Regardless of what method we use for the removal of the tonsils, we use the Crowe position for the removal of the adenoids, removal of small pieces of tonsil tissue, control of bleeding, application of ligatures, inspection of field, etc. The Crowe position has all the advantages of the Rose³ position (Fig. IV.), trapping all blood, secretions and bits of tissue in the pouch formed by the naso-pharynx.

Later, we adopted the Haslinger⁴ head-rest (Fig. V.), with the suspension mouth gag as used by Crowe, the ether being pumped through a cannula in the tongue depressor. If the operation is a short one, we hold the gag by hand; if the operation is to be prolonged, we use the vertical and horizontal supports of the Lynch sus-

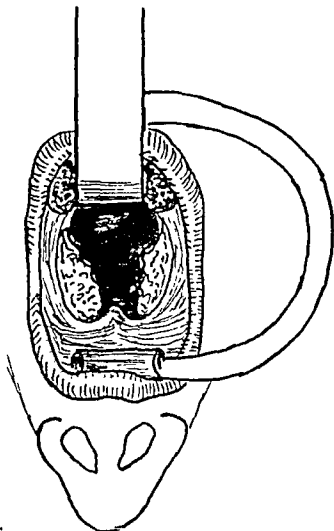


FIGURE III

Field of operation with the operator in the bronchoscopic position, depicted after the manner of Crowe.

pension apparatus to support the suspension mouth gag.

This technique was first suggested to the late Dr. W. T. Garretson, head of the Division of Eye, Ear, Nose and Throat, Henry Ford Hospital, Detroit, and since then has become the routine method of tonsillectomy at that Hospital. Whitney⁵ recently published a report entitled "Suspension Method of Tonsillectomy in 8,000 Cases."

The technique of intratracheal anaesthesia as devised by Flagg,⁶ was later adopted in the Ton-

sil Clinic at the Memorial Hospital (Albany, N. Y.) for all cases of surgery of the head and neck, and the general surgeons in our hospital are beginning to use the same method in head, neck and chest cases.

The experience of exposing the vocal cords by direct laryngoscopy in a large variety of cases, and slipping a canula through the larynx into the trachea in the Flagg anaesthesia method is valuable to the bronchoscopist.

In using the Flagg method in cases of tonsillectomy, the breathing canula obstructs the operative field to some extent, but it can be manipulated out of the field by being slipped under the tongue depressor of the mouth gag, or clamped to the side of the tongue depressor on the gag. This broadens the spatula of the mouth gag so that the annoyance of the tongue bellying over the edge of the tongue depressor is avoided.

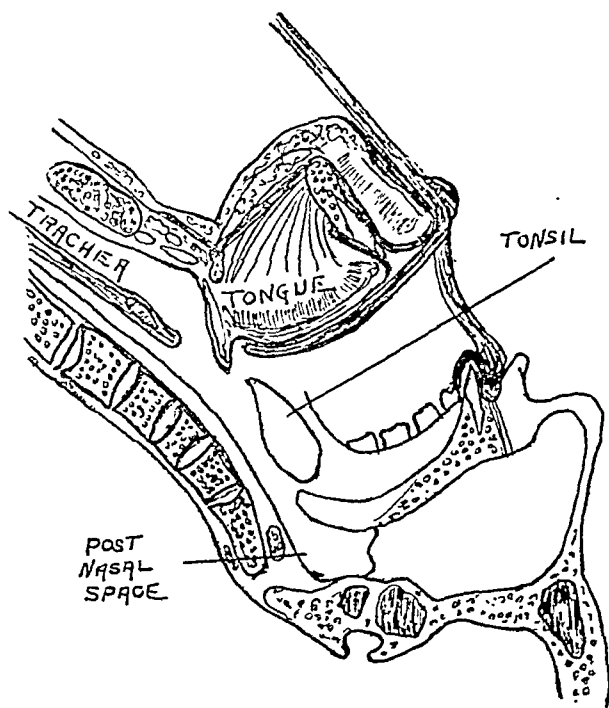


FIGURE IV

Sagittal view, showing safety insured by dependent position of post-nasal space in this position.

The advantages of the Flagg inhalation anaesthesia as stated by him cannot be improved upon—they are:

- a. Elimination of complicated motor-driving apparatus, manometers, and devices for warming and heating ether vapor.
- b. An operating field free from escaping insufflated vapor.
- c. An operative field free from the anaesthetist.
- d. Normal respiratory rhythm and amplitude.
- e. Conservation of carbon-dioxide.

- f. Exclusion from the trachea and lungs of foreign matter, such as blood and vomitus.
- g. Ability to maintain the lightest anaesthesia.
- h. Complete control of artificial respiration by the simplest methods.
- i. A technique which makes available the maintenance of anaesthesia for operations on the nose and throat by ether, gas and oxygen, ethylene, or any combination of these agents.

From the moment of intubation, the patient falls under complete anaesthetic control—a control that is not effected by the subsequent operative procedure or position.

The adoption of the intratracheal inhalation as prescribed is calculated to change the complexion of operations on the upper air passages (as well as all head operations—author) by reducing the customary tension and haste of these operations by insuring full, continuous, unobstructed respiration, which results in a lowered blood pressure, and the reduction of bleeding at the operative site by preventing cyanosis and the accidental aspiration of blood, vomitus, mucous, sponges, tissue, teeth, etc., during operation and thereby protecting the patient from postoperative pulmonary abscesses."

The above quotation describes just the conditions which a bronchoscopist wants and heretofore has found problematical of attainment in each case, so that there was an element of uncertainty—yes, even of fear before each case, because the patient's behavior was an unknown factor and as variable as human nature.

If all the preceding statements have failed to impress the experienced throat surgeon of the value of this position, I feel certain that the following statement will: when doing tonsillectomies on old chronic cases of quinsy, the kind that invariably bleed profusely, the operation is done with ease; the blood drains down into the naso-pharynx, away from operating field; this pool is removed by suction; the bleeding points can be readily seen and clamped; there is no repeated sponging and looking, and sponging and looking; the operating field is in full view of the operator all the time instead of being intermittently in view between the sponging; the operator sits at the head of the table looking down into the throat, much in the same way that the operating gynecologist does a plastic vaginal operation with the field exposed by speculum; the bleeding points are readily sutured and tied.

In over 10,000 cases of tonsillectomies operated by this method to date, there have been no post-operative hemorrhages nor post-tonsillectomy lung abscesses.

Preliminary rectal anaesthesia further simplifies the procedures necessary in bronchoscopy. By the adoption of oil-ether or Avertin as a pre-

liminary anaesthetic, we have diminished shock, eliminated all terrors of anaesthesia from patients, parents and ourselves. For instance, when the patient is a child (as he commonly is) the parent stays in the patient's room and sees him go to sleep. The child is not taken to the operating room until he is asleep, and so recalls nothing of the experiences in the operating room, returns to his room still asleep, and sleeps several hours after the operation. We are careful to wash out the colon by return flow irrigation as soon as the operative work is completed, and up to the time of publication we have seen no untoward effects in our own cases. We are fortified in our belief by the experience of Gwathmey who reports no bad effects in over 2,000 cases (personal communication).

Preliminary colonic anaesthesia saves fond parents much anguish; eliminates the "sobbing"

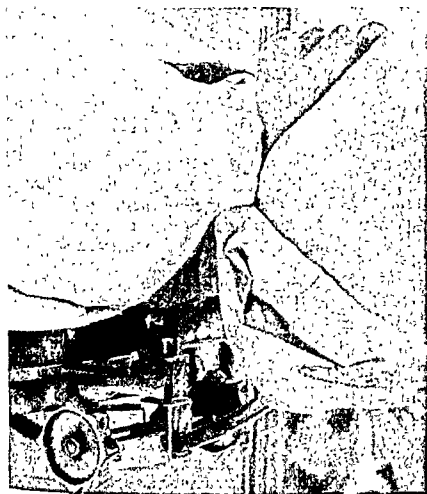


FIGURE V
Haslinger Head Rest.

respiration experienced when the patient is refractory, or is crowded under ether while struggling; makes the bronchoscopy easy of performance as it eliminates all struggling of the patient.

The return to consciousness of the patient after Avertin is somewhat prolonged, which is an advantage because it saves the patient from several hours of being conscious of a sore throat after tonsillectomy. The Avertin method is somewhat expensive in cost (both the product itself and the prolonged time before consciousness is gained during which time a nurse must be in constant attendance), but it is well worth it.

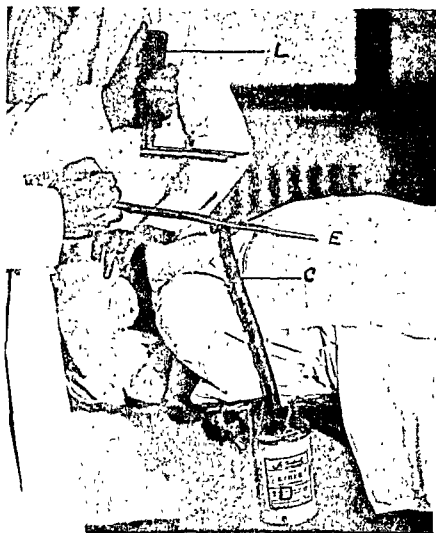


FIGURE VI
(L) laryngoscope, (C) intra-tracheal canula, (E) ether tube and (D) ether can used in the Foggy technique of intra-tracheal anesthesia.

Besides these advantages of operation and anaesthesia in tonsillectomy, we and our assistants, both doctors and nurses, become oriented to the "head on" position in doing operations about the throat, become accustomed to quickly doing a direct laryngoscopy and intubation by the direct method, all of which are fundamental to good bronchoscopy when the emergency arises which requires it. The direct bearing that these various techniques have on bronchoscopic experience is readily grasped by referring to the descriptions and illustrations published by the authorities mentioned. The author claims no originality in these methods, but has adapted several well-known ingenious methods to the end of training himself and his operating team in bronchoscopic technique.

The author takes pleasure in acknowledging his indebtedness to Dr. J. Ivimey Dowling, Chief of the Department of Eye, Ear, Nose and Throat Surgery, Memorial Hospital, Albany, N. Y., as well as the members of the medical, surgical nursing and executive staffs of the Memorial Hospital and Dispensary for their whole-hearted interest and cooperation in contributing to the successful establishment of this work.

CONCLUSIONS

1. A method is shown whereby bronchoscopic

orientation when once attained can be easily and routinely retained.

2. This method is advocated to supplement the fundamentally necessary preliminary bronchoscopic training on cadavers, phantoms and dogs which all students in bronchoscopy must go

through before they can conscientiously attempt this work.

3. The author's methods of co-relating and adapting several and sundry well-known surgical procedures to the end of developing bronchoscopic skill are described and illustrated.

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A POSSIBLE ETIOLOGY OF RAYNAUD'S DISEASE

By ARTHUR F. KRAETZER, M.D., NEW YORK, N. Y.

IN the Journal of the American Medical Association for April 5, 1930, I published an account of a case of Raynaud's disease associated with chronic arsenical retention and cured by sodium thiosulphate. Since then several other cases have been studied and the results have been so striking and so uniform that it is impossible to avoid the temptation to speculate as to whether arsenic may not be the prime etiological factor in this curious condition,—for Raynaud's disease is curious, in fact, unique. Its symptoms, the successive appearance of local syncope of the fingers and toes on exposure to cold, local asphyxia with severe pain on warming, and finally the re-appearance of normal color, are due to spasm of peripheral arterioles. Whether this mal-function is due to excess sympathetic action or to local disturbance in the vascular wall itself, is perhaps not definitely decided, although evidence seems to favor the latter.

But in any event Raynaud's disease lacks the anatomical changes which we associate with chronic inflammation. It has none of the attributes of local infection, nor does it show any of the manifestations which we are in the habit of ascribing to distant focal infection. Its intrinsic characteristics suggest, and suggest with a high degree of plausibility, the effects of a drug. It is, in short, a "functional disease".

But it is impossible to conceive of a function going wrong of its own accord, out of pure moral perversity, as it were. There must be a cause and a cause different from those which we know to be the occasion of organic change. The suggestion of a "drug effect" is inescapable.

The case referred to above is briefly summarized as follows:

Case 1—C.M., woman aged 38 first seen October 7, 1929. From 1912 to 1926 worked in a green-house. It was part of her duties to spray Green Fly Spray on the plants every day. From 1926 on she did secretarial work. Every Spring, from 1922 on, an intensely pruritic rash would appear on the anterior surface of the wrists and would last about a month. Since 1928 she suffered from fatigue and noticed that her skin smelled like onions. The specific complaint started in February, 1929, at first limited to the terminal phalanges, soon involving the entire length of the fingers and toes. The symptoms were classical, syncope in the cold, blackish-purple, intensely painful asphyxia on warming, and finally normal color. The attacks were almost daily during the rest of the winter, cleared up in the Spring, and recurred in October, 1929, when she consulted me. She looked under-nourished, vaguely below par, tired and anxious. The skin of the face was tense and shiny, with numerous telangiectases, and had the waxy, almost atrophic, appearance of the arsenic eaters. Chronic blepharitis was present. The urine, collected for twenty-four hours after intravenous injection of 1 gram of sodium thiosulphate, showed 0.068 milligrams of arsenic per 100 grams of dried material. The blood chemistry showed a low sodium chloride, 437.7, sugar 103.2, urea-nitrogen 11.4, uric acid 1.98. Treatment consisted of 1 gram of sodium thiosulphate intravenously twice a week up to February 3, 1930. During the first week of treatment, the attacks were less frequent and almost lacking in pain, although the color changes were just as marked. Improvement kept on progressively. On October 19 and 25 there were attacks of local syncope, changing back to nor-

mal color without the intermediate phase of asphyxia. On February 3, 1930, she was discharged clinically cured. She went through the winter of 1931 without attacks and has remained free up to the time of writing, February, 1932.

Case 2—R. F., woman aged 33. Attacks started in the Fall of 1926 and consisted of the following series of manifestations in this order:

1. The ears turn dead white. The fingers turn pale but are not absolutely blanched.

2. The affected parts suddenly turn purplish red and there is a sense of swelling. Rubbing the parts causes itching. This stage lasts fifteen minutes to an hour. Severe neuralgic pain which may be intense, and which may persist after the skin returns to normal color.

Cold seems to precipitate the attacks, which occurred two or three times a day at first. Later on several months might elapse without an attack. During an attack there may be uncomfortable sensations in the face and tongue. Constriction and a dependent position increase the pain. She has done a great deal of painting. Early in the course of the disease she took arsenic and thought that the symptoms were aggravated. In 1929 she took up gardening and used a great deal of lead arsenate. In the Fall of the same year the attacks, temporarily less numerous, resumed their original frequency and severity. I first saw her in August, 1930.

Physical examination was negative except for chronic tonsillitis, chronic blepharitis and dermatographia. The urine was negative. Complete bloodcount was normal except for a mild anemia. The Wassermann was negative. The blood chemistry showed sugar 86.8, sodium chloride 441.8, urea nitrogen 13, uric acid, 3.12. The urine collected twenty-four hours after intravenous injection of sodium thiosulphate showed 0.093 milligrams of arsenic per 100 grams of dried material, and 0.3 milligrams of lead in 1000 c.c.

Treatment was started August 9, 1930, and consisted of 0.5 grams sodium thiosulphate twice a week. The following summary describes the course of the case:

August 14, 1930—No swelling or redness. Slight aching in toes and fingers.

August 18, 1930—Feels better generally.

August 21, 1930—Tingling and some pain, but no color change. Weather cooler.

August 25, 1930—No finger symptoms since August 23. Tongue slightly sore. Feels stronger.

August 29, 1930—Condition OK.

September 1, 1930—No symptoms except slight burning of tongue.

September 6, 1930—No symptoms.

September 11, 1930—No symptoms.

September 20, 1930—Fingers red and swollen on rising with slight aching pain lasting two

hours instead of the severe and longer lasting pain that usually occurred.

September 29, 1930—No symptoms.

October 1, 1930—Past twenty-four hours weather quite cool. This morning very slight swelling and redness of fingers of left hand alone, with very little pain.

October 6, 1930—No symptoms.

November 6, 1930—For past two weeks fingers have been numb on exposure to cold, but without pain, swelling or color change. This morning a characteristic attack, but mild and short-lived. Patient is convinced that there has been definite improvement.

December 4, 1930—No symptoms since November 6, in spite of exposure to severe cold.

January 5, 1931—Mild attack, the first in the past two months.

February 9, 1931—Free from symptoms.

On January 4, 1932, the patient had one slight attack but with this exception has passed through the present winter without trouble.

Case 3—H. E., woman aged 43. First seen October 19, 1931. Her complaint was that every winter for three years, especially while driving a car, one or two fingers would turn dead white and tingle severely. On warming they would return to normal color without an intermediate phase of asphyxia. She had suffered from pruritis for seventeen years. At some time in the past she had been given two courses of iron and arsenic injections. Two quantitative Marsh tests on the urine, after thiosulphate injection showed, one a trace of arsenic, the other 0.035 milligrams, per 100 grams of dried material. From October 19, 1931, to January 8, 1932, she was given two injections of thiosulphate a week. Improvement set in from the start. During this period, instead of the usual frequent attacks, there was but one and that merely the whitening of the tip of one finger on rising one cold morning. On January 8, 1932, she reported occasional slight tingling of fingers without color change while driving car in the cold, and was discharged clinically cured. Incidentally, the winter itch cleared up likewise.

Case 4—E. M., woman, aged 25. First seen February 11, 1931. There was a history of taking tonics. Complaint: For two years fatigue, anorexia and inability to stand the cold. Quite incidentally she mentioned the following: In March, 1930, just after coming in from outdoors, the terminal phalanges of the third and fourth fingers of the right hand turned dead white for a few minutes, and then a deep red for a few minutes, finally resuming their normal color. There was no unusual sensation.

The next attack occurred in the Summer of 1930 while swimming. The terminal and middle phalanges of the right middle finger turned

dead white, with a sharp line of demarcation at the base. This stage lasted about five minutes and was accompanied by a sense of numbness. The two phalanges then turned a deep purplish red with a sense of tingling and burning but no real pain. This stage lasted a few minutes and seemed to be brought to an end by vigorously shaking the hand.

Physical examination was negative except for the general appearance of fatigue and being vaguely below par. Poor peripheral circulation was indicated by the presence of marked livedo and acro-asphyxia. The urine collected twenty-four hours after intravenous thiosulphate showed no lead but 0.154 milligrams of arsenic per 100 grams dried material. She was able to take only two injections of thiosulphate, but took it regularly in capsule form five grains three times a day. On March 3, 1931, she reported that on stepping into a hot bath after a long walk in the cold, she noticed a tingling sensation in the soles with marked pallor. The color soon returned to normal without any intermediate stage of exaggeration. She said that after the month of thiosulphate by mouth she was feeling much stronger.

In March, 1932, she reports that she had no attacks in spite of going in swimming and being exposed to cold. The general condition is greatly improved.

The attacks in this case were of course too mild and too infrequent to derive any conclusions as to the effect of treatment upon them. It is, however, not without significance that in this patient's case, as in the rest, arsenic was found in the urine and the general health improved greatly under thiosulphate.

Case 5—A. M., male, aged 30. First seen April, 1921. His complaint was fatigue. In 1913 in South America he had a penile sore which, without any investigation by dark field or Wassermann, was treated with 3 injections of arsphenamine and 10 of mercury.

Examination, April, 1921, was negative except for coated tongue, blepharitis, a mild secondary anemia, and moderate acrocyanosis, the possible significance of which last named finding did not suggest itself to me. By way of doing a good job, I prescribed iron and arsenic, which he took for several weeks. From April, 1921, to February, 1932, he has been under careful observation for lues, but all findings, physical, blood and spinal fluid, have been negative.

Though not sick, he has never felt very well. In May, 1931, he complained of increased fatigue and a sense of tingling in the feet and head. On a cold day the terminal phalanx of the right forefinger turned dark purple and felt numb. The feet felt numb and were very sensitive to cold. Tobacco seemed to intensify the sense of tingling.

Intravenous thiosulphate was started May 7, 1931, but only a few injections were given. The urine showed 0.268 milligrams of arsenic per 100 grams of dried material. The following notes were taken:

May 11, 1931—The tingling has left the feet. It left the hands temporarily and then returned in lesser degree. Still present in left temporal region and tends to shift over scalp.

May 14, 1931—Tingling markedly diminished. May 18, 1931—No tingling. Violaceous color of face is less marged.

May 21, 1931—No tingling.

May 30, 1931—After prolonged swim, left index finger turned dead white for fifteen minutes and then returned to normal without asphyxia or paraesthesia. Patient was free from symptoms until January, 1932, when there was return of the tingling and sense of fatigue. After a hot bath the feet, especially the toes, would get scarlet. Syncope of the terminal phalanx of one finger occurred once on a cold day. All symptoms again responded promptly to sodium thiosulphate.

As in Case 4, the Raynaud symptoms were too mild and too infrequent to base any direct conclusions upon. The association with these mild symptoms, however, of severe paraesthesia, marked fatigue plus a large amount of arsenic in the urine, capped by the clearing up under thiosulphate, certainly suggest that all the symptoms can be grouped under a common etiological head. It is possible that in this case an element of peripheral neuritis was present.

Conclusions: Five cases of Raynaud's disease are reported, two severe, one moderate and two abortive. Arsenic was found in all of them. Under treatment with sodium thiosulphate, not only did the Raynaud symptoms clear up, but associated symptoms theoretically producible by arsenic, such as pruritus, paraesthesia and chronic fatigue, cleared up *pari passu*.

Comment: The idea expressed in this article is an hypothesis, not even a theory. The unfailing coincidence, however, of presence of arsenic plus cure on removing the arsenic, can hardly be ignored and is certainly worth further investigation, whether to prove or to disprove. Despite the undistributed middle term in the argument laid down, there is sufficient proved theoretical background to render the idea plausible.

Throne and Myers demonstrated arsenic in 30% of cases of eczema, which certainly is a sufficiently frequent disease. Of these cases a large proportion recovered under thiosulphate. What is more significant is the fact that they found arsenic retention in several other dermatoses and in many individuals who apparently had no symptoms whatever. In other words, they showed that widespread arsenic retention is a fact, the source of the arsenic being frequently

undemonstrable but doubtless in a large number of cases being the insecticides used so lavishly on fruit and vegetables. It only remains to ask what symptoms is arsenic capable of producing. Obviously, any symptom referable to the sympa-

thetic and vascular systems, for which it is a specific poison. Hypothetically, arsenic should be capable of causing Raynaud's disease. In the cases herein reported it has, I think, been demonstrated as the cause.

THALLIUM ACETATE, ITS TOXICITY AND DEPILATORY ACTION

By HERMAN GOODMAN, M.D., NEW YORK, N. Y.

History

THALLIUM was discovered by Crookes in March, 1861, by spectral analysis. He found a green band at 5350 angstrom units. He named the element thallium from the Greek 'thallos' meaning green and budding twig.¹

Clinical Use and Toxic Effects

Combemale² used 10 to 20 mgs. for night sweats in patients with tuberculosis. He noticed that the loss of hair was rapid and complete.

Richet³ associated chronic poisoning with thallium and muscular atrophy. According to Cushny's book of pharmaceutical therapy, p. 670, 9th Ed., 1928, Richet was the first to observe the depilating effect of thallium. (Obviously incorrect.)

Early Clinical Experiment

Bullard⁴ curiously used the name of Brooks throughout his article instead of Crookes as discoverer of thallium. He gives some historical notes on thallium, and describes a case in a physician 37 years of age who took thallium for experimental purposes. He took one half to one gram every second day for three or four doses and then after two months he took several doses more. Nothing happened after the first experiment, but three or four days after the second, he noticed numbness in his fingers and toes and was taken to the hospital where his case was diagnosed as multiple neuritis.

Mechanism of Action of Thallium

Dowling⁵ wrote that the remarkable action of thallium acetate in producing alopecia is so far as is known shared by no other substance. The exact mechanism of its depilatory action is not absolutely known, but certain established facts appear to show that this action is upon the sympathetic nervous supply of the follicles and not directly on the follicle or hair bulb itself. Endocrine glands are clearly concerned in the action of the drug. The postmortem examination of the animals which had undergone prolonged thallium feeds revealed in all cases changes of an atrophic

nature in the suprarenal glands, the thyroid and testes.

Truffi⁶ stated that thallium alopecia is directly due to the action of the salt on the hair forming process. A series of histologic examinations of the scalp of patients treated with thallium show evidence of epithelial degeneration of the hair follicles and sclerosis of the connective tissue.

Animal Experimentation

Schneider⁷ reported on the basis of two years of experimental work on the ingestion of thallium by rats, mice, rabbits, and dogs which he had bred. Rat poison—zelio paste—which is 2.8 per cent thallium, and zelio corn which is 2.1 per cent thallium was mixed with the food. Ill effects were noticed within from 16 hours to 4 weeks. Two weeks were needed for the loss of hair or alopecia. Examination of the rats and other animals showed degenerative changes in the central and peripheral nervous systems. There was a diffuse ganglionic disease. There was no damage done to any portion of the central nervous system. Schneider thinks that thallium acetate is very toxic. His opinion is that it is necessary to strictly limit its use. He reports that this thallium rat poison had been used by suicides and criminals with intent to kill.

Schamberg and Brown⁸ gave two 2½ kilo rabbits 10 doses of thallium acetate by mouth at 3-day intervals, the dose being 2 mg. per kilo body weight followed by 3 doses at 7-day intervals of 8 mg. per kilo weight. After the second dose of 8 mg. per kilo there was a rapid loss in weight and following the third dose the animals were in such poor condition that they were killed. No loss or loosening of their hair was observed. The adrenals, parathyroids, skin and hair were removed for analyses. Thallium could not be detected either as the iodide, chlorplatinate in the flame test, or by the bright line spectrum.

Rat poison in the form of thallium sulphate was tested by Ward⁹ on sheep. The dose was 25 mg. per kilo of weight. The animals died on the 8th day. Doses of 10 mg. per kilo of weight were so small that the sheep survived but a noticeable slipping of the wool took place from the 13th day.

The symptomatology of thallium poisoning among the sheep included clamping of the teeth, loss of appetite, general dejection, digestive disorders, muscular cramps in the hind legs, and coma. Death was due to respiratory failure.

Epilating Action of Thallium

Drummond¹⁰ stressed the point of some biological and also practical interest in the fact that epilation following thallium leaves a narrow strip of hair across the forehead (the "old Man's fringe") unaffected. It has been proved according to Drummond that this hair shows a greater resistance to external and internal irritation than other hair growths. The eyebrows likewise are unaffected. He asserts that thallium is highly toxic to adults and should not be given to them.

Feldon¹¹ reviewed the statements and warnings regarding the intoxication from the use of thallium acetate in the treatment of ringworm of the scalp of children. He noted the peculiar fact that thallium cannot be used in the same dosage after the development of puberty without greater danger than in children. There is a marked increase in the toxicity which is probably due to the changed function of the endocrine-sympathetic system after maturity. He gives a report of two children, one a girl aged 15 who was completely infantile physically, size of child of 3 and only 35 lbs. in weight. Second child was a boy, a cretin, also infantile, age 19, but of the height of a child of 5 or 6 years. These two children showed only a slight epilatory effect which was insufficient to remove all of the infected hairs. This was undoubtedly due to the marked disproportionment between age and body weight. The development of the endocrine organs possibly is parallel to the age and not to the body weight and if so the dosage made according to body weight does not correspond to the size of the endocrine organs.

Toxic Action of Thallium

Buschke and Langer¹² described several cases of poisoning with suicidal intent from thallium in a rat poison sold freely in Vienna without a poison label. Characteristic symptoms in these cases consisted of pain in the joints, swelling of the feet and legs, colic, vomiting, sleeplessness, mental confusion, and a striking loss of hair from the head and body about three weeks after the administration of the poison. Too rapid administrations of thallium for therapeutic purposes has also been attended by toxic manifestations. The authors stated that a period of two to three months should elapse between the first and second administration of thallium. They write that it is possible to demonstrate thallium in the blood and urine within four weeks after the administration of a large dose. They mention that thallium is used in industry in the making of colors, window

glass, and luminous paints, and that poisoning is possible from occupational contacts.

Greving and Gagel¹³ observed an attempted suicide who had spread half a tube of zelio paste on bread and swallowed it. Patient became ill two days later with pain and weakness in the lower extremities, albuminuria, loss of hair on the 11th day. She was ill for several months suffering from peripheral neuritis, loss of appetite, pain in the chest, emaciation, depression, and amenorrhea.

Teleky¹⁴ described a number of cases of industrial thallium poisoning occurring in workers in a factory for the recovery of thallium. They had inhaled a powder (dust) of metallic thallium that is composed of thallium oxide and thallium sulphate. Besides alopecia, signs of poisoning manifested themselves in fatigue, anorexia, pains in the joints and lower extremities, albuminuria in nearly all cases, and a definite lymphocytosis of over 40%. In one case there occurred after a month, heart burn and redness of the hair. Four months after beginning of regular work with thallium one patient showed a diminution of vision that progressed rapidly.

Cosmetic Depilation with Thallium

Sabouraud¹⁵ as far back as 1897 suggested the use of thallium acetate as a depilatory. In 1912 he advocated the use of thallium acetate in 1% concentration once a day in a very small quantity and over a very small surface.

Paris Letter¹⁶ stated that Sabouraud had used thallium acetate in his service at the Hospital St. Louis to bring about a complete removal of the hair in children affected with tinea. Paris Letter uses about the same material as Sabouraud published under the heading "Sur les Depilatoires" in Clinique Paris (to be quoted).

Sabouraud¹⁷ reported that thallium acetate by ingestion is capable of causing loss of hair in 15 days. It is not a harmless remedy and is to be used only under proper direction. Sabouraud has shown that a paste of thallium acetate of 1 or 2% concentration applied every night to the lip and chin can within 6 or 8 months cause a reduction of the mustache or a commencing beard. The medicament should be used with care for one sees a number of cases of intoxication. It is essential to write the particulars of the dosage on the prescription. These are: Each evening treat only a small area of the total area of excess hair to be treated. The ointment must be applied by massage and the hands must be washed immediately thereafter with soap. The results will then be attended with little danger. All the accidents observed were among young girls who used the medicament in three times the dose advised. Grave toxic effects have been seen as temporary loss of all hair, temporary paralysis of the extremities, and nerve toxicity of several weeks' duration. Sabouraud was convinced that only those patients

who did not follow his advice were the subjects of these accidents.

Abramowitz¹⁸ stated that a 10% thallium cream has been used in hypertrichosis and scycosis, but an alopecia of the scalp frequently resulted with or without epilation of the area treated. A 10% cream was considered too toxic. Ionization has been utilized with a 2% solution of thallium acetate. It has been reported partially successful in hypertrichosis.

Koremu—A Commercial Thallium Depilatory

Lansbury¹⁹ reported that a patient used cream on upper lip and under the chin. Two weeks after use of the cream she noticed pain in the chest, cramps, nausea, vomiting, and constipation; papuloid purpuric spots; hair of scalp was loose and easily pulled out; the eyebrows and eyelashes were not involved, but the scalp was completely bald except around the ears. (Name of cream not mentioned, but Editor notes that it was Koremu.)

The J.A.M.A. noted²⁰ that Koremu Cream had been on the market some time. At first, it was under the trade name "Kora M. Lublin," and more recently as "Koremu, Inc.," both of New York City. According to the advertising, Koremu is "Guaranteed to devitalize superfluous hair roots on face or any part of the body."

At the request of the Bureau of Investigation, the A.M.A. Chemical Laboratory was asked to make an analysis of the Cream. The Laboratory report follows:

Laboratory Report

"an original jar of Koremu Cream; (Koremu Inc., 11 West 42nd Street, N. Y. C., price \$10.00) was submitted to the A.M.A. Chemical Laboratory for examination. The label on the jar bore the following statements: 'Koremu Cream devitalizes superfluous hair roots. . . Will induce baldness wherever applied when used as directed.' The jar contained 69.8 Gm. (approximately 2½ ounces) of a light yellow ointment, strongly perfumed. Qualitative tests indicated the presence of thallium, zinc, acetate, petrolatum, traces of chloride and of saponifiable matter. Heavy metals (such as mercury, lead, arsenic and cadmium), sulphides, iodides, borates and salicylates were not found. Quantitative determinations yielded the following:

Thallium (TI)	5.57 per cent
Zinc (ZN)	7.68 per cent

This may be calculated to:

Thallium Acetate	7.18 per cent
Zinc Oxide	9.56 per cent

"From the foregoing, it is concluded that the product examined consists essentially of an oint-

ment having a petroatum base, in which are incorporated approximately 7 per cent thallium acetate and 9.5 per cent zinc oxide.

"In view of the chemists' report, it is again worth calling attention to the facts developed by Dr. Sabouraud. On the basis of long experience he declares that any ointment containing more than 1 per cent of thallium acetate is dangerous. Koremu was found to contain over 7 per cent! Sabouraud insisted that no larger amount of his one per cent ointment than that equal to two kernels of wheat should be used at a time; no limit is given to the amount of Koremu that should be applied! As the whole trend of the Koremu advertising emphasizes that the stuff is harmless, it is to be expected that women purchasing this product will apply it with the same easy abandon that they use in applying face creams and vanishing creams. It is hard to believe that Kora M. Lublin, who seems to be behind this product, realizes the dangerous properties of the preparation she markets. It is kinder to assume that ignorance, rather than a callous disregard for public safety, prompts the sale of Koremu!

"There is one other point that seems to deserve some attention—that is, the wide discrepancy between the commercial value of Koremu and its selling price. The approximate cost of the ingredients that go into the jar of Koremu, selling at \$10.00, is less than thirty-five cents! This allows 27 cents for the thallium acetate, 1 cent for the zinc oxide, and 4 cents for the petrolatum. However Koremu's assault on the public's pocket-book becomes a minor indictment; the major objection is its menace to the public health."

For comparison with the formula given above for Koremu we give the formula for epilating cream as used by Sabouraud taken from page 437 of his book "Entretiens Dermatologiques":

Acetate of Thallium	0.3
Zinc Oxide	2.5
Vaseline	20.0
Lanoline	
Rose Water	aa 5.0

Further Clinical Reports

Duncan and Crosby²¹ reported a case of thallium poisoning from prolonged use of Koremu Cream. Patient had used Koremu Cream nightly for the preceding 5 months beginning its use 2 weeks before appearance of the first symptoms. A quantity sufficient only to cover the upper lip and chin had been used on each occasion. At each application the cream was well rubbed in. At the time of examination hair was distributed normally over the body with exception of the face where the growth was more profuse than is normal, and this hair was firmly imbedded.

Greenbaum²² reported a case of thallium poison-

ing. Patient began use of Koremlu Cream on January 15th. She was seen by Greenbaum on April 8th. She had used the Koremlu for about two months before she first noticed the alopecia. At the time of examination the loss of hair on the scalp was incomplete but marked. The drug buyer of the department store stated that this had been the only complaint in 400 sales. Greenbaum noticed that the excess hair to which the cream had been applied on the upper lip and cheek still persisted.

Schamberg²³ reported that he had seen one case of Koremlu poisoning on April 12th, and one of his assistants had seen a case, and an acquaintance of his had seen a case. In Schamberg's patient there was loss of seven-eighths of the hair on the scalp which had been pronounced for the past three weeks, although it had existed for some weeks previous. The patient had applied Koremlu to the axilla. Hair was still persistent. She began to use the Cream in April or May of 1930 and had applied it every night until she had had a nervous breakdown. She had resumed the use of Koremlu two weeks in February and showed loss of scalp hair, had neuritis, noticed general weakness, loss of weight, and was highly nervous.

Short²⁴ reported a case of neuritis from thallium acetate. The hair of the scalp was thin, although the excess hair of the face and abdomen persisted. Koremlu had been used for some time, since October, 1930, regularly every day. The toxic symptoms had appeared about two months after she began its use. She was using her second jar of Koremlu Cream. Patient noticed pains in February, 1931, and loss of hair on April 1st. She had used several jars of Koremlu Cream.

Hair Growing Properties of Thallium

Cooper and Engman²⁵ reported on the stimulating effect of small doses of thallium acetate on the rate of growth of hair in the rat. Single doses of 0.004 and 0.006 grams of thallium acetate per kilo body weight dissolved in distilled water injected intra-peritoneally into white rats produced 18% increase in the rate of hair growth. Doses of 0.002 grams per kilo weight were too small to produce any effect on the rate of hair growth.

Absorption of Thallium

Dixon²⁶ was definite that the symptoms of toxicity due to thallium depend on absorption. Thallium rubbed into the skin has no local action. Thallium is readily absorbed into the skin with alcohol or oil. It causes alopecia only after absorption. The effect is mainly on the autonomic motor system which is rendered more sensitive. However, this is more marked on the sympathetic portion, so that electric stimulation of the nerves produces an exaggerated response, even though the stimuli are below the normal response level.

Pathology of Thallium Toxicity

The summary from Prokoptchouk, Bachkievitch, and Chamchine²⁷ is given herewith:

1. The thallium preparations, by their influence on the vegetative nervous system, produce a series of changes on the latter, which in their turn act on the appendages of the skin, particularly on the hairs, causing a whole line of plethoric disturbances to the vessels of the hair bulbs, now in the shape of phenomena of an inflammatory character, with infiltration of round-cells; now again as foci of agglomerated cells, in the shape of furuncles.

2. Like all other salts of the heavy metals, such as mercury, bismuth and lead, thallium can produce a great many serious disturbances in the organism. These disturbances are as follows:

(a) In the skin, besides falling of the hair, folliculitis and a toxic eruption similar to the ones produced by mercury or bismuth, and of a hemorrhagic character as petechiae and ecchymoses.

(b) In the mucous membrane of the mouth, besides gingivitis, glossitis and stomatitis—even in its ulcerative form—the phenomena of an angina thalli. One also encounters cases of herpetic eruption, rhagades and sanguineous spots on the lips; and it should be noted that thallium can cause diarrheas and sharp pains in the stomach.

(c) The mucous linings of the stomach and intestines show a picture of either stippled or completely fused hemorrhages, besides one of either desquamative or ulcerative colitis.

(d) In the liver, we notice, besides hemorrhages, thallium necroses and nephritis.

(e) In the liver and spleen, the phenomena are mostly of a vascular character. Besides rapid palpitations of the heart, we sometimes find paracardiac pains, which must probably be explained as due to influences from the vegetative nervous system.

(f) Acting on the vegetative nervous system, the thallium preparations can thus, through the latter, affect also the other branches of the nervous system, thereby producing those phenomena of quickly passing, epileptiform psychosis termed chorea. They can also act directly, and produce such phenomena as, for instance, thallium polyneuritis, disturbances of the blood vessels, including the peripheric blood vessels of the brain, and cerebral hemorrhages.

(g) At the same time as the polyneuritic phenomena, one notices pains in the articulations, astralgias, accompanied by swelling, tenderness and crackings.

(h) The disturbances thus described can be accompanied by pyrexia, and can cause the patient to become greatly emaciated and very weak, by changing the metabolism in the direction of a disaggregation of the blood-corpuscles already from

the first dose of the thallium. They can also express themselves by interfering with the process of assimilation of the ingested food, a complication occurring especially in connection with serious disturbances in the intestine.

Retrolbulbar Neuritis

Loss of sight as a result of thallium poisoning had been observed by Teleky¹⁴ in the industrial field. Mahoney²⁸ reported retrolbulbar neuritis due to thallium poisoning from depilatory cream in three patients. The cause of the toxic optic neuritides was not suspected at first. Each of the patients reported gave a history of the use of the proprietary depilatory, Koremlu Cream.

The three patients were admitted to the neuro-surgical clinic as "intracranial tumor suspects," and were found to have an advancing retrolbulbar neuritis. Their failing vision was checked, and improved by discontinuing the employment of the thallium depilatory.

Clinical Experiences: Koremlu

Miss G., referred to me for an eruption of the left side of the chin considered as impetigo contagiosa. The chin lesions on examination were vesicles, remains of vesicles on a red edematous base without any of the crusting suggestive of impetigo. The clinical diagnosis of herpes simplex was made. The patient volunteered the information that she had had several appearances of the same or similar eruptions about the same site. She had one tooth which was giving her trouble, and it was thought that the dentist should examine for foci of infection.

The clinical examination disclosed a very scaly scalp with loss of hair back from the forehead over the eyebrows. This type of loss of hair recalled the pattern baldness of post puberty males. The young woman said she was past 21, but would not give her accurate age. She was about 30. She was single. It was not feasible to attempt to learn about sexual habits or tendencies. Soothing application was ordered for the herpes, and glycerite of starch for the scalp to remove the scales.

On the second visit, the scalp was much cleaner. The tendency to pattern baldness was evident. The herpetic lesions had regressed. The hemoglobin was about 60 per cent. The patient was markedly nervous, and although she knew better had taken part in a discussion on religion with her superior at the office putting her "job" in jeopardy. There was slight prominence to the eyes and widened ocular angle but no exophthalmus. The region of the thyroid was prominent but the neck was thin and scrawny.

The hair of the face and sides of the neck showed very fine lanugo hairs in small number. The upper lip (mustache) region was clear. There

was no evidence that a depilatory was needed or had been used. The patient asked informally for suggestions as to the use of a depilatory, and I thought she asked for a friend or relative. I was surprised to learn that she wanted this information for herself, and that further, she had been using Koremlu. She claimed that she had wonderful results in so far as the hair on the face was concerned, but admitted that in fact, the hair there had never been conspicuous, and that she was supersensitive with little cause. She had used one jar over a period of eight months, and felt very satisfied.

The recurrent herpes, and the loss of hair with the use of the thallium acetate as a depilatory, seemed to offer an example of toxic reaction to the metal. It was suggested to the patient, who said she would no longer consider using the Koremlu.

Therapeutic Thallium for Ringworm

A number of children were examined at one time or another who had received the thallium acetate properly weighed for epilation of the scalp preliminary to antiseptic treatment for tinea capitis. One child was very ill with symptoms of intestinal upset, articular inflammation, marked pains in the chest, inability to hold food, loss of weight, and general debility. This patient required hospitalization.

The epilation of the scalp following thallium acetate was observed. The complete epilation of the pre-puberty group, and the partial epilation of the post-puberty group led me to frame the concept of nerve baldness. It appeared that thallium acetate probably acted through the sympathetic nervous system. The loss of hair was more nearly complete prior to puberty than after puberty was established. The control of the scalp hair of the entire scalp was under the sympathetic until puberty, and that the central nervous system then had a share. The recorded observation of Celsus made almost 2,000 years ago that persons with alopecia areata of the ophiasis type (periphery of the scalp) offered a poor prognosis compared to those with loss of hair in the center of the scalp was considered in this concept. Then, too, it is known that the borders of the scalp hair are more resistant to dye. Further, when a man loses his hair from the center of the scalp in the pattern of the Calvities Hippocratica, the hair at the periphery grows more rapidly so that the bald headed person must have less and less hair cut more and more often.

One of my assistants began the use of thallium acetate by ionization for the treatment of excess hair of the chin and mustache region. He did not finish the experiment because of the reports of toxic action by this method of administering the drug.

Animal Experiments

The reports that pilocarpine hydrochloride had the effect of growing hair when injected locally, given by mouth, or used as a scalp wash seemed to indicate that the action on the sympathetic nervous system of the pilocarpine and the thallium might be antagonistic. With this in view, a series of experiments were made:

Three guinea pigs of about the same weight and age were selected. Pig one was given 8 milligrams per kilo of weight of thallium acetate dissolved in water forcibly by mouth. Pig two received 8 milligrams of thallium acetate and in addition one-twelfth of a grain of pilocarpine hydrochloride by mouth. Pig three received one-twelfth of a grain of pilocarpine hydrochloride alone. From theoretical considerations, pig one should have succumbed; pig two should have survived; and pig three should have been unaffected. Strange as it may seem, this was what actually occurred. Pig one died within eight hours after oral administration, and the other two pigs lived. The post mortem examination was very brief—abdominal section. It was noted that the stomach was markedly enlarged with definite constrictions at the two orifices—the esophageal and pyloric. These constrictions were so definite that removal of the stomach by section resulted in the removal of a stomach sac which did not leak any contents at either aperture. The stomach was opened, found to contain a large quantity of yellowish fluid. The mucosa was thinned.

The oral administration did not seem to be certain. The next three guinea pigs were given the drugs in the same dosage by intraperitoneal injection. The pig which received thallium acetate alone died within the eight-hour period. The other pigs survived. The post mortems were more complete—the brain case was opened, and the softening of the cerebral tissue noted; the chambers of the eye were engorged; the heart muscle was congested with pronounced hyperemia; the lungs showed dilatation of the wall the blood vessels, and extravasation of blood into the edematous lung tissue; the intestinal walls showed areas of denuded mucosa, and extravasation of blood into the coats; the liver, spleen and kidney showed the same picture: edema, widening of the blood vessels; and extravasation into the tissue of blood elements. The pathologic pictures were monotonous—and similar to those found by others.

The surprising repetition of the action of the pilocarpine hydrochloride in preventing the action of the thallium acetate immediately must be commented upon, but further experiments along the same lines have not given the same results. In the most recent experiments, the pigs receiving thallium acetate and pilocarpine hydrochloride died. The pathological findings were the same for both sets of pigs.

The main purpose of the experiments was to attempt to find if there was any antagonistic action between the two drugs. Our final conclusion is that none was really demonstrated by our work.

The pigs died too soon after the administration of the lethal dose of thallium acetate to expect any action on the hair. There was no effect noted. It is our opinion, that experimentation on the rate of growth of hair in the rodents is very difficult of control. The normal rate of regrowth after any procedure is very rapid. Local application of thallium paste to the skin of these animals must be guarded as it is impossible to prevent the animal from licking the paste and getting it into the system by this means.

Summary

Thallium acetate and other salts of thallium have been recognized as toxic to man and animals from the time of the discovery of the element. Its use in night sweats disclosed the epilating action. Sabouraud attempted to make use of this action in the cosmetic removal of unwanted hair but found many untoward reactions and has guarded his prescriptions for this purpose. Many attempts to explain the epilating action of thallium have been made, but there is no agreement as to the mode of action. It seems accepted that the metal has an effect on the sympathetic nervous system, although a local action on the hair forming process is claimed. The toxic action of thallium salts on animals has been used in poison potions for undesirable animals. Rat poison containing thallium has been used in criminal attempts to kill and by those desiring to commit suicide.

Within the past two decades, there has been a revival of the therapeutic action of epilation through thallium. Thousands of children have received the drug for the preliminary epilation of the scalp hairs to afford treatment of infestation with tinea organisms. Toxic effects due to the drug in proper dosage, and deaths from the inadvertent use of large doses because of poor mathematics or misunderstanding of orders have been reported. It is true that thallium is falling into disfavor, that is, in so far as its use as therapeutic epilatory is concerned for scalp hairs.

On the other hand, commercially minded concerns have taken advantage of the work of Sabouraud, and have placed before the public various thallium creams for the epilation of unwanted hair of the face and arms. Women are tremendously sensitive in our day and age to any hairiness. The sales of one American product which promised miracles at a high price were very large. Many women used this paste. Throughout the country, undiagnosed instances of thallium intoxication were treated for many conditions, but the role of thallium was soon uncovered. The physicians throughout the country have reported

such unmasked thallium acetate poisoning. The American Medical Association and other agencies guarding the health of a community (which all too often does not want the kind of supervision or which disregards it) have reported on thallium depilatories. In the City of New York, no official action regarding the sale of this type of product has been taken. Any woman with the price can purchase a thallium depilatory and use it.

What attitude the individual physician and health officer takes is determined by considerations beyond the purpose of this paper.

My clinical experience and what few experiments I have done follow that of others in this field: thallium acetate as a depilatory does offer the opportunity of toxic action of persons using it whether for cosmetic effect (unwanted hair) or therapeutic action preliminary to antiseptic treat-

ment of infested follicles with ringworm or favus. Pilocarpine hydrochloride does not prevent the lethal action of a lethal dose of thallium acetate administered intraperitoneally into guinea pigs.

It is our opinion, also, that many of the toxic results obtained from the external applications of thallium paste for the epilation of hairs of the upper lip or chin follow inadvertant oral administration. The application of the paste to the upper lip can easily lead to absorption by mouth. The very intimate contact of the upper lip and food or drink would permit of such absorption. The intermediate pillow case could also lead to such oral administration. The thallium acetate left on the massage fingers could easily be transferred to food eaten from the hand. Sabouraud recognizes this for he advises careful washing of the hands after the application is made.

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For list of officers of County Medical Societies, see November first issue, advertising page xxx.
Annual Meeting, April 3-5, 1933, in the Waldorf-Astoria, New York City.

GRADUATE FORTNIGHT OF THE NEW YORK ACADEMY OF MEDICINE

The Graduate Fortnights of the New York Academy of Medicine are of great importance to physicians and through them to the public. The Fortnights are contributions of the Academy to medical education and public health. They are free to all physicians and are patronized to the full capacity of the rooms in which they have been conducted.
Each year the Fortnight is on a subject of

general interest to all practitioners of medicine and workers in public health. The subjects of the Fortnights have been:
1928.....Old Age
1929.....Functional and Nervous Problems
1930.....Acute Bacterial Infections
1931.....Circulatory Disorders
1932.....Tumors

This year's Graduate Fortnight—the fifth—was held during the two weeks beginning October 17, 1932. It had the most extensive program and was the best attended of all, for physicians had anticipated it with keen expectation, based on the practical value of the four preceding Fortnights. Like those of previous years, this present Fortnight comprised four main features:

1. Afternoon clinics and demonstrations in hospitals.
2. Demonstrations of fresh pathological specimens in the Academy building during the early part of the evenings.
3. Evening lectures in the large assembly hall of the Academy.
4. Exhibits open all day and evening for three weeks.

The attendance was phenomenal. About eight hundred physicians secured tickets for the afternoon clinics, those on record coming from the following sections:

New York City.....	566
New Jersey.....	125
Up-State New York.....	37
Connecticut.....	12
Pennsylvania.....	7
Ohio.....	7
Sixteen other States.....	33

The attendance at the evening lectures varied from 1,500 to 500, with an average of over 900. The demonstrators of fresh pathological specimens were surrounded with eager crowds of doc-

tors, and were forced to repeat their lectures over and over.

The exhibits had to be seen to be comprehended. They filled practically all the available space of three floors of the Academy building. They consisted of preserved pathological specimens, photographs—many in life size—x-rays, charts, and statistical tables. One hundred and ten exhibitors were listed on the program, and the first estimate was that three thousand separate items would be shown, but the total was probably over five thousand.

While all forms of tumors were shown, the exhibits emphasized *cancers*, in accordance with the modern conception of the possible degeneration or development of almost any tumor into cancer.

Space did not permit extensive demonstrations of methods of cancer research but a striking series of photographs showed abnormalities of elks' antlers resulting from injuries during their growth. It is a noteworthy fact that a microscopic section of a growing antler bears a striking resemblance to that of sarcoma of a human bone. While this is now only a bit of scientific information, it may possibly turn out to be a milestone on the way to the ultimate solution of the cancer problem.

While no individual visiting doctor could assimilate all the information available at the Fortnight, he could yet get a comprehensive picture of the vast field of tumors; and when he returned to his practice, he would visualize the probable course of development of the conditions which he observes in a patient and would know where to go to get further light.

LOOKING BACKWARD

This Journal Twenty-Five Years Ago

Third District Branch Meeting: This Journal of November 1, 1907 contains the following account of the first annual meeting of the Third District Branch of the Medical Society of the State of New York, which was held in Albany on October 22, 1907:

"Those intrusted with the arrangement of the program had made an excellent division of the day, the morning hours being devoted to clinics, the afternoon to reading of scientific papers. During the midday recess an excellent luncheon was served at the Albany Hospital, the members of the Branch being the guests of the Board of Governors. The long corridor in the centre of the building upstairs made a very attractive luncheon room, and the trained nurses in caps and uniform kept every one well supplied with the many delicacies prepared by the excellent chef of the Hospital. Such reunions are particularly enjoyable, as men renew acquaintance with those whom

they knew in hospital or college, and lay the foundation for new friendships.

"At the meeting of the Delegates, amendments were proposed to make the election of officers and selection of place of meeting the duty of the general body; in other words, to do away with the delegate system in the Branch. These lie over for a year.

"In the evening about fifty availed themselves of the kind offer of the managers of the Hotel Ten Eyck, who reserved the front dining-room for the exclusive use of the members and served an excellent informal table d'hôte dinner from 6 to 8 P.M. After dinner some members attended the theatre, while others took the evening trains home, thoroughly satisfied that the first meeting of the Third District Branch had been a great success.

"Ten clinics in five institutions were listed for the morning session, and eleven papers for the afternoon."



MEDICAL PROGRESS



A New Treatment for Chronic Arthritis of the Hip: Forage of the Femoral Epiphysis.—For cases in which the shock of surgical intervention would be excessive, Jacques Graber-Duvernay points out in the *Journal de médecine de Lyon* of September 5, 1932, the good effects of thermal treatment in the form of forage of the epiphysis of the femur, a method devised by Louis Duvernay in the last years of his life. At the outset the center of the head of the femur must be found radiographically or fluoroscopically. Then under local novocain anesthesia an incision is made, 10 or 12 cm. long, starting from the upper margin of the great trochanter and descending parallel to the axis of the limb. The perforator must penetrate the epiphysis at a point just 1 cm. below the subtrochanteric crest, and halfway between the anterior and posterior surfaces. The important point in this is that it enables the operator to appreciate adequately the thickness of the bone at this level, holding it between the thumb and index finger. At this moment an assistant must without fail hold the foot of the patient to prevent him from changing the position of the limb. The only instrument necessary is a gimlet, a joiner's auger, 6 mm. in diameter and 12 to 18 cm. long. With the imprint of an iodized thread the center of the head of the femur and the point of implantation of the gimlet are joined by a line, which thus gives the angle of inclination of the neck of the femur. The center of the head having been reached by the gimlet, the forage is carried out without difficulty. It is much easier than in the case of fracture of the neck, since there is no solution of continuity between the neck and the head of the femur. In some cases a peg of dead bone, 5 to 7 cm. long and 5 mm. in diameter, has been introduced into the channel that has been opened; this serves as a means of orientation for controlling the direction of the forage in the indispensable postoperative radiogram. The same can be accomplished by injection of lipiodol through the orifice of the trepanation. There is no postoperative shock, and no need of a plaster cast. The remarkable fact observed is that the pain of the chronic arthritis ceases almost immediately in the days immediately following operation, and the patients can be discharged in 15 to 20 days. This result is explained on the ground that forage lowers the blood pressure on the side where it is carried out. All traumatism causes hyperemia, that is, vasodilatation. It appears that at the end of 3 weeks vasomotor equilibrium is reestablished and a vasoconstriction occurs. In brief, forage accomplishes its results by establishing a new circulatory equilibrium at the level of the head of

the femur, which in turn produces an arrest of the evolution of the pathologic process. The results in 10 cases which the author reports indicate that the new equilibrium will be maintained.

Attempts at Surgical Treatment of Essential Arterial Hypertension.—On the basis of a form of procedure proposed by Pende, Gino Pieri says that he began in April, 1927, to perform resection of the splanchnic nerve in cases of gastric atony that had proved refractory to other forms of treatment. In 4 of these cases he made a point of studying the effect of the operation upon the blood pressure, which was normal or subnormal in all the subjects. The greater splanchnic on the right side was resected in all, and in one case both right splanchnics. In every case there was a more or less marked fall of blood pressure; in one case the lowered pressure has persisted for 3 years. On the basis of these results, Pieri carried out a splanchnicotomy in a case of essential hypertension in a man of 67 (maximal tension, Pachon 200, Riva Rocci 185) who had suffered with symptoms for 14 years, although the cardiovascular-renal apparatus appeared to be normal. Resection of both left splanchnics at once caused a fall of blood pressure (Pachon 165, Riva Rocci 155) which has been maintained for 2 years; the subjective symptoms were greatly improved, though not entirely cured, reappearing at intervals of months, upon occasions of violent emotion. This left-sided resection was carried out on the basis of the current opinion that the left splanchnic supplies both suprarenals. The technique was the resection of the thoracic portion of the greater and lesser splanchnics by the transmediastinal route, and the operation was perfectly tolerated. The objection that it is an especially grave procedure has no basis in fact, provided the correct technique is employed. With a view to a comparison of results, Pieri performed a unilateral (left) adrenalectomy in another patient suffering with hypertension (maximal tension 230, by both systems). The good effect upon blood pressure was nil, after the first immediate drop; on the contrary, the tension arose, and 22 months later was 280 Pachon. Clinically, however, the patient showed considerable improvement, with a diminished sense of thoracic oppression and decrease of tachycardia, persisting for 2 years notwithstanding hard labor. In another case operated on by an assistant, in which there was a complicating endoarteritis obliterans, the results of adrenalectomy were similar, the blood pressure rising from 250 Pachon to 270, as recorded 10 months later. It is thus impossible to draw any certain conclusions as to the relative

value of these surgical procedures, but in a general way the results of resection of the splanchnic nerves would appear to be more encouraging. Pieri interprets this as due rather to the vasodilator influence exerted upon the vast territory of the visceral circulation than to the absent or diminished stimulation of the suprarenals.—*Riforma medica*, July 30, 1932.

Hysteria, Trauma, or Epilepsy—Eugen Körner, writing in the *Deutsche medizinische Wochenschrift* of September 2, 1932, describes the perplexing case of a man of 30 who stated that, always previously healthy, he had begun, some 6 or 7 years before observation, and while engaged as a riveter, to suffer several times a year with boring pains in his temples, which rendered him unconscious for $\frac{1}{4}$ -1 hour, and were followed by violent headache and weakness. The first examining physician made a diagnosis of severe nervous exhaustion and hysterical seizures, with no evidence of occupational trauma. Körner himself had an opportunity to witness several of these attacks, and noted their resemblance to epilepsy. Roentgen examination of the skull revealed a markedly undulating course of the floor of the anterior cranial fossa and of the skullcap, and an uneven thickness of the bones; the sutures were for the most part ossified and unrecognizable. These findings at once excluded hysteria, but strengthened the impression of epilepsy. The spotted and wavy marking of the skullcap was a picture of bone atrophy, due to the increased pressure of the impressiones digitatae, and constituted a clear proof of an augmented internal pressure within the skull, related in some way to the attacks. The characteristic marks of craniostenosis, that is, of premature ossification, were recognized. The fact of a fall from a height of 4-5 meters in 1924, not previously revealed by the patient, now came to light. The circumstance that although he had lost consciousness he had not later visited a physician, and his failure to mention the incident, suggested that the fall might itself have been due to one of the attacks, and hence was not regarded by the patient as an exceptional experience. Though this theory could not be proved, the roentgen picture was decisive for a pressure atrophy of the cranial bones, clearly attributable to a high grade craniostenosis dating from an early period of development. Pressure due to trauma would have forced the sutures into visibility to some extent at least. The case, although running an epileptiform course, must therefore be regarded as neither a traumatic nor a genuine epilepsy, but as the result of an early developmental disturbance.

The Heart Rate During Sleep in Graves' Disease.—Ernst P. Boas recalls the fact that a persistently rapid heart rate is one of the most

characteristic features of Graves' disease. It is caused chiefly by one or all of the following factors: The increased consumption of oxygen by the tissues which necessitates an increased minute-volume flow of blood to which the acceleration of the pulse beats contributes; the action of the altered thyroid secretion on the heart itself; the action of the altered thyroid secretion on the sympathetic nervous system leading to a neurogenic tachycardia superimposed on the basic acceleration determined by the first two factors. The presence of an unexplained sinus tachycardia properly suggests the existence of Graves' disease, yet in many instances such a rapid heart rate is due solely to neurogenic or psychogenic factors. Neurogenic sinus tachycardia is caused only by a disturbance of the nervous regulation of the heart which interferes with the usual well regulated reflex adaptation of cardiac function to the needs of the body. The determination of the basal metabolism is useful in distinguishing these two types of tachycardia, but there is also another method of differentiating neurogenic from thyrotoxic tachycardia which is by determining the minimum heart rate during sleep, as this is the best measure of the intrinsic chronotropism of the heart. The author has studied the heart rate during sleep of patients with Graves' disease and of those with neurogenic sinus tachycardia by means of the cardiograph. He found that in Graves' disease there is little reduction of the heart rate during sleep, the minimum sleeping rate being on the average over 30 beats higher than that of normal people. In neurogenic sinus tachycardia the heart rate shows a marked reduction during sleep, but does not quite attain the low level observed in normal subjects. Therefore the measurement of the heart rate during sleep is of diagnostic value in distinguishing thyrotoxic from neurogenic tachycardia and also serves as a rough check on the reliability of the basal metabolic determination.—*The American Heart Journal*, October, 1932.

Anorexia Nervosa.—Fred Elsworth Clow reviews the literature and reports two cases of anorexia nervosa. Patients with this condition are what is known as "mental anorexics." They are usually young women, who, without having any physical lesions, by the association of various troubles, all having a psychic origin, have lost a quarter, a third, or a half of their weight. Sir William Gull, who first described the condition in 1874, as well as Osler, considered the disease a manifestation of hysteria. Within recent years investigations have been made to establish a metabolic or endocrine etiology, but there is still considerable divergence of opinion. Osler says that the emaciation with marked retraction of the abdomen, sunken eyes and dilated pupils, is comparable only with that of cancer of the esophagus. There is, however, no sign of or-

ganic affection. The patients develop an aversion to food, there is peristaltic unrest, marked constipation, occasionally diarrhea, pallor, a high grade of anemia, slow weak pulse, and scanty urine. Mentally there are irritability, restlessness, sleeplessness, and obstinacy with slow speech. In time delirium with a slight fever may develop and the exhausted patient may succumb to the disease or to bacterial infection from loss of resistance. Of the author's two patients one has recovered, while the other, whose weight in 1920 was 148 pounds, weighed only 58 pounds in May, 1932. She refused food and was apparently content in her present condition: All authorities agree that change of environment, psychotherapy, and forced feeding are the essentials of management. From personal experience Clow endorses the postulates of Leede: that so long as the patient holds the center of the stage in a family too easily given to sentiment very little can be accomplished in rescuing the victim from her pitiable plight.—*New England Medical Journal*, October 6, 1932, ccvii, 14.

Vascular Syndrome with Vasodilatation of the Left Foot. Sympathetic Angioneuralgia.—There are a number of vascular disturbances of the extremities encountered in clinical practice, according to L. Gravier, that do not readily admit of classification under the heading of any of the well individualized syndromes, such as Raynaud's disease, chronic acrocyanosis and erythromelalgia. On the basis of a case history the primary nervous origin of these disturbances is demonstrated, as well as the extraordinary influence exerted upon them by acetylcholine. The patient had been suffering for several weeks with a constant burning pain in her left foot, upon the internal aspect of which was a red plaque extending from toe to heel, with swelling of the soft parts and onionlike thinness of the epidermis, suggesting neuritis of erythromelalgic type. The heart and great arteries were normal both clinically and radioscopically, but there was a lowering of arterial tension in the affected foot and in the entire limb. When iodine and sedatives had no effect upon the excruciating pain, recourse was had to acetylcholine as a last resort, the effects of which were magical, the patient immediately falling into a restful sleep that lasted for 12 hours. A course of 20 injections on alternate days was given, resulting in complete cure, with restoration of arterial tension in the affected member. The case, while resembling erythromelalgia, did not exhibit its chronicity, its paroxysmal character nor its reaction to heat and cold and changes of position; and it differed from painful claudication from vasodilatation, recently individualized by Van Bogaert, in that it was accompanied by swelling and presented a special topography. The possibility of a neuritis due to an arteritis is excluded, since no arteritis could

be demonstrated. Gravier inclines to give the name of angioneuralgia to the affection, which appears to be a simplified form of Raynaud's disease and erythromelalgia—simplified because surprised in an early stage. In view of its topography, it seems logical to suppose that the sympathetic disturbance was localized in the nerve fibers of the tibialis posticus, and to regard the case, in the absence of any arterial lesion, as one of neuritis of the periarterial tibial sympathetic plexus. This conclusion is not so revolutionary as it at first sight appears, and is in accord with the contemporary works of Leriche and Dechaume, who have shown the importance of nerve lesions in various vascular troubles of the extremities. The effect of acetylcholine, acting through its customary vasodilator mechanism, demonstrates the intricate blending of nervous and vascular factors in the syndrome.—*Journal de Médecine de Lyon*, September 20, 1932.

Multiple Biologic Tests in the Diagnosis of Tuberculosis.—There are certain cases, say M. Lucacer and G. D'Alessandro, writing in the *Riforma medica* of August 27, 1932, in which a diagnosis of doubtful tuberculosis is facilitated by applying multiple tests simultaneously or in close succession. The intracutaneous reaction to tuberculin is generally of little value for diagnosis, being the index only of a state of infection and not of the disease itself. But multiple intracutaneous reactions with progressive dilutions of tuberculin (perfectly harmless) and the tuberculin reaction at the level of the diseased organ increase the value of the test, offering in the first case the possibility of measuring the sensitivity of the individual person to tuberculin, and in the second revealing the different sensibility to the substance in different tracts of the skin, some nearer to and some farther from the disease focus. The result of a test with tuberculin diluted to 1:100,000 reveals the degree of "resistance," being positive only in subjects with circumscribed lesions, with good conditions of organic defense, and negative in all others. A test with tuberculin 1:5,000 at the level of the diseased organ itself produces a more intense reaction in 50 per cent of the cases than one of the same dilution carried out on the arm of the same side. Good practical results are obtained by determining three reactions, two with tuberculin 1:5,000 in the arm and second intercostal space on the suspected side, and a third with tuberculin 1:100,000. Fixation of complement, if the test is made on the day following the multiple tuberculin tests, will be stronger in 20 per cent of cases than if done before them, and hence will be more decisive. For the cases negative (about 15 per cent) both before and after the tuberculin test, some hints can be drawn from the multiple tuberculin tests by using the functional test of the reticulo-endothelium. These

cases are marked by an exquisite sensitivity to tuberculin (strongly positive with tuberculin 1:1,000,000) and offer an index of retention of electronegative substances (Congo red) which is still sensitive at the upper limit assigned to the productive and sclerotic forms (70-80 per cent). The velocity of sedimentation test carried out again on the day following the multiple tuberculin tests reveals in 50 per cent of cases either an increase or a decrease of about 10 mm., and can be used as an index of the course of the evolution of the disease. The functional reticulo-endothelial test, although complex and therefore not always practicable, offers a qualitative diagnosis, the retention of Congo red being greater in exudative and less in productive forms of tuberculosis.

Recurrent Boils.—Rupert Hallam, writing in the *British Medical Journal*, October 8, 1932, ii, 3744, discusses certain points relating to the etiology, complications, and treatment of recurrent boils. He recalls that to Pasteur belongs the credit of having discovered that boils were due to the *Staphylococcus aureus*, but it is the individual skin resistance to the staphylococcus which is of supreme importance in determining whether a person will suffer from furunculosis. An important etiological factor is the frequent presence, in cases of recurrent boils, of an intercurrent infection of the skin. This occurred in 31 out of 98 consecutive cases examined from this point of view. Sufferers from furunculosis are usually unaware of the complications which may assail them, yet there are probably more fatalities arising from it than from any other skin disease. The face and neck are recognized as a danger zone, but in addition surgeons meet with perineal and prostatic abscess and osteomyelitis followed by one or more boils. Prophylactic measures are, therefore, of definite importance. The reduction of carbohydrates should be insisted upon. The skin should be kept as dry as possible, since the self-disinfecting power of the skin is influenced by the amount of moisture present. It cannot be too strongly emphasized that the use of fomentations is a common cause of recurrence. The purulent discharge soaks into the dressing and staphylococci are spread to the neighboring follicles, where they are encouraged to multiply by the optimum conditions of heat and moisture. Hallam recommends the frequent cleansing of the surrounding skin with spirit and the direct application of pads of gauze soaked in spirit as a covering to the boil. Vaccines, though favored by some practitioners, have not lived up to their reputation, and in Hallam's experience yeast has proved useless. He has employed colloidal manganese hydroxide for many years and is convinced of its utility. Puncture with the galvano-cautery, injection of pure carbolic acid, and painting with iodine, each has its advocates,

but favorable results by these methods are by no means the rule. It is the prophylactic measures taken to prevent reinfection of the skin which are of greater importance.

Some Aspects of Rheumatism.—In the opinion of Charles Sundell the part played by infection in the causation of rheumatism has been grossly exaggerated. Irregularities of skin action and endocrine dysfunction are more important. The rheumatic individual is one whose nervous, mental, and physiological functions are unstable. A characteristic feature of acute rheumatism is excessive sweating. In chronic rheumatism sweating is abolished or irregular. The "acid sweat" of rheumatism is a tradition upon which was built the alkali therapy. An investigation, as yet unpublished, to determine whether there is an excess of lactic acid in the sweat of rheumatic individuals showed that there is no essential difference in the sweats of normal and of rheumatic persons. Sensitiveness to chill and patchy coldness of the surface of the body are common findings in the rheumatic state. The surface thermometer may record lowered temperature over these areas and there is evidence of capillary narrowing when the skin is examined under the microscope. There is also abnormality in the rôle played by nerve endings of the skin in originating afferent impulses by which bodily functions, such as blood pressure, are maintained or endocrine glands are called into play. It is possible to correlate in theory many of the features of the rheumatic state with the established effect of the thyroid and adrenal glands. For example, the lethargy of the rheumatic child, the fatigue of the adult, their impaired circulation and lowered body temperature have their counterpart in myxedema. Llewellyn and Bassett-Jones point out that thyroxine and adrenaline are derivatives of tyrosine, and that this is found in large quantities in the horny non-vascular layers of the skin. Possibly in the tyrosine supply of the skin may be found the clue to many of our problems.

If metabolic error is at the root of rheumatic manifestations, a cure cannot be expected from the administration of drugs. When, as with salicylates, their dramatic effect on the temperature and pain is taken as evidence of cure, they become a danger. For several years Sundell has employed purely physical measures. Left to themselves the fever and sweating of acute rheumatism effect a cure in four or five weeks; encouraged by hot packs or vapor baths their curative effect will be obtained much sooner. By exposure for one and a half to two hours in the vapor bath a temperature of 107° or 108° may be obtained without distress. The result is that the metabolic processes are quickened, the flow of blood and lymph is accelerated.—*Practitioner*, October, 1932, cxxix, 772.



LEGAL



PRIVILEGED COMMUNICATIONS

By LORENZ J. BROSNAN, ESQ.

Counsel, Medical Society of the State of New York.

A member of the State Society recently wrote to your Counsel requesting an opinion upon two very interesting questions pertaining to the subject of privileged communications. These questions were referred by Legal Counsel to the Executive Committee and authorization obtained from it to answer the questions. Several members of the Executive Committee expressed the opinion that the questions were of sufficient interest to the profession generally to warrant the questions and the answer of Legal Counsel being published in the Legal Column of the NEW YORK STATE JOURNAL OF MEDICINE. The questions under consideration were the following:

"1. A private physician, in order to arrive at a diagnosis, referred his patient to a roentgenologist for chest examination. Said roentgenologist found and reported a tubercular condition of the lungs. Several years later an insurance carrier referred this same patient to the same roentgenologist for a chest examination. It appeared that about one year prior to that (or one year after the original examination), the patient met with an accident as a result of which he claimed a chest condition. Again the X-rays revealed a tubercular condition. However, from the second X-ray examination alone, without knowledge of the previous findings, it was impossible for the roentgenologist to state definitely that the pathology existed prior to the date of the alleged accident or not. Was it ethical and within his rights to divulge to the carrier the knowledge that he had gained from his first examination, two years prior, in which he acted in an entirely different capacity? As a witness before the court would he be permitted to give this information or would it be considered privileged?

"2. A very similar problem confronted a colleague of mine who in the course of his practice was called upon to treat a patient for vaginal bleeding. The bleeding was spontaneous and he found a condition responsible for it. Five months later, the same physician, who was also engaged in public liability examinations for an insurance company, by a mere coincidence, was requested by this company to examine the same patient. She was now attributing her vaginal bleeding to an accident. Wishing to avoid an embarrassing situation, he referred the examination to another physician. Was it ethical or permissible for him

to make this examination at the instance of the carrier, and, if so, was it permissible to include in the report such information that he derived from his original examination? As in the previous case cited, was it ethical and permissible for either physician to divulge to the carrier such knowledge that was gained from his original examination when he acted in the capacity of attending physician, or, was he bound to adhere to the restrictions of privileged communications? And, as in the previous case, how much information could he give as a witness in court? Would this be an instance where there existed an exception to privileged communications?"

The statute in this State relating to privileged communications is Section 352 of the Civil Practice Act, which reads as follows:

"Physicians and nurses not to disclose professional information. A person duly authorized to practice physic or surgery, or a professional or registered nurse, shall not be allowed to disclose any information which he acquired in attending a patient in a professional capacity, and which was necessary to enable him to act in that capacity; unless where the patient is a child under the age of sixteen, the information so acquired indicates that the patient has been the victim or subject of a crime, in which case the physician or nurses may be required to testify fully in relation thereto upon any examination, trial or other proceeding in which the commission of such crime is a subject of inquiry."

A reading of this statute discloses the fact that a physician may not disclose matters which he observed in treating or examining a patient, and this includes the nature of the examination, the diagnosis and the treatment itself, unless the patient has expressly or by implication waived the privilege of non-disclosure. The provision relating to the Criminal Law is not, of course, material to the questions under consideration.

In the first question, in the opinion of your Counsel, both the roentgenologist and the private physician under this statute would be prohibited from making any disclosure of the conditions found as a result of the first examination by the roentgenologist. Further, on the second examination the roentgenologist would be prohibited, without the patient's consent, from making a report to the carrier based in part upon his first examination. In our judgment, it could not be

claimed that there was a waiver of this privilege by reason of the fact that the patient consented to be examined by the same roentgenologist who had conducted the first examination.

In reference to the last question contained in the first statement of facts, to wit: "As a witness before the court would he (the roentgenologist) be permitted to give this information or would it be considered privileged?", this question has been fully answered by a decision of the Court of Appeals of this State in which the Court held that, "Where the plaintiff in an action brought to recover damages for personal injuries caused by the negligence of the defendant describes these injuries and their results and it appears that he has consulted or been treated by a physician in regard to them he waives the protection of Section 834 of the Code (now Section 352, Civil Practice Act)."

The Court then went on to state that in an earlier decision it had laid down the proposition that, "Where the patient tenders to the jury the issue as to his physical condition it must in fairness and justice be held that he has himself waived the obligation of secrecy which would otherwise exist. The ruling of the trial judge in the case before us, therefore, was erroneous and it was material. The plaintiff gave evidence as to her physical condition after an accident which she claims was caused by the negligence of the defendant. She stated that because of that condition she consulted Dr. W—, and described in

part at least what occurred at that consultation. Dr. W— was called upon by the defendant who sought to examine him upon the same subject. His evidence was excluded and an exception was taken."

We feel, however, that as a protection to the physician even in such a case a ruling should be obtained from the Court as to whether he should give the testimony sought to be elicited.

With respect to the second case cited above, in the opinion of your Counsel, the physician was correct in referring the patient in question to another physician for examination. Still, however, it cannot be said that it would have been unethical for the physician in question to have made the examination provided, however, he did not disclose without the patient's consent anything in connection with his first examination. With reference to the other points involved in the second case, the same rulings would apply as in the first case.

To avoid embarrassment in these and similar situations, we believe that the physician should not make the examination requested on the patient previously examined by him unless, prior to the second examination, a written consent is obtained from the patient to disclose the results of the first examination. In the absence of such consent, in our opinion the physician should advise the party requesting the examination to have it made by another physician acting independently of himself.

CLAIM OF NEGLIGENCE IN CYSTOSCOPY EXAMINATION

A specialist in Urology was consulted at a clinic conducted by him by a patient who complained of difficulty in urinating. The doctor put her on a table and after cleaning the vulva with soap and water and injecting 2% novocaine in the urethra, he inserted a cystoscope into her bladder. An examination with the said instrument showed that the fundus was normal except that there was a depression in the post-trigonal region. The trigonum vesicae was normal. The doctor then passed a catheter up to the kidney pelvis without any difficulty on the right side, but on the left side encountered an obstruction of unknown nature at a distance of about twenty-five centimeters. He then injected intravenously 1 cc. of phenolsulphonephthalein which appeared in about six minutes on the right side and in about five minutes on the left side. Specimens of the urine from each kidney were collected in order to examine whether bacteria was present.

Following this examination, the doctor directed the patient to be put to bed in the

hospital where the examination was made. The report made upon the specimen of urine was negative.

After the patient had been at the hospital for a few days she contracted a cold and when her bladder was irrigated by one of the house surgeons, his diagnosis was acute cystitis. A specimen of urine taken at the hospital about twelve days after the cystoscopy disclosed a trace of albumin and pus cells. About ten days thereafter the patient's condition having improved, she was discharged from the hospital.

The patient brought suit against the Urologist claiming that the cystoscopic examination had been made by him in a negligent manner so that the bladder was injured during the course of said examination, causing ulcerous condition of the bladder and an infection of the kidneys. When the case came on for trial, the plaintiff's attorney was not ready to proceed, and on motion of the attorney for the defendant the complaint was dismissed, which finally terminated the matter in favor of the doctor.



NEWS NOTES



COMMITTEE ON PUBLIC RELATIONS

The Committee on Public Relations of the State Society met at the Hotel Statler in Rochester on October 18, 1932, with all members present as follows:

Dr. James E. Sadlier, Poughkeepsie, Chairman.

Dr. W. H. Ross, Brentwood, Secretary.

Dr. George M. Fisher, Utica.

Dr. O. W. H. Mitchell, Syracuse.

Dr. A. J. Hambrook, Troy.

Dr. W. D. Johnson, Batavia.

Dr. T. H. Cunningham, Glens Falls.

There were also present Dr. T. P. Farmer, Syracuse, Chairman of the Committee on Public Health and Medical Education, and Dr. J. S. Lawrence, Executive Officer.

Private Practice by State Physicians: Drs. Ross and Johnson, the Committee on full-time prison physicians engaging in private practice, reported that the Committee had consulted the Commissioner of Corrections, and finds that it is usual for physicians in prison service to engage in private practice. Many of the physicians in prison service are on part time. The Department of Correction is friendly to the contention of organized medicine that physicians engaging in State service should not engage in private practice in competition with local physicians already established. The Deputy Commissioner of Correction said that his department felt that it had as much at stake in the quality of the prison service as organized medicine had in the interference of prison physicians with the private practice of medicine, and that his department would do all that it could to work out the problem for the good of the service as well as to be just to the medical profession.

The question of prison physicians engaging in private practice and possibly neglecting their major obligation for private gain has apparently not been raised before. The sub-committee reported that the foundation had been laid for further conferences on a friendly basis. The danger of neglecting the prison service brought to the front a possible criticism of the Department of Correction, because of the injustice of the State subsidizing a physician by paying him for his services, and then letting him do more or less as he wants to about determining the service for which he is paid. This is a major argument against a prison physician engaging in the private practice of medicine.

The prison situation has arisen because the system of prison medical service throughout the

State has been largely based upon the engagement of the doctor upon part-time employment. Now that the facts have been obtained, the next step will be to report the whole matter to the Executive Committee of the State Society for advice and counsel. Dr. Farmer advised that an effort should be made to get the Department of Correction to clarify its attitude toward full-time men in prison service on salary. It was brought out that it might be necessary to have the service of the Society's counsel, and that this should be included in the report to the Executive Committee.

Ratio of Hospitals to Population: The report on the ratio of hospitals to population was made by its chairman, Dr. O. W. H. Mitchell. It was as follows:

"On July 14, 1932, Dr. E. E. Haley addressed a letter to Dr. Chas. Gordon Heyd, President of the Medical Society of the State of New York, concerning the increase of Federal, State, County, and Municipal hospitals. The communication was eventually referred to a sub-committee of the Committee on Public Relations.

"The sub-committee desires to report that the problem presented by Dr. Haley centers about the General Municipal Law. If the law should be changed, or if it is being interpreted in ways not originally intended, the Counsel and Committee on Legislation should give attention to the problem.

"Your sub-committee suggested that the Executive Committee be so informed, and that Dr. Haley be notified of the decision of the Committee on Public Relations."

The opinion was reached that the whole matter is a legal question and that it should be referred to the Committee on Legislation. The Committee on Public Relations concluded that an evil exists, but that it was outside of the function of the Committee to correct it, since the first thing to do is to change the law regarding municipal and other hospitals. This, of course, will have to be preceded by a change in public sentiment. The whole subject was interpreted as another tendency toward State medicine. The Hospital number of the *Journal of the American Medical Association*—that of June 11, 1932, page 2142—contains an illuminating editorial on the great increase in the number of hospitals in recent years.

Popular Education on Cancer: Dr. Sadlier reported on the campaign of education regarding cancer now being carried on by the physicians of

the Dutchess-Putnam County Society. The members are now addressing about sixty organizations such as the Grange, Farm Bureau, clubs, and fraternal organizations on the early diagnosis of cancer. He said that it had been found that the doctor should first be educated as to his responsibility toward teaching the public regarding the early diagnosis of cancer. It was the opinion of the committee after discussion that this is a commendable activity for a county medical society, and it should be reported to other county medical societies.

Medical Examination of School Children: The Committee considered a series of newspaper articles setting forth the records of the several school districts of Steuben County in the medical examination of the school children, with special reference to the inequalities in both the character of the medical work and also in its cost. The Committee recognized the present chaotic state of the system of medical school inspection, and felt that the responsibility for improving conditions rests upon the educational authorities as well as the medical profession. Teachers, school boards of local districts, and the State Department of Education are all responsible for providing facilities for the doctors to make the examinations, and correct the defects; and also for the hearty cooperation of all the lay educational authorities with the physicians who make the examinations as employees of either the school or the parents of children.

Upon motion duly carried it was decided that the chairmen of the Committee on Public Health and that on Public Relations effect a contact with the State Department of Education and ask that better facilities be provided in schools and better cooperation of teachers, in order that school physicians may make more satisfactory examinations; that the result of the conference be published in the Journal; and that a bulletin be sent as a personal communication to the school physicians of the state, to be signed by the chairman of the Committee on Public Health and that on Public Relations.

It was also decided to ask the State Department of Education to send this request from the State Society to the Boards of Education and Trustees of schools throughout the state.

There was a further discussion regarding the examination of school children. It was the opinion of everybody that one dollar per pupil is a proper fee for the medical examiner. It was brought out by the discussion, however, that the work depended upon the man and not his fee; and also that a physician will do no better work for one dollar than he will for fifty cents.

County General Hospital: There was a discussion of the general hospital, built and operated by the county authorities, and particularly the relation of its medical staff to the physicians of the

county. Conditions in the Lewis County Hospital with a paid operating surgeon as head of the medical staff, were contrasted with a similar county hospital in Warsaw, Wyoming County, with an open staff. It was the opinion of the members of the Committee that the local physicians should assume the leadership in finding a solution of their hospital problems.

Reports from County Public Relations Committees: The afternoon session was devoted principally to a conference of the chairmen of the Public Relations Committees of six counties in the vicinity of Rochester.

Genesee County: Dr. M. P. Messinger, Oakfield, said that a county society was not usually informed of the usefulness of a Public Relations Committee, and that it did not understand that a Public Relations Committee was of service both to the public and to the physicians. He thought that a real need was that a county society should know more about the State Society and its committees.

Livingston County: Dr. Charles I. Newton, Genesee, outlined the health work in Livingston County, and reported on the doctor's clinics being held there under the health officer's direction. He said that physicians are in a position of leadership in Livingston County health work; and that the Supervisors are quite likely to abolish all public health services in Livingston County instead of economizing in these services. It was suggested that the Livingston County Medical Society formulate a program, go before the Board of Supervisors, and tell the Board that it is presenting a program that the physicians of Livingston County consider necessary for the health of the county. The County Medical Society of Livingston was advised that it should take charge of the matter and that a representative of the Public Health or the Public Relations Committee of the State Society will go with them and speak to the Board of Supervisors on the need of a health program sponsored by the County Medical Society.

Monroe County: Dr. Austin G. Morris discussed the overlapping of public health, charity, and medicine, and mentioned the increasing cooperation of family doctors with the official agencies of Rochester engaged in public health work.

Dr. Morris also stated that about four out of every five cases of tonsils and adenoids operated in the City of Rochester last year were charity cases and that it cost the City five dollars to get each one of these operations done; that a considerable number of these cases could pay a reasonable fee; that how to bring about a change in this situation was at present unknown. He said that a committee of the county medical society was working on the problem.

Ontario County: Dr. W. B. Clapper of Victor

discussed the value of retaining members in office and said that the Ontario County Medical Society had had the same secretary for thirty-six years. He said that a survey of all the towns in Ontario County regarding vaccination and administration of toxoid had been made, and that the Public Health Committee of the county, made up of laymen, supervisors, and physicians, had on it three physicians nominated by the County Society and appointed by the Board of Supervisors.

Wayne County: Dr. Ralph Sheldon, Lyons, said that his County Society is engaged in finding out the amount of welfare work that physicians in Wayne County are doing for nothing, and that when this is collected, it will be shown to the Supervisors and to the public. He said that the County Medical Society members are very friendly with each other.

Dr. Sheldon has examined two thousand school

children in Wayne County. He referred each one needing the correction of some defect by saying to them, "Please go and see your physician and see what he says about it." He called attention to the fact that a mandatory law compels the welfare official of the county to pay for the correction of defects if there is no other way for them to be corrected. He said that the Red Cross and fraternal societies in his county were a help in this work. All physicians in Wayne County charge one dollar for school examinations, and do one dollar's worth of work. Dr. Sheldon further said that in case the welfare official refuses to pay for the correction of defects, a reference should be made to the decision of the Attorney-General that welfare officials must pay for the correction of these defects if the need is certified to by the physician.

W. H. Ross, M.D., *Secretary.*

JAMES E. SADLER, M.D., *Chairman.*

GENESEE COUNTY

The annual meeting of the Genesee County Medical Society was held on October 20, 1932, at the Blue Bird Inn, Batavia, N. Y. The members of the Public Health Committee of the Board of Supervisors of Genesee County were our guests at the meeting and dinner.

The meeting was devoted to a discussion of public welfare problems, the chief speaker being Dr. Homer Knickerbocker of Geneva, who spoke on the experiences of Ontario County in Public Welfare work. He also spoke of a plan to take care of poor welfare work in Ontario County.

There was a general discussion on the various phases of inefficiency of administration of the public welfare law. The subject will be discussed with the Commissioner of Public Welfare.

A committee was appointed to meet with the Public Health Committee of the Board of Supervisors in order to develop a plan of public health activities for the County.

The annual election of officers took place and the following were elected:

President, Frank R. Hall, M.D., Batavia.

Vice-President, Ralph B. Smallman, M.D., Corfu.

Secretary-Treasurer, P. J. di Natale, M.D., Batavia.

Dr. Frank Hall, the incoming President, appointed the following committees:

1. Public Relations—I. A. Cole, M.D., Batavia, Chairman; G. H. Knoll, M.D., Le Roy; C. C. Koester, M.D., Batavia.

2. Public Health—Charles L. Davis, M.D., Batavia, Chairman; Ralph G. Streeter, M.D., Batavia; M. P. Messinger, M.D., Oakfield; C. D. Graney, M.D., Le Roy.

3. Legislation—C. M. Graney, M.D., Batavia, Chairman; Robert Wilson, M.D., Batavia; P. J. Di Natale, M.D., Batavia.

4. Medical Economics—S. R. Hare, M.D., Batavia, Chairman; H. M. Spofford, M.D., Batavia; E. G. Ribby, M.D., Byron; L. B. Manchester, M.D., Batavia; Peter J. Di Natale, M.D., Batavia.

5. Memberships—W. B. Manchester, M.D., Batavia, Chairman; H. G. Houze, M.D., Bergen; E. N. Morgan, M.D., Batavia.

6. Physio-Therapy—T. M. Steele, M.D., Le Roy, Chairman; H. A. Harvey, M.D., Batavia; W. C. Swasey, M.D., Batavia.

The following twenty members were present: Drs. Cole, C. L. Davis, Di Natale, Frazier, C. D. Graney, C. M. Graney, Hall, Hare, Houze, Johnson, Knoll, Koester, Manchester, Messinger, Morgan, Ribby, Smallman, Spofford, Streeter and Swasey.

P. J. DI NATALE, M.D., *Secretary.*

SULLIVAN COUNTY

The annual meeting of the Sullivan County Medical Society was held at the Lenape Hotel, Liberty, N. Y., on Wednesday evening, October twelfth, with the President, Dr. J. M. Rosenthal, of Monticello, in the chair. Officers for 1933 were elected as follows:

President, George F. Herben, M.D., Loomis.
Vice-President, Harry Golembe, M.D., Liberty.
Secretary-Treasurer, Luther C. Payne, M.D., Liberty.

Chairman, Legislative Committee, Ralph S. Breakey, M.D., Monticello.

Chairman, Public Health and Relations Committee, Harry Golembe, M.D., Liberty.

Board of Censors: Benjamin Abramowitz, M.D., Monticello; Harry Jacobs, M.D., Hurleyville; V. G. Bourke, M.D., Livingston Manor; Stephen W. Wells, M.D., Liberty; J. H. Moore, M.D., Loomis.

Physicians elected to membership were: Deeming S. Payne, M.D., Liberty; Lee Tompkins, M.D., Liberty; E. H. Kerper, M.D., Loomis.

Dr. Burton T. Simpson, Director of the State Institute for the Study of Malignant Disease, Buffalo, N. Y., read a paper on the responsibility

of medical men in the control of cancer. This paper was discussed at length and was well received by the physicians present.

Individual photographs were taken during the course of the meeting, in anticipation of the publication of a booklet commemorating the 125th anniversary of the Society, which organized in Liberty in 1809.

The next meeting will be held at the Monticello l'lks' Club on November 16, 1932.

HARRY GOLEMBE,
Chairman, Publicity Committee.

BRONX COUNTY

A regular meeting of the Bronx County Medical Society, held at Elsmere Hall on October 19, 1932, was called to order at 9 P. M. with the retiring President, Dr. Irving Smiley, in the Chair.

Dr. Smiley urged the members to give to the incoming President, Dr. William Klein, the same cooperation, support and loyalty that they gave to him during the past year. He then turned over the gavel to Dr. Klein, who thereupon took the Chair.

Louis Schneider was elected to membership.

Dr. L. A. Friedman, Chairman of the Committee on Public Health and Medical Education, presented the gist of an agreement between all high school principals in the Borough of the Bronx and the Bronx County Medical Society relative to the examination of the students.

Dr. B. H. Archer, Chairman of the Committee on Medical Economics, reported on the plans of the Committee for the coming year.

Dr. Weintraub reported for the Social Committee, urging the cooperation of the members in the matter of the coming beefsteak dinner for the benefit of the relief fund.

Dr. Moses H. Krakow was elected Delegate to the American Medical Association in the place of Dr. C. J. Egan, deceased.

Memorial resolutions were adopted in memory of Dr. Cornelius J. Egan and Dr. Ernst A. W. Wilkens.

Dr. William Klein then delivered his inaugural address as President of the Bronx County Medical Society. (This will be published in a future number of this Journal.—Editor's Note.)

The scientific program then proceeded as follows:

Dr. Marcus A. Rothschild gave a paper on the subject: "Acute and Chronic Rheumatic Heart Disease: Etiology, Treatment and Prevention."

I. J. LANDSMAN, *Secretary.*

GREENE COUNTY

The 116th annual meeting of the Greene County Medical Society was held in Cairo on October 11, 1932, with the President-elect, Dr. L. B. Honeyford, presiding. A dinner was served at 6:30 P. M. and immediately thereafter the meeting convened.

Dr. Edward P. McDonald of Albany presented an address on dysmenorrhœa, which was ably delivered and of great interest.

Mr. George Irwin of Catskill, Chairman of the Board of Managers of the Greene County Memorial Hospital, detailed the efforts made to establish a hospital in Greene County, and requested the appointment of a committee from the Medical Society to assist the Board of Managers in the further plans for the equipment and operating of the hospital, which is under construction and is expected to be ready for opening by March first.

Mr. Lowe, the architect of the building, was present and described in detail the specifications of the building, which is modern in every respect.

He also presented the plans for the members' inspection.

The following members of the County Society were appointed a committee to assist the Board of Managers of the Hospital:

Dr. L. B. Honeyford, Chairman; Drs. William M. Rapp, M. H. Atkinson, I. E. Van Hoesen, P. G. Waller, A. B. Daley, K. F. Bott, A. O. Persons.

The County Welfare Commissioner, Mr. H. L. Barker, was present and explained in detail the working of the Welfare Law in the County.

A resolution on the death of Dr. Andrew Van Slyke, the oldest active member, and the oldest health officer in the State, was adopted.

The following officers were elected for 1933:

President, L. B. Honeyford, M.D., Catskill. Vice-President, K. F. Bott, M.D., Greenville. Secretary, William M. Rapp, M.D., Catskill. Treasurer, M. H. Atkinson, M.D., Catskill.

WILLIAM M. RAPP, M.D., *Secretary.*

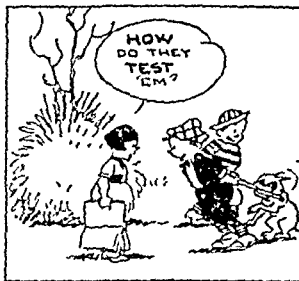
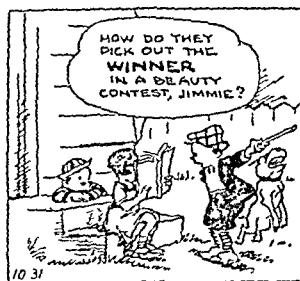


THE DAILY PRESS



REG'LAR FELLERS—Sure Proof.

By Gene Byrne.



From N. Y. Sun, October 31, 1932.

POISONING WITH TOADSTOOLS

The depression seems to be the only plausible explanation of the numerous persons who roam the country sides of Long Island, sometimes in trucks, gathering mushrooms for food, but are unable to explain how they recognize the edible varieties. The following item in the New York Times of October 27, shows the dangers to which the custom may lead:

"Babylon, L. I., October 26.—Three persons have died in twenty-four hours within a radius of one mile as the result of eating toadstools, which were mistaken for mushrooms. Two more are in the South Side Hospital in Bay Shore. The first victim was Mrs. Mary Sakalcka, 75 years old, who died yesterday at the home of her daughter, Mrs. Albert Laska, in the West Islip section. Mrs. Sakalcka came here from Newark, N. J., for

a visit, became ill after eating the toadstools and died next day.

"The Marcin family, living on South Fire Island Avenue, ate toadstools Saturday, and Mrs. Gertrude Marcin, 35, wife of Emil Marcin, died yesterday, while her sister-in-law, Miss Mary Marcin, 44, died early this morning. Emil, 37, his brother, Frank, 49, and their sister, Mrs. Emma Klein, 53, are ill. Mrs. Klein is convalescing at home, while the two brothers, more seriously affected, are at the hospital. They are expected to recover. The Marcin family moved here from Maspeth two years ago.

"It has been a custom here to gather wild mushrooms, but this is the first instance of poisoning. The toadstools were gathered in different parts of the town. The two families were not acquainted."

VITAL STATISTICS OF THE NOVEL

Homer's Iliad contains a long account of a battle beneath the walls of Troy, listing the names of the heroes, and the wounds which they received. Students have compiled interesting statistics showing that the ratio of fatalities and incapacitating wounds of the soldiers in the Greek army were practically the same as those in a modern army.

The New York Times of November third has the following suggestive editorial on some vital statistics derived from a study of the tragedies of life as depicted on the stage and in the modern novel:

"In these formulas, which condense Life into a hotel, or Life into a dinner party, or Life into

twenty-four hours, the vital statistics are truly extraordinary. Among a group of people gathered in a hotel lobby in a novel, or around a dinner table on the stage, the murder-rate will be 10 per cent, the suicide-rate 20 per cent, the divorce-rate 40 per cent, the seduction-rate 20 per cent, the bankruptcy-rate 60 per cent, &c.

"If life in New York City were really as life is like that in the novels and on the stage, we would have 500,000 homicides a year instead of 400, a million suicides instead of a thousand and other things in proportion.

"The true realist would take note of the fact that more people are probably bored to death at dinner parties than are shot or commit suicide."

RED WATER

Since physicians are trained in biology, they will be interested in the following scientific explanation of water turning into blood, taken from the *New York Sun* of October 20:

"Even as the waters of the Nile turned to blood, as told in the seventh chapter of Exodus, the waters of Long Island Sound have been running red in great patches this fall. Iodine has been blazoned as the cause. Impossible, say scientists, for that much iodine would be lethal.

"The red color probably is the same as the Nile discoloration, the same as famous classical instances of blood-red water mentioned by Strabo, Tacitus and other writers, namely, the dinoflagellates.

"The dinoflagellates are microscopic marine plants, says the Associated Press, identified repeatedly by scientists in the last hundred years as causes of outbursts of blood-red water, fresh and salt alike, all over the world.

"Dinoflagellates seem to be poisonous, but in fact are good food. They turn water red, but their color is greenish yellow. The latest studies of their peculiarities are from Dr. Thurlow C. Nelson of Rutgers University and Dr. G. W. Martin of Iowa State University.

"These little organisms are so small that one magnified 150 times is only about the diameter of the head of a pencil. Like the head of a pencil, it is flat, but not so perfectly rounded. It

forms one of the staple foods of shell fish, being one of the best for oysters.

"Sometimes through accidents of tide, winds, prolific breeding and the stickiness of a coat of gelatine covering their bodies, they mass in countless billions. That is when they turn the water red.

"The red color is not altogether understood. It is not any substance poured off like ink into the water. Instead, Dr. Nelson and Dr. Martin find that it is probably the reddish fluorescence of chlorophyll in the dinoflagellates.

"Chlorophyll is the universal green coloring matter in plants, a substance as important to them as blood to animals. Furthermore, chlorophyll is one of the most active, hard-working chemical substances, and its ability to emit a reddish fluorescence is well known to chemists.

"Even when massed, the dinoflagellates are not poisonous. But they asphyxiate and sometimes kill large quantities of fish, by extracting the oxygen from the water. Like other plants the dinoflagellates give off oxygen during daylight, but absorb it at night. Fish trapped among clouds of them at night are likely to become too exhausted to escape.

"The 'death' of a dinoflagellate is dramatic. It comes to rest, and then almost immediately disintegrates."

FLYING AS A CURE OF DEAFNESS

Newspaper reports of alleged cures of deafness delude the people into going to high altitudes in airplanes and submitting to long dives in order to subject their ears to rapid change in air pressure. This procedure was condemned by Army flight surgeons, who spoke at the scientific meeting of the Associated Physicians of Long Island on October 25, at Mitchell Field, the headquarters of Army aviation in the Eastern United States. The opinion of the medical officers is reported in the following item in the *New York Sun* of October 26th:

"That stunt flying never has and never will restore hearing was the principal theme of addresses by several physicians. Major Chauncey L. Chase said he once saw a deaf man make a 3,000-foot dive in an airplane, without effect. Major A. Edward Sherman supported him, saying repeated tests had shown that stunt flying had no value as a corrective of deafness. In fact, he added, it does more harm than good, and physi-

cians in the Army Air Corps do not recommend it.

"Dr. Louis H. Bauer of Hempstead, formerly head of the medical section of the aeronautical branch of the United States Department of Commerce, said he could see no reason why stunt flying should be expected to cure deafness.

"Dr. Bauer explained that the aeronautical division of the Department of Commerce has a rule against stunting with a passenger. When he was with the department, he added, many requests were received for waiver of this rule in behalf of deaf persons who sought to try the 'cure' but each request was answered with a telegram in which it was pointed out that nothing was to be gained by such an experiment.

"Dr. Bauer said that he knew of rare cases in which fright brought back a person's hearing (Referring to deafness due to hysteria), but he advised that there are other and safer ways of frightening a deaf person than taking him on a stunt flight."



BOOKS RECEIVED



Acknowledgement of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits, or in the interests of our readers.

GASTROINTESTINAL TRACT. By WILLIAM GERRY MORGAN, M.D. 12 mo. of 259 pages, illustrated. Philadelphia, J. B. Lippincott Company, [1931]. Fabrikoid, \$5.00. (Everyday Practice Series.)

NEW AND NON-OFFICIAL REMEDIES, 1932. Containing Descriptions of the Articles Which Stand Accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1932. 12 mo. of 485 pages. Chicago, American Medical Association [1932]. Cloth, \$1.50.

ORTHOPEDECS IN CHILDHOOD. By WILLIAM L. SNEED, M.D. 12mo of 318 pages, illustrated. Philadelphia, J. B. Lippincott Company, 1931. Fabrikoid, \$5.00. (Everyday Practice Series.)

POSTURE, ITS RELATION TO HEALTH. By FRANK D. DICKSON, M.D. 12mo of 213 pages, illustrated. Philadelphia, J. B. Lippincott Company, 1931. Fabrikoid, \$5.00. (Everyday Practice Series.)

FUNCTIONAL DISTURBANCES OF THE HEART. By HARLOW BROOKS, M.D. 12mo of 288 pages. Philadelphia, J. B. Lippincott Company, 1932. Fabrikoid, \$5.00. (Everyday Practice Series.)

NURSING SERVICES AND INSURANCE FOR MEDICAL CARE IN BRATTLEBORO, VERMONT. By ALLON PEEBLES, Ph.D. and Valerie D. McDermott. Octavo of 65 pages. Chicago, The University of Chicago Press, c.1932. Paper, 60c. (Publications of the Committee on the Costs of Medical Care: No. 17.)

THE MEDICAL SERVICE OF THE HOMESTEAK MINING COMPANY. By LOUIS S. REED, Ph.D. Octavo of 54 pages. Chicago, The University of Chicago Press, c.1932. Paper, 60c. (Publications of the Committee on the Costs of Medical Care: No. 18.)

HANDBOOK OF BACTERIOLOGY. For Students and Practitioners of Medicine. By JOSEPH W. BIGGER, M.D. (Dublin) Third edition. 12mo of 459 pages, illustrated. Baltimore, The Williams & Wilkins Company, (William Wood & Company), 1932. Cloth, \$5.00.

TEXTBOOK OF MEDICINE. By various authors. Second edition. Edited by J. J. Conybeare, M.D. Octavo of 1004 pages, illustrated. Baltimore, The Williams & Wilkins Company, (William Wood & Company), 1932. Cloth, \$8.00.

TREATMENT OF SYPHILIS. By JAY F. SCHAMBERG, M.D. and CARROLL S. WRIGHT, M.D. Octavo of 658 pages, illustrated. New York, D. Appleton and Company, c.1932. Cloth, \$8.00.

LABORATORY SERVICE AND THE GENERAL PRACTITIONER. By Arnold Renshaw, M.D. 12mo of 267 pages. New York and London, Oxford University Press, 1932. Cloth, \$2.50. (Oxford Medical Publications.)

A NEW PHYSIOLOGY OF SENSATION. Based on a Study of Cardiac Action. By W. BURRIDGE, D.M., M.A. Octavo of 70 pages. New York and London, Oxford University Press, 1932. Cloth. (Oxford Medical Publications.)

EXCITABILITY—A Cardiac Study. By W. BURRIDGE, D.M., M.A. Octavo of 208 pages. New York and London, Oxford University Press, 1932. Cloth. (Oxford Medical Publications.)

THE ADVANCE OF MEDICINE. By The Right Honourable Lord MOYNIHAN, K.C.M.G., C.B. 16mo of 64 pages. New York and London, Oxford University Press, 1932. Cloth, \$1.00.

PHARMACOLOGY OF THE MEDICINAL AGENTS IN COMMON USE. By STANLEY COULTER, Ph.D., Sc.D. 16mo of 254 pages. Indianapolis, Ind. Eli Lilly and Company, 1932. Flexible fabrikoid, 50c.

FUNCTIONAL DISORDERS OF THE LARGE INTESTINE AND THEIR TREATMENT. By JACOB BUCKSTEIN, M.D. 16mo of 265 pages, illustrated. New York, Harper & Brothers, 1932. Fabrikoid, \$3.00. (Harper's Medical Monographs.)

THE CURATIVE VALUE OF LIGHT. By EDGAR MAYER, M.D. 12mo of 175 pages, illustrated. New York, D. Appleton and Company, 1932. Cloth, \$1.50.

PROSPECTING FOR HEAVEN. Some Conversation About Science and the Good Life. By EDWIN R. EMBREE. Octavo of 185 pages. New York, The Viking Press Inc., 1932. Cloth, \$1.75.

WHITE HOUSE CONFERENCE ON CHILD HEALTH AND PROTECTION. Hospitals and Child Health. Octavo of 279 pages. New York, The Century Company, 1932. Cloth, \$2.50.

HEART DISEASE. The Principles of Diagnosis and Treatment. By CRIGHTON BRAMWELL, M.D. Octavo of 244 pages, illustrated. London, Edward Arnold & Company, New York, Longmans-Green & Company, 1932. Cloth, \$3.75.

A CENTURY OF PUBLIC HEALTH IN BRITAIN. 1832-1929. By HARLEY WILLIAMS, M.D. Octavo of 314 pages. London, A. & C. Black Ltd., 1932. Cloth.

THE FAILING HEART OF MIDDLE LIFE. By ALBERT S. HYMAN, M.D., and AARON E. PARSONNET, M.D. Octavo of 538 pages, illustrated. Philadelphia, F. A. Davis Company, 1932. Cloth, \$5.00.

INTERNAL MEDICINE. Its Theory and Practice. Edited by JOHN H. MUSSER, M.D. Octavo of 1316 pages, illustrated. Philadelphia, Lea & Febiger, 1932. Cloth, \$10.00.

ENDOCRINE MEDICINE. By WILLIAM ENGELBACH, M.D. Volumes 1, 2, 3 and an Index Volume. Octavo of 1795 pages, and 933 illustrations. Springfield, Illinois, Charles C. Thomas, 1932. Cloth, \$35.00.

MEDICAL CLINICS OF NORTH AMERICA. Vol. 16, No. 2, September, 1932. (Chicago Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues). Cloth, \$16.00 net, paper, \$12.00 net.

DIAGNOSIS AND TREATMENT OF DISEASES OF THE THYROID GLAND. By GEORGE CRILE, M.D. and Associates. Octavo of 508 pages, illustrated. Philadelphia, W. B. Saunders Company, 1932. Cloth, \$6.50.



BOOK REVIEWS



SCHIZOPHRENIA [Dementia Praecox]. An Investigation of the Most Recent Advances. The Proceedings of the Association New York, December 27th and 28th, 1929. Editorial Board, GEORGE H. KIRBY, M.D., and others. Octavo of 246 pages, illustrated. Baltimore, The Williams and Wilkins Company, 1931. Cloth, \$4.00. (Association for Research in Nervous and Mental Disease. Vol. X of a Series of Research Publications.)

This book is Volume X of a series of research publications issued by the Association for Research in Nervous and Mental Disease. It is divided into four sections:

- Section I—Clinical Investigation.
- Section II—Pathology.
- Section III—Prognosis.
- Section IV—Treatment.

The section on Clinical Investigation has papers on the "Distribution Ratio of Bromides" wherein the results of the determination of the bromide distribution ratio between the blood and the cerebrospinal fluid in 210 cases of Schizophrenia are reported. Another paper on the "Deficiency of Catalytic Iron" showed iron to be deficient in the cortical ganglion cells in schizophrenia and the significance thereof. There are other papers on a neurocirculatory test for early diagnosis, environmental factors, and a personality study in schizophrenic patients.

In the discussion of the pathological anatomy, Dr. Spelmeyer emphasizes the fact that Schizophrenia is an organic disease, though the anatomical diagnosis and differential diagnosis necessary to isolate the process and establish it as an entity has not been worked out.

In the paper on prognosis several points are brought out. In general an acute, stormy onset means a relatively favorable prognosis, whereas the insidious onset means the reverse. The most fruitful sources of prognostic information in a series of 25 cases were the personality, the evaluation of toxicity and exhaustion, a close analysis of the precipitating situation and the stage of onset.

In the paper on treatment Dr. Zeboorg emphasizes the fact that Dementia Praecox is being treated psychotherapeutically, dealing with the reality principle first and then the analytical situation. There is a statistical analysis of the report of records and improvement by various investigators.

This volume represents the most modern concepts of this important subject. It is concise, carefully arranged, and the papers are conservative in their statements. It should be of interest to all physicians as its scope is unlimited.

S. S. LAMM.

PHYSIOTHERAPY: ITS PRINCIPLES AND PRACTICE. By F. HOWARD HUMPHRIES, M.D., F.R.C.P., and RALPH E. STUART-WEBB, M.B., B.S. Octavo of 399 pages, illustrated. New York, The Macmillan Company, 1932. Cloth, \$4.50.

In this excellent volume the author has succeeded in condensing a surprising amount of information in comparatively small space. The book is divided into two parts, the first dealing with the underlying principles of physiotherapy. It includes a very complete description of the fundamentals of the various modalities used, and an equal description of apparatus both new and old. The second part is devoted to an inclusive exposition of the practical application of physiotherapy. Treatment of the various parts of the body and the different pathological conditions is covered in detail.

Careful classification renders the volume of use as a reference work also. The book is well written and illustrated and clearly printed, and can be highly recommended to the practitioner as well as to the student.

JEROME WEISS.

MICROSCOPIC SLIDE PRECIPITATION TESTS FOR THE DIAGNOSIS AND EXCLUSION OF SYPHILIS. By B. S. KLINE, A.B., M.D. Octavo of 99 pages, illustrated. Baltimore, The Williams and Wilkins Company, 1932. Cloth, \$2.50.

There is an increasing interest on the part of laboratory workers and clinicians in precipitation tests for syphilis. In addition to specificity, two things would seem to be indicated in such tests, namely, simplification of test (not so much for convenience as to reduce chances for error) and greater knowledge of the principles involved.

In this monograph of 100 pages, Dr. Kline gives a complete discussion of his slide precipitation tests for the diagnosis of syphilis. He devotes about 25 pages to a discussion of the principles of flocculation with a review of the work of other investigators. This is a very valuable section and includes microphotographs of different types of reaction. In the remaining pages the author describes in great detail the technic of his tests and their clinical evaluation. This is a working manual for the serologist who wishes to try these tests.

E. B. SMITH.

ANTE-NATAL CARE: Including the abnormalities associated with pregnancy and a section on post-natal care. By W. F. T. HAULTAIN, O.B.E., M.C., and E. CHALMERS FAHMY, M.B., F.R.C.S.E. Second edition. 12mo of 127 pages, illustrated. New York, William Wood & Company, 1931. Cloth, \$2.25.

In the preface to this second edition of Ante-Natal Care, the authors state that this edition contains a description of the Aschheim-Zondek test for pregnancy and in response to numerous requests a chapter on Post-Natal Care has been added.

In so doing they have considerably enhanced the value of this book which is now more complete and should be of benefit to the general practitioner and those who have charge of ante-natal and post-natal clinics.

This small volume of about 121 pages is probably the only book of its kind which is especially devoted to this subject and should be a welcome addition to any well-rounded library.

It describes the routine of the clinic at the Royal Maternity and Simpson Memorial Hospital, Edinburgh, including diagrammatic sketches of the layout in the ante-natal department.

There are excellent chapters on the diagnosis and hygiene of pregnancy.

Pelvimetry has been given competent treatment, deviating from the custom in this country, however, by giving the measurements in inches instead of centimeters.

The management of contracted pelvis cases is discussed in some detail, but in this reviewer's opinion too much stress is laid upon the induction of premature labor in such cases, for in this country induction of labor for contracted pelvis is practically obsolete.

Albuminuria, eclampsia and chronic nephritis and their management is adequately discussed.

The hemorrhages of pregnancy and the subject of pain during pregnancy, with its possible causes, are handled in a complete manner.

The chapter on Post-Natal Care is a valuable addition to this book.

M. V. ARMSTRONG.



OUR NEIGHBORS



ANNUAL MEETING IN WISCONSIN

The October number of the *Wisconsin Medical Journal* contains the following description of the ninety-first annual meeting of the State Medical Society of Wisconsin:

"With over nine hundred twenty-five physicians registered during the three-day session, the State Medical Society of Wisconsin set a new record for attendance at its annual meeting at the ninety-first anniversary session in Milwaukee, September 13th-16th. The entire fourth and fifth floors of the Schroeder were given over to the meeting rooms for the one hundred twenty presentations made during the three days.

"Despite the very large attendance and extensive program with its section meetings, every session ran within five minutes of schedule throughout the entire three days and over five hundred were present for the last address on Friday afternoon presented by Dr. Julius Bauer of Vienna.

"A feature of the meeting was the round table luncheon conferences held on Thursday noon which, although expanded to accommodate two hundred forty members in twelve separate discussion groups, was still found to be insufficient to accommodate all who desired to attend these popular meetings. Over three hundred members were in attendance at the hospital clinics which opened the scientific meeting from eight to ten on the first day.

"The House of Delegates was literally flooded by the major questions presented at this session. Meetings were held on both Tuesday and Wednesday evenings, and the final session was held on Thursday morning, September 15th. Important actions of the House are summarized following:

"1. Adopted unanimously the report of the special committee to study admissions to the State of Wisconsin General Hospital, and instructed the committee to proceed towards the accomplishment of the ends outlined in this report.

"2. Adopted the progress report of the special committee on the distribution of medical services in Wisconsin.

"3. Referred to the Council, after referendum vote in the county societies, the question of whether the Society should favor legislation or conferences with insurance carriers as a means of securing for the injured under the Workmen's Compensation Act, free choice of physicians among all willing and capable.

"4. Adopted all committee reports as published in the August issue of the *Wisconsin Medical Journal* with but two minor changes.

"5. Voted unanimously to retain \$15.00 dues that the Society might carry into effect the progressive program outlined for 1933."

The State Society gives a gold seal of the Society to members selected in accordance with the following plan:

"Among this host of contributors to our achievements there stands out, from time to time, one or two who have not only rendered long and exceptional services and discharged their duties faithfully, but have actually given of themselves far beyond the call of office because of the love of the work and the feeling of satisfaction in doing something more than that required for their Society, their brethren in medicine, and the people of this State."

The Society gave the seal to four members, and also gave it to a woman member, Dr. Mina Brooks Glasier, of Bloomington, with the following citation:

"A daughter of Wisconsin, a teacher in its public schools, a physician for fifty years, the wife of a physician, the sister of a physician, the niece of a physician, a past worthy grand matron of the Wisconsin Order of the Eastern Star, a past president of the Grant County Medical Society and now rounding out thirty consecutive years as its secretary; a member of the State Board of Health, now in the eighth year of service; and a mother,—for your distinguished service in your home, in your profession, to your profession and to the people of this commonwealth, we your fellow members, give you this seal of our Society as a token of your achievements and our esteem.

ANNUAL MEETING IN WASHINGTON

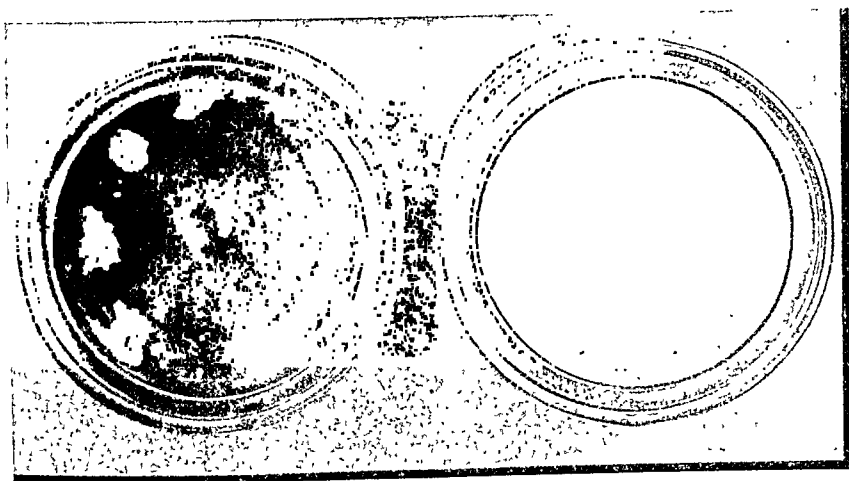
The October issue of *Northwest Medicine* has the following editorial comment on the annual meeting:

"The annual meeting of Washington State Medical Association, held at Tacoma, September 12-14, was noteworthy and in three particulars epochal. It was entirely economic, and marked

the beginning of a unified acceptance of the problem of medical economics, and a study program for the future. It established for this association the new and highly valuable educational department of scientific exhibit and demonstration; and it will become historic because it marked the

(Continued on page 1332—adv. xii)

Why We Supply DEXTRI-MALTOSE Only in Powder Form



Syrup Contaminated by Exposure to Air

FIG. 1. The can of syrup* shown above was opened for one-half hour in a bacteriological laboratory to permit withdrawal of a portion of its contents. This was done with sterile pipettes. The can was then covered tightly and stored. One month later it was again opened for the purpose of obtaining more syrup but examination revealed the heavy mold growth pictured above. Growth also developed in two other cans purposely exposed for a brief time. Mold grew in one as early as 7 days after the can was opened.

No Growth in DEXTRI-MALTOSE After Exposure to Air

FIG. 2. This can of Dextri-Maltose was opened for one-half hour to approximate conditions under which accidental contamination appeared in syrup at left. To make the test more severe, the Dextri-Maltose was also heavily inoculated with a micro-organism which had previously produced thick growth in syrup. The can was then closed and not opened for 40 days, at which time no growth was visible. Later, the can was opened 4 or 5 times for a total exposure of about 1 hour, without the slightest evidence of growth.

Thrush Organism Grows in Syrup — Fails to Grow in DEXTRI-MALTOSE

As a more stringent test, syrup* was inoculated with the pathogenic thrush organism. A thick mold growth developed and the inoculum grew after 17 days. In sharp contrast, Dextri-Maltose inoculated with the same strain was entirely free from growth. These tests were conducted in a modern bacteriological laboratory. Considering that the thrush organism and other molds grew so rapidly in syrup under these

conditions, how much greater is the chance for contamination in the average household where the syrup can would be opened at least once daily! Therefore, because carbohydrate preparations in syrup form not only attract insects and dust but also offer a fertile field for the growth of fungi, we shall continue to supply Dextri-Maltose only in powder form.

*A maltose-and-dextrin syrup experimentally made and studied but not marketed.

MEAD JOHNSON & COMPANY, Evansville, Indiana, U.S.A.

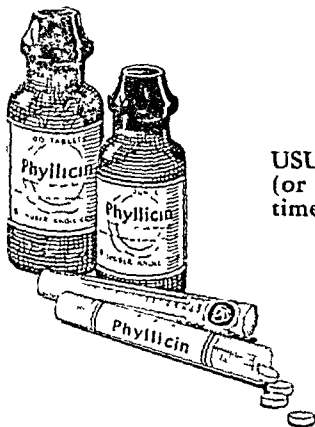
Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons

PHYLICIN

Theophylline-calcium salicylate

In Cardiac Disease

A new theophylline salt for oral medication. A well tolerated diuretic and myocardial stimulant.



USUAL DOSE: 4 grains
(or 1 tablet) two to four
times a day.

Literature and
samples upon request.

BILHUBER-KNOLL CORP., Jersey City, N. J.



Maltcao Builds Health and Energy

Maltcao is ideal for those of your patients who require a concentrated food drink rich in organic salts. This scientific food preparation with a delicious chocolate taste builds health and energy because it contains calcium, iron and phosphates in organic combination.

It is the only chocolate food drink, so far as is known, that contains these added organic salts. Young and old enjoy drinking Maltcao with meals or at bed-time.

8 oz. sample can to physicians on request
Merckens Chocolate Co., Inc., Buffalo, N. Y.

Maltcao
BUILDS FOR THE YEARS AHEAD

(Continued from page 1330)

beginning of the Woman's Auxiliary to the Washington State Medical Association.

"One year ago there was general discontent, demand was made on all sides for the correction of many evils, and few were in agreement as to just what should be done to bring order out of chaos. At the close of this annual meeting the mental attitude of the profession is changed. Those who saw no hope are willing to withhold active opposition to reorganization efforts; those who were most conscious of the economic and social problems that beset the medical profession are either hopeful or enthusiastic over the possibilities of relief; and, most important of all, unity prevails.

"The studies of the past year have relegated the previously paramount question of contract practice to a minor position, because they have shown that this is only a part of the big problem that confronts organized medicine, and physicians everywhere are less disposed to take a radical position on this question. Antagonisms have been softened, individuals are less disposed to insist upon their right to practice as they please, and the principle, that what is best for the entire profession is best for the individual physician, has gained some measure of acceptance. There was, perhaps, no single note sounded at this meeting which did more to bring the members to a full realization of the need for unity than the somewhat guarded statements of Drs. Nathan Sinai and R. G. Leland, to the effect that unless the medical profession united in earnest cooperative study and developed an improved plan of medical care, they would be submerged by social insurance within a period of two years.

"Two forward steps were made and definite action taken. A new Medical Practice Act to replace the existing law was proposed and adopted. This was proposed, first, because it will make it possible for the medical profession to regain control of its own members; second, because it eliminates politics; third, it provides funds and machinery for the effective enforcement of its provisions; and, fourth, it places organized medicine in a position to take leadership in the supervision of scientific medicine and control of public health, to the end that public welfare and safety may be advanced. Every item in this new bill is in the interest of public welfare, and cannot in any sense be looked upon as class legislation. It is fair to all physicians and upholds the high standard of ethical medicine.

"The second forward step concerns the proposal for the amendment of that section of the Medical Aid Law which deals with contract practice, and is designed to correct certain abuses of the system which are deplored by all parties concerned. The most essential element in this bill is the proposal to establish a non-political advisory board for the Department of Labor and In-

NEWSPAPER PUBLICITY IN MINNESOTA

The minutes of the Minnesota House of Delegates held on May 23 and printed in the September issue of *Minnesota Medicine* contains five pages of the report of the Editorial Association Committee and its discussion. The Committee establishes contacts with the newspapers. Mr. Roy Dunlap, representing the newspapers, spoke on newspaper advertising by medical societies, and said:

"We cannot hope to present medical education without your assistance. We in St. Paul have been very fortunate. This question was thrashed out some years ago, and the Ramsey County Medical Society appointed a committee to work with the newspapers, with the result that when anything new bobs up in the way of a supposed cure, we immediately refer it to the doctor's committee, and are able to print it with a note of caution from the doctors that this thing is rather new, and we had better wait until it is further developed and further experiments have been made before we accept it. We all know that the man who is ill and in desperate straits, is a drowning man grasping at a straw when a new cure appears.

"I am going to leave these advertisements with you. I want you to study them. I want you to know they are done in the most dignified manner. There is nothing there that is going to in any way cross the doctor's code of ethics. There is nothing in there that they would be ashamed to have appear in your local newspapers, because the whole idea is educating along two lines: Guard your health, call the doctor when you are ill, and pay the doctor, and I am sure if this campaign is run in that way, in due time you will see it will have a wonderful result."

Dr. O. E. Locken, of Crookston, said:

"We are now running a series of advertisements in the paper of Crookston that is paid by the two clinic groups in that town. We are advancing some information in regard to present medicine. The first advertisement, for instance, stated that the doctor is not only giving you his time and his judgment, but he is giving you something that costs money when he gives you an examination, because he is using scientific instruments that cost a good deal of money, and for that reason he has to expect that you pay for that service. The advertisement which came out last week said, 'You should add a sixth item to your budget.' To the necessity of budgeting groceries, taxes, and so on down the list of fundamentals, that they should add something to their budget for medical attention.

"We had very interesting reactions. I had a woman say, 'You didn't send me a bill. I called you out at three o'clock in the morning. I know you people are entitled to your money.' We

(Continued on page 1334—adv. xiv)



*Protecting both mother
and child against*

CALCIUM DEFICIENCY

COCOMALT is a delicious, high-calorie food drink, valuable as a source of calcium, phosphorus and Vitamin D.

and teeth—helps safeguard them against rickets.

During pregnancy and lactation, Cocomalt helps to protect the mother from drawing upon her own calcium reserve. Many physicians now recommend this delicious drink routinely for pregnant and nursing women. It is accepted by the Committee on Foods of the American Medical Association.



*Licensed by Wisconsin Alumni
Research Foundation*

Each ounce of Cocomalt (the amount used in preparing one glass or cup) contains not less than 30 Steenbock (300 ADMA) units of Vitamin D.

Comes in powder form, easy to mix with milk—hot or cold. At grocers and drug stores in ½-lb., and 1-lb. cans. Also in 5-lb. can for hospital use, at a special price.

FREE to Physicians

Send for a trial-size can of Cocomalt, free. Send name and address to R. B. Davis Co., Dept. 71X, Hoboken, N. J.

Cocomalt

Cocomalt is a scientific food concentrate of selected cocoa, sucrose, skimmed milk, malt extract, vanilla flavoring and added Vitamin D.

ADDS 70% MORE NOURISHMENT (FOOD-ENERGY) TO MILK
(Prepare according to label directions)

Dispensing

Interest in our products and prices is greater than ever before.

Our co-operative method of doing business will save money on purchases.

A new price change list is now in print.

Write for a copy.

MUTUAL PHARMACAL CO., Inc.

107 North Franklin Street
SYRACUSE, NEW YORK

P R E S C R I B E K N O X SPARKLING GELATINE IN DIETS FOR DIABETES LIQUID and SOFT FEEDING REDUCING and ANEMIA

KNOX is pure, granulated plain gelatine with 85-86% protein content. Free from flavoring, coloring or sweetening—therefore combines safely and perfectly with fruits, vegetables and other foods for all diets.



KNOX is the real Gelatine

Data and Recipe Books on Request
KNOX GELATINE LABORATORIES, 432 Knox Ave., Johnston, N.Y.

(Continued from page 1333—adv. xiii)

have had men write in and say, 'I have noticed your advertising, which is O.K. with me,' and send in their check. People in our community are getting to feel, when you have given your services, 'How much will the charge be?' They go into the business angle more than they have in the past.

"It is done in a purely dignified manner. I find when I am through talking to people I don't feel I have to apologize when I ask them to go into the business office and hand them the bill. I used to. I felt as a dignified physician I should only talk to them on scientific matters. I found that when my own psychology changed it was easier to talk to the people about that. I feel sincerely that there is a better relation between my patients and myself now than there was a year ago when I hardly dared mention the subject of money to them. We have a finer relationship between the patient and the doctor.

"Out in the country we are getting to have the reaction that the specialists in the city have. When the people come in they expect to pay, and have a very high respect for our services.

"Every week a lot of information has been sent out by the Minnesota State Medical Association to all the newspapers in the state and our editor has thrown every one of those in the waste basket every week for the last three or four years. We have talked to him about it. He said, 'Why should I be interested in your organization when you are not interested in mine?' We feel we can go to him (he is a good friend of ours), because we have spent a little money with him and expect him to put in this legitimate information which the state medical society is sending out, and he will. I know he will because the bankers of that territory said they would buy no more printing material from him if he continued to publish on the front page every time a bank closed in that territory. For two years there has never been an item in the Crookston paper that any bank had closed. These men understand economics, and we propose to talk to them in the language they can understand."

ANNUAL MEETING IN INDIANA

The October number of the *Journal of the Indiana State Medical Association* contains the following editorial on the annual meeting held September 27-29, 1932:

"With a total registration of 904, a mark well up to the average even in normal times, except when the convention is held in Indianapolis, the eighty-third annual session of the Indiana State Medical Association at Michigan City, September 27th, 28th, and 29th, might be said on the whole to have been a very successful meeting. The low

(Continued on page 1336—adv. xvi)

4 New Concentrated Vitamin Products



Vitamin A alone

Name Smaco Carotol Product No 505

Description. Carotol is a 0.3% solution of carotene in bland oil, providing a safe, palatable and convenient concentration of vitamin A for therapeutic use

Taste Entire absence of all fishy taste makes it acceptable to your patients

Color Deep red, due to carotene

Potency Ten drops contain one thousand International Units of vitamin A

Dosage Three to five drops daily for infants and young children. Five to ten drops daily for adults

Package 15 c. dropper top, protectively-colored bottles, in special cartons to shield it from the light

Cost Because of its high potency and the small doses required, it is an inexpensive source of vitamin A, in spite of the fact that it is the only product containing vitamin A alone

Indications For conditions caused by vitamin A deficiency and cured or prevented by adequate vitamin A or carotene dosage

Vitamin D alone

Name. Smaco Concentrated Vitamin D Product No 515

Description. This product is Natural Vitamin D, being a highly potent extract of the antirachitic principle of cod liver oil

Taste Palatable and free from objectionable taste

Color Nearly colorless

Potency Ten drops are equal in vitamin D potency to three teaspoons of standard potent cod liver oil

Dosage Average prophylactic dose, ten drops daily. Average curative dose, fifteen to thirty drops daily, depending on severity of case

Package 5 c. and 50 c. protectively colored bottles

Cost Approximately the same as that current for equivalent vitamin D dosages of plain cod liver oil

Indications For the prevention or cure of rickets and spasmophilia, and where ever vitamin D therapy is required, such as tetany and osteomalacia

Vitamins A and D together

Name Smaco Vitamins A and D Product No 525

Description Smaco Carotol and Smaco Concentrated Vitamin D are combined in this product, providing both vitamins A and D in concentrated form for therapeutic use

Taste Palatable and free from objectionable taste

Color Red, due to carotene

Potency Ten drops are equivalent to one thousand International Units of vitamin A plus the vitamin D potency of three teaspoons of standard potent cod liver oil

Dosage Ten drops or more daily depending upon individual requirements

Package 5 c. and 50 c. protectively colored bottles

Cost Approximately the same as current prices for equal dosages of other vitamin concentrates

Indications Wherever vitamins A and D are required together in palatable form and small dosage

Smaco Cod Liver Oil fortified

Name *Smaco Cod Liver Oil (with Carotene and Concentrated Vitamin D) Product No 510

Description A high grade cod liver oil fortified with vitamin A of vegetable origin (carotene) and natural vitamin D described in the second column

Taste Although carotene is not a flavoring agent, nevertheless the addition of carotene noticeably improves the flavor

Color Deep red, due to carotene it contains

Potency. One teaspoon is equivalent in vitamin D potency to three teaspoons of standard potent cod liver oil plus 1,000 International Units of vitamin A per teaspoon in addition to the original vitamin A potency of the oil

Dosage. One teaspoon daily for average individual needing vitamins A and D

Package. Four ounce protectively colored bottles packaged in special cartons to shield from light

Cost Approximately one half as much as the equivalent amounts of vitamins A and D when purchased as plain cod liver oil

Indications Wherever a more palatable, concentrated cod liver oil is indicated (Only one third as much is required as plain cod liver oil)

New Vitamin Therapy Possible

Up to this time it has not been possible to prescribe vitamin A alone as in cases where vitamin D is not required or is already supplied by sunshine, ultra violet light, viosterol, etc. Smaco Carotol makes possible the administration of Primary Vitamin A in drop doses thus permitting the physician to regulate the dosage to meet individual requirements

Smaco Vitamin D is natural vitamin D. It is not an irradiated oil and not a cod liver oil concentrate but rather a highly potent extract of the antirachitic principle of cod liver oil. It is produced for therapeutic use by methods (Zucker Process) developed in the department of Pathology of the College of Physicians and Surgeons of Columbia University

It now becomes possible with these new Smaco concentrated vitamin products to prescribe vitamin A alone, vitamin D alone or vitamins A and D together in drop dosages and palatable form, thus permitting the physician to prescribe any desired potency of these vitamins and any desired combination

Smaco Cod Liver Oil fortified with primary vitamin A and natural vitamin D is a product which physicians who use this Smaco product—namely—ch as much as the same vitamin content of plain cod liver oil and only one third the dosage is required



Smaco Products, like S. M. A. are ethically advertised and carefully distributed through prescription pharmacies. No dosage is given in the label. Each package carries its statement. Use as prescribed by your physician.

Information and prices on crystalline Carotene (up to FIVE THOUSAND T. M. E. S. the vitamin A potency of cod liver oil) for research purposes furnished upon request

S. M. A. CORPORATION
4614 Prospect Avenue Cleveland, Ohio

Please send samples and literature

18 112

- ☐ Smaco Carotol (Primary Vitamin A) ☐ Smaco Vitamins A and D
☐ Smaco Concentrated Vitamin D ☐ Smaco Cod Liver Oil—fortified with A & D

ATTACH TO PRESCRIPTION BLANK OR LETTERHEAD

(Continued from page 1334—adv. xiv)

point of the convention came on the opening day when more than one hundred golfers were rained out, and the high point of the session undoubtedly was the banquet on the final night with Dr. Dean Lewis, of Baltimore, president-elect of the American Medical Association, former Congressman Fred Landis, of Logansport, entertainer supreme, and Mrs. Walter Jackson Freeman, of Philadelphia, president of the Woman's Auxiliary to the American Medical Association, as guests of honor and principal speakers.

"Although not housed to the best advantage, due to the insurmountable handicaps of the convention hall which allowed much noise that even the use of mechanical loud speakers could not override, the scientific meetings without exception were well attended and the essayists well received. The instructional courses, an innovation this year, on the first morning of the meeting, received the hearty approval of the audience. These courses had a tremendous appeal as they were short on theory and long on practical information. They gave each physician something he could apply to his own practice. So splendid was the material presented by the three sections at this instructional hour that the general expression was, 'It is difficult, with the programs in the three sections going on simultaneously, for a man to choose the speaker he desires to hear.'

"More of the program was devoted this year to the discussion of medical economics than ever before, President F. S. Crockett devoting practically his entire address from the chair to that subject, while the whole afternoon on the last day of the session was given over to this problem.

"The principal duty before the Council was the selection of an editor and an editorial board to carry on The Journal work with that high standard established through the last twenty-five years of editorship by the late Dr. Albert E. Bulson. Dr. E. M. Shanklin, of Hammond, was selected editor by the Council with an editorial board composed of five men."

SCHOLARSHIP OF MEDICAL STUDENTS IN COLORADO

The August number of Colorado Medicine strikes a pessimistic note in an editorial on the scholarship of medical students. It deplors the lack of real instruction in anatomy and physiology in high schools, when commonplace health and habits constitute the bulk of the teaching. It suggests the admission of first-year students to clinics, as is done in Yale, in order to show them what the basic work of the first year is all about. The editorial reads:

(Continued on page 1337—adv. xvii)

The VEIL MATERNITY HOSPITAL

WEST CHESTER, PENNA.

Strictly Private. Absolutely Ethical. Patients accepted at any time during gestation. Open to Regular Practitioners. Early entrance advisable



For Care and Protection of the BETTER CLASS UNFORTUNATE YOUNG WOMEN

Adoption of babies when arranged for. Rates reasonable. Located on the Interurban and Penna. R. R. and the Lincoln Highway. Twenty miles southwest of Philadelphia.

Write for booklet
THE VEIL
WEST CHESTER, PENNA.



"INTERPINES"

GOSHEN, N. Y.

PHONE 117

ETHICAL—RELIABLE—SCIENTIFIC

Disorders of the Nervous System

BEAUTIFUL—QUIET—HOMELIKE—WRITE FOR BOOKLET

FREDERICK W. SEWARD, M.D., Dir.

CLARENCE A. POTTER, M.D., Res. Phy.

FREDERICK T. SEWARD, M.D., Res. Phy.



(Continued from page 1336—adv. xxi)

"The appalling number of students failing in our medical schools causes us to contemplate the etiological factors. Medical educators appear to be dissatisfied with the mental equipment of their entering classes; this is, of course, a reflection upon preliminary education. The dissatisfaction has been reflected in the altering and increasing pre-medical education required during the past generation.

"Dr. Iran E. Wallin, professor of anatomy in the University of Colorado School of Medicine, has prepared an enlightening paper upon this subject. Dr. Wallin has for years sought and analyzed the causes of poor medical scholarship. About 30 per cent of our freshman students barely pass; approximately 40 per cent flunk their first examination in gross anatomy. Analysis indicates that the majority of these failures follow memorizing rather than learning by understanding. There is a striking lack of curiosity which would naturally make learning a pleasurable task. A deplorable absence of child-like curiosity has been commented upon by Dr. Wallin; what has become of that desire to know? The students' entire educational experience has been based upon the passage of examinations and not upon genuine interest in the subjects.

"Even with a biological preliminary education, there is an unbelievable ignorance of the human body. Anatomical and physiological subjects have been stricken from the curricula of most high schools. There is, then, no foundation upon which to build the medical vocabulary and immense amount of advanced detail. The student is bewildered and often enters the examination room on the verge of hysteria and unable to utilize the knowledge he has acquired, especially in the answering of practical questions.

"We note in our leading teaching institutions an attempt to give the students the earliest possible practical observations and experience. Admission to the clinics and contact with the patients is greatly appreciated by the underclassmen. Nothing will so increase their interest and insight; it will be necessarily result in improved scholarship.

"The local medical school is planning to request each of its candidates for the freshman class to study Harvey's 'Simple Lessons in Human Anatomy.' Here is a valuable suggestion, applicable also, by way of review, to those of us engaged in the practice of medicine."

NEWS NOTES IN NEBRASKA

Suggestions are sometimes made that this Journal print personal notes regarding the members of the State Society, on the ground that they will be of general interest. Some State journals print personals regarding the professional activities of

(Continued on page 1338—adv. xxviii)

FOR RESTFUL RECUPERATION



Send your Patients to the **BRUNSWICK HOME**

Located only an hour's ride from New York City in Amityville, L. I., Brunswick Home offers ideal accommodations at modest rates for convalescents, post-operative and habit cases, for the aged and infirm and those with other chronic and nervous disorders. Physicians' treatments rigidly followed. Special, separate accommodations for nervous and backward children. Write for full information about this unusual place for restful recuperation.



The **BRUNSWICK HOME** One Hour's Ride from New York City

Broadway and Loudon Avenue, Amityville, Long Island
Telephone Amityville 1700-01-02

(Continued from page 1337—adv. xvii)

physicians. The *Nebraska State Medical Journal* of October has a page describing doctors' activities which are in no way connected with medicine, such as the following items:

"Dr. J. W. Carr has located at Ulysses.

"Dr. T. J. Kerr, North Platte, recently suffered a broken leg.

"Dr. Charles F. Moon, Omaha, spent his vacation in the Black Hills.

"The village of Surprise is without a physician, but has two drug stores.

"Dr. C. C. Shepard and family, Ord, have gone to California for an indefinite stay.

"Dr. A. J. Mullman, Talmadge, has sold his interests at that place to Dr. T. L. Grizka.

"Dr. F. J. Condon and family, St. Paul, visited relatives at Fort Dodge, Iowa, the latter part of August.

"Dr. and Mrs. B. B. Davis, Omaha, covered 6,000 miles in a motor trip east during the summer.

"Dr. D. D. Hughes, Fairbury, suffered the loss by theft from his car of an instrument and medical case.

"Dr. A. D. Mahaffey has sold his good will at Valparaiso to Dr. J. W. Hervert of Lincoln, and will move to Texas.

"Dr. Esther McEachron, Omaha, contributed

an article, 'Physical Examination for the Healthy Child,' to *Hygeia* for September.

"Dr. and Mrs. Charles Lucas, Shelton, visited the boyhood home of the doctor at Bloomington, Ill., recently, and also historic places in Springfield.

"O. Gilbert Peskin, Omaha, was sentenced to thirty days in jail for practicing medicine without a license. He was conducting a so-called 'health home.'"

CHIROPRACTIC IN MASSACHUSETTS

The *New England Journal of Medicine* of September first contains the following circular letter which had been sent out by the Legislative Committee of the Massachusetts Medical Society:

"The Massachusetts Medical Society, founded in 1781 and now numbering about 4,800 members, is confronted with an important problem and asks for your cooperation.

"The chiropractors, a medical cult who call themselves 'Drugless Healers,' have obtained the requisite number of signatures of legalized voters and their Initiative Petition will appear upon the November ballot. Chiropractic is defined in said petition as 'the science or practice of locating and adjusting by hand the malposi-

(Continued on page 1339—adv. xix)

BACKWARD AND PROBLEM CHILDREN

require intensive scientific training in a suitable environment.

The Bancroft School

One of the oldest private schools of its kind in the United States. An incorporated educational foundation, operated not for profit, organized to give the fullest possible co-operation to physicians.

CATALOG ON REQUEST

Address Box 312

Haddonfield, New Jersey

ELIXIR GOLD TRIBROMIDE

(Pre-eminent a neurosedative and antispasmodic)

Used essentially for the treatment of WHOOPING COUGH. Other Therapeutic Indications: Bronchial asthma, chorea and petit mal. In four-ounce original bottles. A teaspoonful three or four times a day after meals.

Gold Pharmacal Company

SCHIEFFELIN & CO., 16-20 Cooper Sq., New York, Distributors
At your druggist

ENGRAVED STATIONERY

OF ALL KINDS, MADE TO ORDER FOR PHYSICIANS

100 LETTERHEADS, ENVELOPES AND BILLHEADS \$5

All Engraved with your NAME and ADDRESS for

100 Engraved Wedding Announcements Complete for \$15.00

Stationery Samples and Estimates Mailed on Request

Engraved Stationery Co., 113 E. 24th St., New York

75%

of **Diabetic Patients**

Approximately 75% of Diabetic Patients may be successfully treated by properly regulated diet.

LISTERS FLOUR

(Starch-Free)

is necessary. Your diabetic patients will do well and enjoy these easily made starch-free muffins, biscuits, bread.

LISTER BROS., INC., 41 East 42nd Street, New York, N. Y.

(Continued from page 1338—adv. xviii)

tions of the articulations of the human spine.' For the past ten years all of their bills have been defeated by legislative action and in 1932 they were given leave to withdraw by a vote of 151 to 50 in the House and 21 to 13 in the Senate.

"The present law provides a single standard for all who practice the healing art in this Commonwealth, and is satisfactory to all graduates of recognized medical schools including those from homeopathic and osteopathic schools.

"The chiropractors ask for special privileges although our form of government abhors class legislation. Chief Justice Rugg of the Supreme Judicial Court has rendered an opinion in the case of Commonwealth vs. Zimmerman that a chiropractor practiced medicine without being lawfully authorized.

"After an individual has successfully passed the examination of the Board of Registration in Medicine, he should be permitted to practice the method for which he is best fitted, be it allopathic, homeopathic, osteopathic or chiropractic. The sick, injured and infirm must be protected from those who are not able to comply with the present law.

"An editorial in the Boston Herald of June 30, 1932, said in part, 'We should not lower the bars for the benefit of those who cannot meet our reasonable requirements. New Jersey did some years ago, and in one year 536 chiropractors were licensed. The next year New Jersey put the bars up again.'

"We feel that this problem is a mutual one and that your organization should become active in opposing this petition. We would like to present more information at a personal conference if you are interested."

MEDICAL STUDY IN RHODE ISLAND

The September issue of the *Rhode Island Medical Journal* points out the opportunities for medical study in the State, even though it has no medical school:

"Doctors in Rhode Island often deplore the fact that we have no Medical College in the state to stimulate medical study. The awe-inspiring equipment useful in the laboratory does make an impressive sight. A Medical College, however, means medical students and they mean considerable time both from practice and research.

We are just as able to record careful histories and good physical examinations as doctors in a medical center. We can review any series of these carefully recorded cases we wish or have the initiative to study. We can be assured that such a review will always teach us something new, something that we have never read in a text book, and we will find something that will greatly help others, even those in medical centers."

SARATOGA GEYSER

Distinctly Alkaline
Naturally Carbonated

STATE OWNED AND STATE BOTTLED

SARATOGA Geyser water, because of its distinctly alkaline nature, makes an excellent natural antiacid. It has been successfully used as an aid in the treatment of patients suffering from acid dyspepsia, hyperacidity, the acidosis accompanying gout, rheumatism, neuritis and diabetes. Because of the sodium chlorid in Saratoga Geyser, it is not recommended for patients with nephritis.

Saratoga Geyser is bottled by the State just as it flows from the ground, retaining its natural mineral content, carbonization and catalytic activity. Nothing is added or subtracted.



Upon written request, we will gladly send a complete analysis and a complimentary carton of Saratoga mineral waters, including 2 bottles of Geyser and 1 bottle each of Hathorn and Coesa.



SARATOGA
SPRINGS
COMMISSION

Saratoga Springs
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SARATOGA SPRINGS COMMISSION

Dr. Walter S. McClellan, medical director of the Saratoga Springs Commission of the State of New York, sailed September 22 for six months study and research in Europe. In London he will be in conference with Dr. Fortesque Fox and Dr. W. S. C. Copeman, of the International Society of Medical Hydrology.

The summer season which has just closed at Saratoga Springs was marked by an unexpectedly small decline in the patronage of the State-owned spa. Reports to Chairman Pierpont B. Noyes show that from May 16 to August 31 the whole number of treatments given was 71,695, approximately 80 per cent of the treatments given during the corresponding period last year. Of these treatments 15,425 were free.

"This proportion is higher than it has ever been before," Chairman Noyes says, "and it is higher than we shall be justified in reaching again except under such conditions as existed this year. We believed, however, that it was a proper contribution for the State to make to the well being of its people."

Nearly 90 per cent of the treatments given were the mineral water baths, including the cardiac therapy which has been so highly developed at Saratoga. The whole number of these was 61,862. See page xix.—Adv.

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The importance of sandalwood oil in the systemic treatment of gonorrhea and its complications and in other acute infections of the genito-urinary tract is stressed by many authorities on urology. There is, however, one rather serious objection to the use of sandalwood oil therapy: it is unreliable and uncertain in its action. This arises from the fact that it is not a uniform product. The percentage of its active principle, sesquiterpenic alcohol ($C_{15}H_{22}O$) may vary considerably in different lots of the oil. The efficiency of any sandalwood oil is directly proportional to its sesquiterpenic alcohol content.

The uncertainty and unreliability of sandalwood oil therapy are eliminated when Arheol Astier is used. For Arheol Astier is all sesquiterpenic alcohol, the active principle of sandalwood oil, containing never less than 98% of santalol. It may be prescribed to meet all the therapeutic indications for sandalwood oil. Being free of the therapeutically inert but irritating substances found in even the best grade of crude sandalwood oil, Arheol Astier may be administered in full therapeutic doses without causing urinary or gastro-intestinal disturbance.

The action of Arheol Astier in gonorrhea and other conditions is described on the back cover of this issue. See page xxiv.—Adv.

ORAL THERAPY IN CONGENITAL SYPHILIS

The use of Stovarsol in congenital syphilis by pediatricians abroad induced Maxwell and Glaser to investigate the value of the therapy. The results achieved in ten cases are reported in full in the *Am. J. Dis. Child.* 43:1461-1489, June 1932.

In four cases the Wassermann reactions were negative when treatment was begun but as the parents were 4+ treatment was not delayed. These cases had remained negative over a period of thirteen months when reported. The other six cases had positive Wassermann reactions. Three were reversed after the first course of treatment, two at the end of the first rest period, and the other at the end of the second course of Stovarsol therapy. The results in these infants, all under one year of age when treatment was begun, are encouraging. Children over one year

of age did not respond so readily. Other advantageous features of Stovarsol therapy in congenital syphilis in infants and children as reported are: the remedy is administered by mouth, and the patients generally show improvement in appetite, general vigor and energy.

The authors believe that Stovarsol has a definite place in the treatment for congenital syphilis. Administration must always be under the direction of the physician as toxic symptoms may appear. In the majority of cases these symptoms are evidently mild in character but occasionally they may be severe.

Stovarsol is a pentavalent arsenic preparation allied to arsphenamine in its chemical constitution. It is manufactured in this Country by Messrs. Merck & Co. Inc., of Rahway, N. J.—See page iv.—Adv.

COCOMALT USED IN CLINICAL TESTS

Important clinical tests with Cocomalt are being conducted all over the country. Whole groups of undernourished children show substantial gains in weight after taking this food-drink regularly. During the recent drought in Arkansas, for example, health officers fed Cocomalt to youngsters for 40 days. At the end of that time, gains of from 4 to 16 pounds were noted (depending largely on age). The average gain for the 40-day period was 8½ pounds—more than a pound a week. Children who missed the Cocomalt clinic or attended irregularly showed no substantial gain. Cocomalt is a delicious chocolate flavor food-drink that is almost twice as nourishing as plain milk, adding 110 extra calories to every glass. It contains 30 steenbock (300 ADMA) units of vitamin D per ounce—the quantity recommended for one drink. Samples sent to physicians on request. Write to R. B. Davis Co., Hoboken, N. J. See page xiii.—Adv.

ERYSIPELAS

The recent reports by Symmers and Lewis of Bellevue Hospital covering the results following the employment of Erysipelas Antitoxin are most gratifying. These results are based upon the treatment of three thousand three hundred cases.

The season when erysipelas causes disability is close at hand, and physicians should be acquainted with this development and the results following the use of the product of the LEDERLE LABORATORIES.

Full information will gladly be supplied by communicating with them at 511 Fifth Avenue, New York City. See page vii.—Adv.

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END RESULTS IN HYPERTHYROIDISM*

By FRANK H. LAHEY, M.D., BOSTON, MASS.

THE end results in the treatment of hyperthyroidism are intimately related to the matter of diagnosis. Some of the good results obtained by unconventional methods of treating this disease are at times undoubtedly due to treating purely neurotic states under the incorrect assumption that they are cases of hyperthyroidism, and some of the worst results with the most conventional form of treatment, surgery, are undoubtedly due to operating upon patients whose symptoms are purely neurogenic in origin, with the incorrect assumption that their symptoms are attributable to pathological thyroid states.

The diagnosis of hyperthyroidism in the frank case needs little discussion. The factors influencing the decision for or against hyperthyroidism in the borderline case are of the utmost importance.

There are occasional exceptions to the dictum which we have repeatedly stated. "No preoperative elevation of basal metabolism, no hyperthyroidism, no operation. Failure to restore the basal metabolism to normal rate postoperatively, no cure, further operation." But they are rare, and we believe that violations of the above dictum in any considerable numbers will show a high percentage of error in diagnosis and end results.

The interpretation of basal metabolism readings as related to the entire clinical picture often makes it possible to attach proper values to that individual factor. For example, given a patient on whom a basal metabolism reading of plus fifty-five is reported, but the patient is a borderline case and lacks the frank signs of hyperthyroidism, one depreciates considerably the worth and dependability of a basal metabolism reading of plus fifty-five. If this were a true report of the degree of metabolic activity, there could hardly fail to be present enough of the striking clinical features of hyperthyroidism to make the clinical diagnosis certain. One should, therefore, be skeptical of high basal metabolism in the absence of convincing clinical evidence of hyperthyroidism.

Variations in basal metabolism readings defi-

nately depreciate the value of such readings. In a series of basal metabolism tests done over three to four days, a report of plus thirty-five or plus forty on the first day, one of plus six or plus ten on the second day, and plus thirty on the third day should make us doubtful as to the correctness of the basal metabolism reports. Basal metabolism readings which are on one day normal and within a few days markedly elevated are to be viewed with suspicion as to their probable correctness.

With certain reservations, in the patients with primary hyperthyroidism in contradistinction to toxic adenomata, the consistency of the gland is of diagnostic value in the borderline case. Rarely in the presence of a true hyperthyroidism will a considerable degree of hyperplasia in the gland be absent, and so rarely in true hyperthyroidism will definite firmness in the gland on palpation be absent. When, therefore, in a borderline case the gland is of normal consistency and size (this is less dependable), one should be suspicious that the symptoms are neurogenic and not of thyroid origin. The exceptions to the above are that very occasionally thyroid overactivity of the primary type can exist in the presence of a relatively soft thyroid gland, and, on the other hand, the not infrequent occurrence of mild thyroiditis produces such a firm gland that it closely simulates in consistency that of the gland associated with primary hyperthyroidism.

The value of the eye signs of hyperthyroidism in borderline cases is not great, since when obvious eye signs are present, other convincing clinical features of the disease are rarely lacking. One early and somewhat intangible eye sign which is of value in the borderline case is swelling or puffiness of the lids, particularly of the upper lids. This swelling is not cedematous in character. It does not pit upon pressure, and later in the disease, if the disease becomes more intense, this puffiness becomes more marked and extends to the lower lids.

Of all the clinical signs of thyroid toxicity, its effect upon the pulse rate is the most characteristic. The rapid rate which is so constantly associated with true toxicity and the at least relative

* Read before the American Association for the Study of Goitre, June 16, 1932, at Hamilton, Ontario.

association of elevation of rate with degree of toxicity make this clinical feature of hyperthyroidism not only a diagnostic one but in a measure also an indication of the severity of the disease. Even with the apathetic type of hyperthyroidism in mind, of which I will speak later, in borderline cases of doubtful hyperthyroidism the absence of tachycardia of rates above one hundred with the patient up and about should make one very suspicious that hyperthyroidism is not present.

We have from time to time discussed and written about a type of hyperthyroidism which we have termed apathetic hyperthyroidism. We have now recognized and dealt with so many patients with this type of hyperthyroidism that we realize that it lacks many of the striking features of the activated type of the disease and that it can be, and is frequently, overlooked and remains undiagnosed for many months. Illustrations I and II.

Apathetic hyperthyroidism is so constantly associated with advanced years that one should always have in mind that while hyperthyroidism of the typical activated type can and does occur in people of advanced years, the apathetic type of hyperthyroidism is to be suspected in any elderly patient with persistent weight loss and persistent even though moderate pulse elevation, no matter how lacking the patient may be in the striking signs of hyperthyroidism.

A short review and comparison of some of the clinical features of this condition with those of activated hyperthyroidism will be of value as we discuss this thyroid state.

The apathetic type of hyperthyroidism occurs almost exclusively in the elderly. Activated hyperthyroidism tends to occur in the young and middle-aged. Eye signs are for the most part entirely absent in apathetic hyperthyroidism, the eyes being in quiet repose. The gland in apathetic hyperthyroidism is usually small but quite firm and pebbly in consistency. The pulse rate is persistently but not markedly elevated. The apex beat is not forceful. The pulse is not of the toxic character which one sees with activated hyperthyroidism. Gradual but persistent weight loss, often of large amounts, fifty to seventy pounds, over a period of several months, is usually a striking feature of the disease. The skin, in contradistinction to the warm, moist, velvety skin of the patient with activated hyperthyroidism, is cool, wrinkled and pigmented. These patients lack almost utterly the motor and mental activation which is so characteristically associated with activated hyperthyroidism. The basal metabolism rates in patients with this type of hyperthyroidism tend to be relatively low, plus thirty, plus thirty-five, plus forty and the reaction of these individuals to trauma, particularly in the form of operation, is strikingly different from that of pa-

tients with the activated type of hyperthyroidism. Patients with apathetic hyperthyroidism sometimes maintain pulse rates of not over one hundred and twenty during anaesthesia and subtotal thyroidectomy, only to return to their rooms, never awaken from their anaesthetic, and die in spite of all measures to improve them. Patients with apathetic hyperthyroidism die after thyroid operations quite differently than do those with activated hyperthyroidism. When a postoperative fatality occurs in apathetic hyperthyroidism, the patient, instead of being wildly activated on return to her room as is the case with typical hyperthyroidism, sinks into a peaceful apathetic unconsciousness from which she cannot be roused, and quietly dies in spite of all measures to support and rouse her. On obtaining relief from hyperthyroidism of this type, the pigmentation disappears, weight and strength are regained, and the sluggish apathy is lost. One should have in mind always that this is the type of hyperthyroidism in which unexpected fatalities occur. It is in patients with this type of hyperthyroidism that, because of the lack preoperatively of striking signs of typical (activated) hyperthyroidism and danger signs during the operation patients are often unwisely submitted to complete subtotal thyroidectomies, only to return to their rooms, never awaken from their anesthetics and die in apathetic coma. It is in cases with hyperthyroidism of this atypical type that we must be on our guard against doing too much surgery at one sitting, if we wish to avoid the definite and real mortality associated with this group of patients.

One of the most important decisions in dealing with patients with hyperthyroidism is the estimation of the degree of operative risk. Nothing has more to do with the end results than does this decision, since mortality rate is so dependent upon the correctness or incorrectness of the risk grading. It has for several years been our custom to record on the chart of each patient with hyperthyroidism at the time when the patient is first examined in the Clinic, our impression as to whether or not she will require operation in one or more stages. If this is done at the time of the first examination, the risk estimation will be made when one may be certain that the patient is seen when the evidences of her toxicity will be most obvious and so the examiner's estimate of the degree of risk the worst. Following rest in bed, a high carbohydrate diet and Lugol's Solution for a week or ten days, there may be such a striking change in the general picture of the hyperthyroidism that the recollection is apt to fade that not over seven to eight days before this same patient was considered a very serious risk. If this fact is recorded upon the chart in a prominent and constant place, and every chart is read before every operation by the operating

surgeon, the assistant and the anesthetist, this fact will occupy a prominent part in everyone's mind. Should the patient do badly in any way while on the operating table, this will serve to remind everyone that one week previously it was thought that, for example, the patient would require a two-stage operation. When it is recorded upon the patient's chart at the time of the first examination that he or she will probably require more than a single stage operative procedure, the burden of the decision of risk is on those who

a clinic where patients with hyperthyroidism are operated upon in large numbers, prove that this arbitrary grouping of risks is of distinct value.

I cannot discuss preoperative decisions as to mortality risk without mentioning also the need of the preoperative recognition of the mortality factors which Dr. Clute has called attention to, based upon a study of our fatalities. He has demonstrated that in patients who have had hyperthyroidism for over a year, there is a definitely increased operative risk. In patients who are over fifty years of age with hyperthyroidism there is also an increased risk, and in patients who have lost more than fifty pounds in weight there is a definitely increased operative risk.

Based upon an operative experience now with several thousand thyroid operations, I would like to leave this part of the subject with the following advice to any surgeons who are ambitious to do thyroid surgery. Patients with definite and intense hyperthyroidism react definitely in proportion to the degree of load that is put upon them by the anesthesia and a surgical operation or any other physical or emotional burden which they must bear. One half of a complete subtotal thyroidectomy is easier for a patient to endure than is a complete subtotal thyroidectomy. If there is any doubt or uncertainty as to a patient's ability to withstand a one stage procedure, select for her the two or even three stage operation. If one is to err in the matter of too much or too



FIGURE 1

In atypical case of apathetic hyperthyroidism. Note the wrinkled skin, the somewhat senile appearance, the extreme weight loss, lack of eye signs, lack of activation, lack of thyroid enlargement and the least suggestion of apathy.

in spite of this and after rest and preparation decide upon a one stage procedure. With the original opinion recorded at the time of the first examination that the patient will require a two-stage operative procedure, no matter how marked his or her improvement under preoperative preparation, one can be certain that this decision will be of a conservative character.

In the routine of operating upon a good many cases, as an additional measure of safety, against overlooking bad but not obvious risk cases, we have arbitrarily graded all patients at the time of the first examination into Grades I, II, III, and IV risks.—Grade I being a perfect risk, Grade II a slightly doubtful risk, Grade III a dangerous risk, and Grade IV a risk in which a fatality will occur if an operation is done upon the patient.

This plan serves also to call attention to and stress the degree of risk in bad cases, and is of real value in protecting the bad risk patient from too much surgery. The features which indicate uncertainty as to a fatality in hyperthyroidism are often so non-evident and the ease with which routine envelops and obscures these warnings in



FIGURE 2

A similar case of apathetic hyperthyroidism in which the above features are also present.

little surgery in these dangerous cases, let the decision always be on the side of safety. The

criticism for being too conservative contains no sting to the surgeon who makes the safe decision, and, with recovery, on the patient's part soon disappears and is forgotten. The criticism for a too radical decision never disappears and, unlike the above, bears the everlasting sting of being a just and deserved criticism.

TABLE I

Operative Mortality in Exophthalmic Goitre

	Cases	Operations	Deaths	Case Mortality	Op. Mortality
1927	439	596	4	.9%	.67%
1928	536	676	0	0%	0%
1929	448	539	4	.89%	.74%
1930	398	568	5	1.25%	.88%
1931	472	648	3	.63%	.46%
Total	2,293	3,027	16	.70%	.69%

Table I—Mortality is such a self-evident part in end results that anything which influences this is of extreme importance, and preoperative preparation of the toxic thyroid patient plays a very considerable part in the mortality rate. The best risk patients are those who react favorably to preoperative preparation as evidenced particularly by weight gain, also by a drop in pulse rate and basal metabolism rate. During the period of preoperative preparation, all patients are kept in bed except for an hour in the morning and afternoon, when they are encouraged to walk about. We cannot prove it, but from a comparison of the two methods, we feel sure that patients who are up and about for a short period twice a day in the period of preparation are better prepared for the operation than are those who are kept in bed all of the time.

Our average time of preoperative preparation is about eight days, but one should have no fixed rule as to this time, being covered by how sick the patients are, and continuing preoperative preparation as long as there is obvious improvement.

In the very toxic patient with vomiting and diarrhoea, the important features of the preparation are, first, that they receive sufficient fluids, and with this in mind we provide for it by giving them at least three thousand c.c.'s containing at least one hundred and twenty-five grams of glucose in twenty-four hours. In many of the patients with severe thyroid toxicity, particularly when they are vomiting, it becomes a problem to give them the necessary amount of iodine to bring about an abatement of the rising rate of intoxication. In such cases we have learned that fifty minims of Lugol's Solution may be administered in a thousand c.c.'s of salt solution at the time at which the salt solution and glucose are administered. This is in our experience the most positive and satisfactory way of employing iodine in the patient with very severe thyroid toxicity.

End results as they relate to mortality are at times attributed to the form of anaesthesia. Good

results are being obtained by various surgeons with a variety of forms of anaesthesia, and we are of the opinion that if one excludes ether as a form of anaesthesia in these cases, this feature is not as important in the outcome as we have at times considered it. Ether is in our opinion chiefly undesirable because of the fact that it produces so much nausea, and because patients are so long in coming out of it. Anything which interferes with the intake of fuel and water during the period of hypercombustion associated with severe thyroid reactions is undesirable. Of the inhalation anaesthetics, nitrous oxide or ethylene with its higher percentage of oxygen are very satisfactory. Avertin provides a highly desirable feature in the operative management of toxic patients. With its pre and postoperative period of abolished consciousness, it robs the visit to the operating room of its terror and eliminates largely the consequent psychic shock. Local anaesthesia with patients conscious and unprotected as to psychic shock either by light nitrous oxide or avertin is, in our opinion, an unnecessarily trying emotional ordeal, and one which, at least in some moderate measure, places an unnecessary burden upon an already overburdened individual.

In any well organized clinic where thyroid surgery is being done in any considerable amount, the very low mortality rate which exists in these clinics is made up, at least in a considerable part, of technical accidents and postoperative complications. With this in mind, we wish to state that there is a tendency, particularly on the part of surgeons who devote themselves largely to goitre surgery, to become oversentimental as to the length of the incision and oversentimental as to the preservation of the prethyroid muscles. We feel very strongly that any good fortune that we have had as relates to postoperative complications (we have had four patients with complete tetany and never a complete bilateral nerve injury in now very close to eleven thousand thyroid operations) is in a large measure due to the wide exposure which can be obtained with a generous incision, with the prethyroid muscles cut, a dry field and anatomical exposure of the entire gland and the anatomical structures to be avoided.

The immediate control of bleeding in thyroidectomy is not only necessary if one wishes to do accurate anatomical dissections of the gland, but the control of bleeding so that secondary hemorrhages do not occur later is of very great importance. It is not the bleeding of secondary hemorrhage itself, although patients with severe thyroid toxicity stand blood loss badly, which is of the most importance. It is the fact that secondary hemorrhage, when it happens, occurs either on the afternoon or evening of the day of operation or on the first or second postoperative days. The most unhappy feature of this situation is that patients at this time show their greatest degree of thyroid reaction to the operative

procedure, and must then be taken to the operating room or anesthetized in bed and put through another emotional ordeal, which in serious risks may well be the factor which brings about a fatality.

We feel very strongly that the control of blood supply, particularly in operations upon patients with toxicity, should be undertaken with the idea in mind that precautions are being taken against possible secondary hemorrhages and their possibility of increasing mortality rate.

Exposure is a basic principle in surgery and this principle is as applicable to thyroid surgery as it is to abdominal surgery. A scar on the neck is a scar, and whether it be an inch or two or even three or four longer or shorter makes but little difference in its appearance, but often makes a great difference in the ease and safety of the operation. We have literally cut thousands of prethyroid muscles. In two-stage operations we have cut muscles on one side, sutured them, and had the opportunity to observe the point of suture and the muscle itself at the second-stage procedure on the opposite side in at least hundreds of cases. As the result of this experience, we know that if one cuts muscles high and sutures them with reasonable care, there is no muscle atrophy, they heal so that one cannot tell the cut from the uncut side, and there is nothing relating to function which is lost in these cases. We urge strongly, as the result of our experience, that you do not incite in patients that pride in a short incision for their goitre which was a blot on surgery when applied to appendectomy. What a criticism of our common sense and judgment it was when surgeons were famous for the shortness of their appendectomy incisions. Do not operate upon patients for goitre unless they need it, and then get an exposure which permits you to visualize the entire gland and its important adjacent anatomy. We have no hesitancy in cutting the prethyroid muscles. We make it a practice to cut muscles in all toxic cases and in many of the non-toxic cases. We believe that with the muscles cut we can get better exposures, and what we can see we can avoid.

The end results in thyroid surgery, particularly that of thyroid toxicity, are inevitably associated with the matter of technic, especially as related to the amount of thyroid tissue removed and surgical accidents or errors of a technical character. We have recently published in the *Annals of Surgery** our views regarding the varying amount of thyroid tissue to be removed in patients with various types of thyroid toxicity, and I do not need to again discuss that matter. A point which was made in that article and which is, I believe, of very great importance in bringing about satisfactory end results in these cases is

*"How Much Thyroid Tissue Should Be Removed in Toxic Goitre?" *Annals of Surgery*, April, 1932, Volume XCV, No. 4, pp. 529-536.

the complete removal of the thyroid isthmus, together with any pyramidal lobes. If you will look at the diagrammatic illustrations III and IV, you can at once see, I believe, that with isthmus removal a larger segment of thyroid tissue can be removed with good sized thyroid remnants left over the region of the recurrent laryngeal nerve and parathyroid bodies than can be removed, if an attempt is made to leave a section of thyroid tissue on the trachea in order to protect it from trauma and the possible tracheitis which is assumed to follow it. We have now removed the isthmus completely in all patients with toxic goitre for several years and feel sure that one does not need to fear that it increases the amount of postoperative tracheitis or produces any other undesirable complication.

With good exposure, accurate control of bleed-

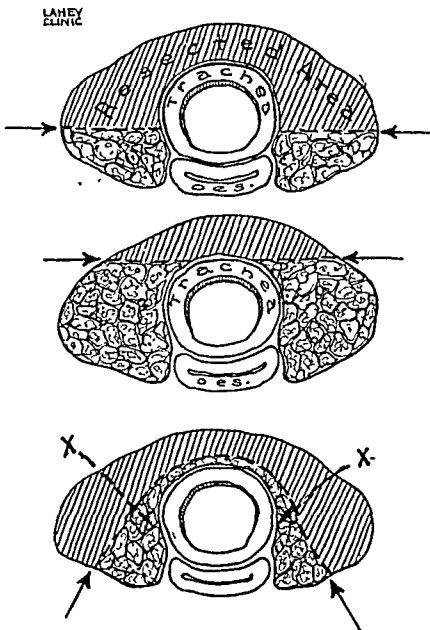


FIGURE 3

This shows diagrammatically the result of completely baring the trachea. Note the two segments of thyroid on either side and more than half of the trachea bared.

ing and turning of the cut surfaces of the gland against the trachea by suture as we have advocated for a number of years (Illustration V), the institution of drainage is rarely necessary. We feel quite sure that with bleeding well controlled there is no more postoperative reaction in the undrained case than in the drained case.

We feel very strongly that the surgical error of removal of parathyroid bodies is largely due to lack of exposure and to lack of control of bleeding, as already stated, but because of the fact that thyroid bodies are not infrequently atypically located (we have seen them on the front of the gland, embedded in the gland, and separate and at some distance from the gland), they will occasionally be removed in spite of meticulous pains to avoid them. Since the demonstration by Halstead and the further demon-



FIGURE 4

This shows the method of removing one lobe and the isthmus at a first-stage subtotal hemithyroidectomy. Attention is called to the fact that when a thyroid operation is divided into two stages, the second-stage is made much easier by the removal of the isthmus together with the lobe at the first-stage. Note how completely this bares the trachea and the large segment of tissue removed at the isthmus.

stration by Drs. Cattell and Mason in our Clinic that these glands can be successfully transplanted, we strongly urge that anyone doing thyroid surgery become familiar with the gross appearance of these bodies; that specimens be carefully searched for them, and that they be transplanted in an adjacent muscle belly at once. It is wise, we believe, to take a minute section for the pathologist from each of these bodies to be transplanted, in order that one may prove with certainty as to whether or not the body is really a parathyroid body. This is valuable also in that

one is certain or not that he has really transplanted a parathyroid, and serves also the purpose of checking one's judgment as to what is or what is not a parathyroid gland in gross appearance. We have learned in our experience when dealing with the transplantation of a large number of parathyroid bodies that if a successful graft is to be obtained, care must be taken to see that the transplant is made deep into the belly of the sterno-mastoid, which is chosen because of its convenient closeness, and because of the thickness of its belly, and care must be taken also to see that the transplant is made into a dry pocket. Transplants made into pockets filled with blood will be macerated, digested, and will fail to take and function.

We have discussed up to now the factors which influence the end results, largely in terms of mortality and I wish to present to you now some actual end results, first in the form of a large group of metabolism examinations at the end of a year, Table II, in which there is a considerable defect because a large number of the patients upon whom the original metabolisms were done, did not return at the end of a year for their follow-up metabolism. The absence of such a large percentage of the original one thousand cases, as



FIGURE 5

By turning the remnant of the gland in against the trachea and suturing it to the first fascia of the trachea, it is possible to so reconstruct the gland that no oozing occurs and thyroid wounds can thus be sewed up without drainage.

Notice the complete baring of the trachea in both cases and the restoration of the isthmus in b.

reported here, largely invalidates the reliability of these figures.

In Table III we find the preoperative and the postoperative metabolic rate determinations in one hundred and eighty-eight cases in which the metabolism was done before operation, after operation and again at the end of a year. These figures are more valid in that every case reported at the end of a year for a follow-up report and the average basal rate at the end of one year, actually represents the end results in the same one hundred and eighty-eight cases. These fol-

TABLE II

This table was published in the *American Journal of Medical Sciences*, July, 1928, No. 1, Vol. clxxvi, pl. showing end results as related to basal metabolism and weight gain and may be criticized, as stated in the text, because of the fact that such a large number of patients failed to report for final check-up metabolism at the end of a year

Lahey Clinic	Primary		Secondary	
	No of Cases	Average	No of Cases	Average
B M R Before operation	1,000	+49.38	245	+40.94
B M R 8 days after operation . . .	1,000	+20.48	245	+22.27
B M R 12 mos after operation .	380	+ 2.34	38	+ 2.63
Gain in weight from weight after operation:				
3 mos after operation	850	15.35 lbs	123	1.26 lbs
6 mos. after operation	652	20.43 lbs	81	7.56 lbs
9 mos after operation	424	22.74 lbs	40	9.43 lbs
12 mos after operation	380	24.37 lbs	38	13.51 lbs

low-up figures lack value in that they report end results solely in terms of a laboratory finding.

At the recent meeting of the American Medical Association, Dr. H. M. Clute and Dr. J. R. Veal of the Clinic, reported on the end results of the surgery of exophthalmic goitre on ninety-seven patients followed by basal metabolism studies and clinical examinations, all of whom had been operated upon five years or over. These figures are dependable in that they are not reports by mail. They have been checked by personal examination of every patient on the part of Dr. Clute or Dr. Veal and every patient has had a basal metabolism examination at least five years after the original operation. In addition to that, the percentage of patients who have myxoedema is reported, the percentage of patients who have persistent and recurrent hyperthyroidism is reported, the percentage of patients in which any degree of tetany occurred is reported and the percentage of patients in whom recurrent laryngeal injury occurred is also reported.

Dr. Clute and Dr. Veal sent letters to one hundred and eighty-six consecutive patients with exophthalmic goitres who had been operated upon five or more years previously. Of these, they were unable to locate fifty-six but succeeded in following one hundred and thirty patients operated on for exophthalmic goitre of over five years standing. In twenty-six cases, the only information received was by letter and this was, therefore, discarded. In seven cases, then information was determined by personal examination but they were unable to secure metabolism tests on these patients and they were, therefore, also discarded. They personally did clinical examinations and obtained metabolism reports in our own laboratory on ninety-seven consecutive cases which represent a five-year follow-up on this group of cases.

The average basal metabolic rate for this entire group of patients at entrance in the hospital was plus fifty-four. After these patients had

been prepared for operation with Lugol's Solution and test, a subtotal thyroidectomy was performed. In thirty-five per cent of the cases it was necessary,—or considered wise—to do this in the form of divided operations. The average metabolic rate of these ninety-seven cases just before leaving the hospital, that is, just before

TABLE III

This table is of greater value than Table I since every patient had a metabolism before operation, after operation and at the end of a year. It may be criticized, however, as stated in the text, because of the fact that it reports end results solely in terms of metabolism for which reason the end results as obtained by Dr. Clute and Dr. Veal from ninety-seven cases followed in the Clinic as stated in the following paragraph at the end of five years, are of much greater value.

188 Cases of Primary Hyperthyroidism Showing Variation in B M R From Before Operation to 12 Months After Operation

B M R Before Op 188 Cases	B M R After Op 188 Cases	B M R 3rd Mo After Op 173 Cases	B M R 6th Mo 169 Cases	B M R 9th Mo 137 Cases	B M R 12th Mo 188 Cases
+39	+15	+7	+2	+1	-3
Gain in Wt 14 lbs			4 lbs	2 lbs	3 lbs

discharge, was plus fifteen. Ninety-three of this group of patients were followed post-operatively with metabolic estimations and clinical examinations at intervals of six months to a year and the average metabolic rate in these ninety-three patients was minus one. Final check-up examination was made on the entire ninety-seven cases, five or six years after operation, and showed the average basal rate for the entire group to be minus one.

As an additional check on the end results in these ninety-seven cases, Dr. Clute and Dr. Veal found it interesting to note that the average resting pulse rate at the time of entrance for the metabolism test was one hundred and eight. Following operation the average pulse rate before leaving the hospital in the ninety-seven cases, was eighty-five. At the time the patients returned—six months to one year after operation—for their post-operative metabolism test, the up and about pulse rate in ninety-three cases was seventy-two. In the final metabolism test done five years after operation in this study in which the pulse rate was known in ninety-six cases, the average pulse rate was seventy six.

In ninety-six of these cases, the average weight on admission was one hundred and nineteen pounds. The average weight of ninety-two of these patients taken six months to a year after operation had increased to one hundred and thirty nine pounds, and in the ninety-six cases in whom the weight was listed five to six years after operation, the average was one hundred and forty-three pounds, showing an average gain per individual in this group over a period of five to six years of twenty-four pounds. The end results as relates to exophthalmos are also of in-

terest. In one hundred consecutive patients examined in 1926, sixty-two cases were noticed as having definite exophthalmos preoperatively, an incidence of sixty-two per cent. Twenty-one of these same one hundred patients showed exophthalmos five years later.

As to the incidence of myxœdema in this group of ninety-seven patients, myxœdema occurred three times as a persistent condition which is still present and requires treatment. All three patients with myxœdema are well but require thyroid feeding. Four patients in the group had quite low basal rates at the end of three months following the operation when their first post-operative basal metabolism tests were done, but all have now returned to normal basal rates and none of them require thyroid feeding.

In this group of ninety-seven cases, six can be classed as persistent hyperthyroidism and six others as recurrent hyperthyroidism. Of the group of six with persistent hyperthyroidism, four required later operation and of these one only was cured. Two of these four are still toxic but their symptoms are controlled with Lugol's Solution and they are able to live normal lives. One of the four patients with persistent hyperthyroidism, a patient with established auricular fibrillation for five years, died of an embolus eight days following a recent secondary operation on her thyroid. The remaining two of these six cases of persistent hyperthyroidism are still mildly toxic but are adequately controlled with Lugol's Solution. In the six cases with recurrent hyperthyroidism, two required later operation. One of these two has remained perfectly well with normal metabolism for three years. The other one was operated upon too recently to report on. The remaining four cases with recurrence of their hyperthyroidism are all of the mild type and are adequately controlled with Lugol's Solution.

Injury to both recurrent laryngeal nerves has occurred but once in our entire experience now

with something between ten and eleven thousand goitre operations. We have had occasional injuries to the single recurrent laryngeal nerve but they have never been of any serious consequence.

As relates to injuries to the parathyroid bodies, and the onset of tetany in this entire experience with goitre operations, complete tetany has occurred but three times and transient tetany eleven times in our entire experience. One case of transient tetany occurred in the group of patients reported here, a patient operated in 1926. This patient was re-examined lately and found to have no evidence of tetany and required no treatment for the condition.

As relates to the ultimate effect of subtotal thyroidectomy, in all the group of one hundred and thirty-four patients followed by mail and also by personal examination, it was found that in the five to six-year interval since the time of operation, four had died. Of these four, two died of pneumonia at intervals of two and three years after their operation. One died of cancer of the pancreas some months after the thyroid operation and one died of nephritis four and one-half years after operation. Dr. Clute summarizes the results obtained in the follow-up of these ninety-seven patients who had been operated on for hyperthyroidism five years or more, saying that in eighty-two cases, complete cures were obtained. In seven other patients, there is still slight toxicity present entirely controlled by Lugol's Solution. Three patients developed myxœdema which is entirely controlled by thyroid extract. Four patients in the group are still toxic. None of the four are in any way incapacitated and all are working. One of the patients in the group died following a recent secondary operation for recurrent hyperthyroidism and congestive heart failure. It is, therefore, possible to say that ninety-two or ninety-four and eight-tenths per cent of these ninety-seven cases were relieved of their symptoms of this disease by subtotal thyroidectomy.

EPIDEMIOLOGY OF SEPTIC SORE THROAT*

By PAUL B. BROOKS, M.D., DEPUTY STATE HEALTH COMMISSIONER,
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SEVENTEEN years ago Dr. Hermann M. Biggs, in a paper on the topic "Milkborne Septic Sore Throat—A New Health Problem,"¹ said:

"Septic sore throat, while probably not a new disease, has at least appeared in a previously unrecognized form in this country within the past few years. A number of extensive epidemics have occurred, all resembling each other closely

in character and due as a rule primarily to widespread milk infections."

No such milkborne epidemics had been reported in this country, he said, previous to the Boston epidemic of 1,400 cases in 1911, although they had not been uncommon in Great Britain, where one had been reported as early as 1875. He then discussed several American epidemics and said that three of serious extent and several smaller ones had occurred in New York State in a little over a year.

* Read at the Annual Meeting of the Medical Society of the State of New York, at Buffalo, N. Y., May 24, 1932.

Our records of milkborne outbreaks of this and other diseases in this State, exclusive of New York City, from January 1, 1917, to date, show none of septic sore throat until 1925, an extensive epidemic in that year, a lapse of three years and three outbreaks annually since: 10 altogether with a total of nearly 1,800 cases, all traced to raw milk, in most instances from herds in which there were cases of bovine mastitis. The total of approximately 1,400 cases in the nine outbreaks in the last three years constitutes about 85 percent of the recorded cases in this period. Except for cases which occurred in an outbreak which may have been due to contamination of ice cream by a carrier, the balance presumably were sporadic.

Dr. Bigelow,² in 1929, referred to 15 outbreaks which had occurred in Massachusetts in 18 years. The latest and most serious of these was the one at Lee in 1928, with over 900 cases and 48 deaths occurring in a community of 400 inhabitants. Our epidemic at Walton, N. Y., a community of about the same size, in which there were 444 cases and seven deaths, was comparable although the mortality—about 2 percent—was considerably lower.

Judging from the data collected and published by the United States Public Health Service, New York State has had much more than its pro rata share of these outbreaks as compared with other states. Whether this means that infection is actually more prevalent here or that outbreaks are being overlooked elsewhere remains to be determined.

We have come to look upon septic sore throat as a clinical entity. Certainly in typical cases there is a fairly definite clinical picture. Yet individual cases vary greatly and so far as the physical signs in the throat are concerned there is little if anything to distinguish infections with different strains of virulent hemolytic streptococci. Dr. May Holmes,³ describing cases seen during the Lee epidemic, said that "the redness was not as sharply circumscribed as in scarlet fever." Ordinarily, however, there seems to be nothing characteristically different in the throats in scarlet fever and septic sore throat.

Dr. D. J. Davis of Chicago, some years ago gave the name "Streptococcus epidemicus" to a type of hemolytic streptococcus which he considered the specific incitant of this disease. In addition to certain cultural peculiarities which he described, he considered its outstanding characteristic to be a well defined capsule observable in moist india ink preparations. Other distinguished observers support his position as to the identity and specificity of the organism. In our laboratory, where extensive studies have also been made, organisms meeting the "epidemicus" specifications have been obtained from cases of scarlet fever and erysipelas and from normal throats,

while those definitely known to have been responsible for certain milkborne epidemics have not conformed. Cultures from one of these epidemics were sent to one of the active proponents of the identity of the organism and he is said to have reported that in his opinion the streptococcus on the cultures was not "epidemicus." The present conclusion in our laboratory is that there is as yet no known method by which a specific excitant of this disease can be identified, and Dr. Park of New York and Dr. Breed of Geneva seem to have reached the same conclusion. While still looking for the "epidemicus" characteristics we are satisfied, for the present epidemiologically, if we find hemolytic streptococci with identical morphology, cultural and biochemical reactions in the human cases and in the milk or discharge from the cow's udder. Irrespective of the merits of the question of identity of the organism it certainly is not yet safe, in epidemics or clinical cases, to disregard organisms found because they do not conform to "epidemicus" specifications.

Dr. Biggs⁴ described an epidemic which occurred in Poughkeepsie and vicinity in 1915 in which there were at the same time 212 cases of scarlet fever and 296 of "sore throat." In one of our more recent outbreaks cases of both diseases were reported. It is also well known that cases of erysipelas frequently occur in connection with milkborne septic sore throat epidemics. In an epidemic of 487 cases at Portland, Oregon, in 1923,⁵ twenty cases of erysipelas occurred. This condition was observed in two of the fatal cases at Walton.

Dr. Biggs, referring to the Poughkeepsie epidemic, said:

"There are three possible assumptions in connection with this outbreak; the first—that an epidemic of scarlet fever and an epidemic of septic sore throat occurred at the same time, both probably the result primarily of milk infections. The second—that this whole outbreak was one of septic sore throat of unusual severity; and the third—that this was an epidemic of scarlet fever throughout, and that the sore throats were simply mild types of scarlet fever in which the eruption was not recognized or was transient, or was absent entirely as is sometimes the case." A fourth possible assumption might be added: that scarlet fever, septic sore throat and possibly also erysipelas are simply different manifestations of the same infection, the determination as to the character of the manifestations depending on conditions, not yet understood, affecting the organism. The experience in an epidemic which occurred at Kirkland Lake, Ontario, in 1930,⁶ is interesting in this connection. There 11.8 percent of the patients gave a history of having had scarlet fever and several were convalescing from that disease when taken with septic sore throat.

Epidemics of septic sore throat believed to

have been primarily due to contact have been reported, and scattered cases apparently due to contact usually precede and follow milkborne outbreaks. Most outbreaks of this disease, however, are primarily milkborne and our recent experience and observation convince us that extensive milkborne outbreaks rarely, if ever, occur except when cases of bovine mastitis are involved. Where the cow is missed it is convenient to fall back on the carrier; but it seems very improbable that accidental contamination of milk by a carrier would account for an extensive outbreak extending over days or weeks, especially as there seems to be a tendency for the organisms to die out after a few hours in milk which has been properly cooled.

Mastitis among cattle is extremely common and ordinarily caused by a streptococcus not usually pathogenic for man. Apparently it is only on the relatively rare occasions when the udders, perhaps already damaged, become infected with organisms from human cases or carriers that the cases of mastitis become responsible for epidemics. It is not unusual to obtain histories of the occurrence of cases among milkers preceding epidemics and carriers may be found, but for obvious reasons it is usually difficult to determine definitely just how the cow became infected. In several of our outbreaks there have been histories of injuries to teats or udders. In one the dairyman had on his arm a suppurating wound discharging streptococci identical with those found in the cow and in the human cases of septic sore throat.

Bigelow⁷ relates an interesting experience in connection with the Lee epidemic. A cow was found which was discharging "*S. epidemicus*." On the farm there was a child which had had sore throat and from whose throat hemolytic streptococci were obtained which, however, did not correspond to those obtained from the cow. A presumably normal quarter of a healthy cow was infected experimentally with the organisms obtained from the child; the infection persisted for two months and led to mastitis but "the organism remained true to type and developed no new characters that would ally it with the organism associated with the epidemic." Once implanted the organisms multiply rapidly and for a time are discharged in large numbers. They usually disappear after a time from the originally infected quarters and may later be found in apparently normal quarters. Vaughan⁸ suggested the possibility that the virulence of the human strain of organisms might be greatly increased by passage through the udder.

I have recently studied the age and sex incidence of 981 cases occurring in three of our epidemics: Walton, Saugerties and Savannah. Both conformed to the usual observations in milkborne epidemics of this disease. Seventy-seven percent

of the cases were in persons over 15 years of age and there were very few under 5. As usual the deaths were mostly among persons past middle age. The percentage of females involved was 58. Just after arriving at this figure I read in Dr. Biggs' paper⁹ the following with reference to an epidemic of 900 cases which occurred in Westchester county in 1915:

"Fifty-eight percent of the cases were among females—a peculiar incidence characteristic of this disease in almost every outbreak previously reported."

At Kirkland Lake, Ontario,¹⁰ the story was a little different. This is a mining town and males predominated both in the population and among the cases. Seventy-one percent of the cases were in persons over 15 but of those under this age 51 percent were under five.

One remarkable thing about the milkborne epidemics here and elsewhere is that many of them have been traced to exceptionally good farms. Our largest outbreak in recent years was traced to one of the best farms delivering milk to the city and to a thoroughbred cow, the best milk-producer on the farm. At Savannah samples taken from cans at the farm and examined in Dr. Breed's laboratory gave counts around 2,500. The dairy responsible for an outbreak on Long Island had an average count of 9,000.

In this rambling paper I have not attempted a comprehensive discussion of the subject but have simply tried to bring out a few of the interesting points. My study of the subject has led me to at least two definite conclusions. The first is that there is still a great deal that we do not know about streptococcus infections. The other is that unless it is possible to apply the rigid precautions against mastitis and against milk infection which are required on farms producing Certified milk, with at least equal care and supervision, the only practical safeguard against milkborne outbreaks of septic sore throat is pasteurization.

SUMMARY

Although milkborne outbreaks of septic sore throat previously were not uncommon in Europe, none were reported in this country before 1911. Several occurred in New York State in 1915. From January 1, 1917, ten have been recorded in the State, exclusive of New York City, one in 1925 and three each in 1929, 1930 and 1931. Cases in the last nine constitute about 85 percent of the recorded cases.

While septic sore throat is generally regarded as a clinical entity, the facts concerning the relationship between this and scarlet fever, erysipelas and other hemolytic streptococcus infections are not yet well understood. Competent observers are not in agreement as to the possibility of identifying a specific incitant of this disease.

While the disease may be spread by contact,

most epidemics are milkborne and cases of bovine mastitis are usually involved in extensive outbreaks. The bovine infection probably is always of human origin.

The age and sex incidence in 981 cases occurring in three New York State outbreaks con-

formed to the usual observations. Seventy-seven percent of the patients were over 15 years of age and 58 percent were females.

Milkborne outbreaks are frequently traced to exceptionally good farms. The only practical safeguard is pasteurization.

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REPORT OF SEPTIC SORE THROAT OUTBREAK IN GREENWICH, WASHINGTON COUNTY, N. Y.*

By WILLIAM L. MUNSON, M.D., DISTRICT STATE HEALTH OFFICER, GRANVILLE, N. Y.

ORGANIZATION OF ADMINISTRATIVE PERSONNEL

IN doing the routine check-up on the daily card reports for May 22, 1931, I found five reports of septic sore throat in Greenwich village. I immediately telephoned the health officer and he stated to me that six other cases had just been reported to his office.

Conference was held the next morning for discussion of evidence already at hand and to determine on methods of investigation. This conference was attended by Dr. Graves and Mr. Leete of the Bureau of Milk Sanitation of the State Department of Health, Dr. Rogers, Health Officer, Misses Snyder and Mulligan, County Nurses, and myself. Arrangements were made for the nurses to immediately take cultures of the throats of those sick and to get specific epidemiological data on each clinical case. Dr. Graves and Mr. Leete immediately began a complete investigation of the herds of the farms who furnished milk to the suspected peddler.

MILK SUPPLY

The milk supply of the village of Greenwich, which has a population of 2,270, was furnished by:

1. The W Dairy, selling 580 quarts.
2. The M or W Dairy, selling 130 quarts.
3. The M Dairy, selling 375 quarts.

It had been noted that all cases reported were on the route of the W Dairy. Thus it will be seen that the immediately suspected supply furnished 580 quarts of milk out of the total, or about 53% of all milk sold in the village. Of the total cases reported all but one case was on the W's milk and that case was proved to

be a contact. It should be noted that pasteurization took place on May 23 while the peak of the outbreak occurred on the twentieth.

CASES

The cases may be divided into two groups. The first group is composed of 24 cases developing in twenty families in an explosive outbreak in May, 1931, especially on the twentieth, as shown in table one. The second group includes cases developing since May, 1931, as shown in table two. All the cases in the May explosion except six were checked by laboratory positives; and all cases since that time, except eight, had positive laboratory reports.

Day of Month	Number of Cases
12	2
13	2
14	2
17	1
19	2
20	9
21	1
23	1 Pasteurization begun
26	1 contact
28	1 contact
29	1 contact
31	1 contact
Total	24

Table 1. Number of Cases in the Explosive Outbreak in May

All of the cases during May were drinking raw milk and all but one were on the suspected route. The cases which have occurred since have been rather difficult to investigate so far as the milk supply is concerned. Just across the village line

* Read at the Annual Meeting of the Medical Society of the State of New York, at Buffalo, N. Y., May 24, 1932.

there is a raw milk stand and it is surprising how many persons would go there for their supply, and it is also surprising the type of person that would occasionally be found. A number of cases which have occurred since and who have told the nurse that they were drinking pasteurized milk are definitely known to the health officer and me to have gone across the line for raw milk. There was one very notable case in which this occurred and it was one of the cases which had severe complications following the disease.

May, 1931.....	24
June, 1931.....	6
August, 1931.....	3
September, 1931.....	2
October, 1931.....	1
November, 1931.....	2
December, 1931.....	3
January, 1932.....	3
February, 1932.....	2
March, 1932.....	2
April, 1932.....	3
Total	51

Table 2. Number of Cases by Months

All the cases which occurred on May 20 were in one small group on the Hill-Bleeker section with one exception and that occurred on Whipple Place. It is fair to deduce from this set of facts that the infection was in just one can of milk which was delivered to this group of people. The dairyman says that all the milk was mixed before bottling for delivery but neither the health officer nor I believe that. It is true, too, that this section represents that center of densest population in the village.

INSPECTION OF HERDS

A complete survey was made of the herds supplying the milk to the suspected dealer by Dr. Graves and Mr. Leete. In this inspection there were hundreds of specimens examined. Finally, on the farm of one J. D. W., there was discovered a cow (No. 4064K) one quarter of which was dripping pus. Culture on May 24 from this infected teat showed hæmolytic streptococci of the same cultural and morphological characteristics as those found in the throats of those persons sick with the disease.

SOURCE OF INFECTION

It was found that the wife of the farmer had had a sore throat from which she had recovered and that on the 24th of May had a negative culture; but that the husband who was in charge of the milk supply and was doing some of the milking, showed a throat culture of hæmolytic streptococci on May 25, 1931. He had not been sick enough to take to his bed as far as we were able

to gather the history. It is interesting to note that this farmer argued that his milk could not be infected because it was his wife who had really been "quite sick" and she had nothing to do with the handling of the milk.

SEQUENCE OF EVENTS

There seems to be no question at all but probably the sequence of events was that Mrs. W had septic sore throat, that Mr. W contracted it from her and that he infected the cow by stripping the teat which was sick and that the infection from this cow was in the milk which was drunk by the persons in the outbreak.

AGE INCIDENCE

The age incidence in the cases recorded shows the largest number of cases to come in the age group 31 to 40. In the total number of cases in the explosive outbreak 10 of them occurred in this group—or about 41% of the total. Practically the same age grouping has occurred in the cases which have occurred since the May explosion as is shown in table three.

	May, 1931	June 1, 1931, to April 30, 1932
Under 11 years.....	3	5
11-20	1	7
21-30	5	5
31-40	10	9
41-50	1	1
51-60	1	0
Over 60	3	0
Totals	24	27

Table 3. Age Incidence of Septic Sore Throat Cases in Greenwich, Washington County, N. Y.

In an outbreak in Westchester County in 1915 the age incidence of 720 cases was given as follows in table 4.

Under 11 years	181
11-20	119
21-30	146
31-40	153
41-50	81
51-60	30
Over 60	14
Age not stated	181

Table 4. Age Incidence in Westchester Outbreak in 1915

It will be seen from this that the age group 31-40 had a large number of cases. Dr. Rosenau of the Harvard School of Public Health says, "Although septic sore throat is largely a milk-borne disease, the greatest prevalence is among adults and not among children who are the milk drinkers and among whom we would expect the greatest number of cases."

SEVERITY OF CASES

About half the May cases, roughly speaking, were considered severely ill, adults predominating, and about 20% developed complications. While there were no deaths some of the patients suffered very severe and crippling illnesses. One person has just returned to duty after almost a year of disability. In an article by Dr H M Biggs in the *Medical Record* of December 4, 1915, on "Milk borne Septic Sore Throat" he states "The children and young adults were not seriously ill, being confined to the house as a rule only two or three days. Those in middle and later life suffered severely, relapses and complications being of frequent occurrence." In the 27 cases since May, 1931, only two had complications and these were the only ones considered at all seriously sick.

Before the explosive occurrence of these cases in the village of Greenwich there had occurred two known cases in the rural section, about four miles from the village, in a rural settlement called "Middle Falls." There also was the occurrence of the cases of Mr and Mrs W on the dairy farm.

It is the opinion of the writer that there is constantly in most communities occurring cases of this disease and that for one reason or other they are not reported and that outbreaks occur only when the proper circumstances conducive to a large number of cases occurring are present, that is

- 1 A dairymen with the clinical disease
- 2 A cow with mastitis
- 3 The consumption of this milk raw by a large number of patrons

Following the outbreak of any communicable disease there is a distinct heightening of the diagnosis and reporting of that particular disease. Everyone becomes conscious of the disease and is on the look out for it.

Because of the discussion in the community and because of a forward looking health officer with insistence, persistence and ability kept the matter before the board of health an ordinance permitting only pasteurized milk was passed for the community. One of the outstanding features of the investigation was the complete cooperation of the health officer, Dr Rogers. It was not only in giving his consent but his active help was cardinal. He was very potent in energizing the whole investigation. Also he had backbone in pushing through when locally at times it might have seemed to his advantage to pussyfoot. As a matter of fact he gained the respect of his people more than ever by his unwillingness to weaken. I might say in passing that he has one of the largest and best practices in my district. My experience has been that the busy men—the good doctors—are really the ones to get to do things

They know how to arrange their time. God deliver us from the ones who are just getting by, that always see the bogey man and are constantly talking to ghosts.

CONCLUSIONS

1 That there was an explosive outbreak of 24 cases of septic sore throat, that the infection was conveyed by the milk of a particular dealer and that this milk was from a cow with mastitis which was infected from human sources.

2 That the epidemic served a good purpose in that it resulted in an ordinance for the sale of only pasteurized milk in the community.

3 That the way to investigate such outbreaks is by swift-moving and thorough going executive and administrative procedures.

4 That the most important part of such an investigation by the epidemiologist is his use of the intelligent and competent services of veterinarians and milk experts.

5 That where the local health officer is interested and active, things get done.

For the most part modern medical papers set up the essayist as a section of the judgment day with total disregard for the many questions which are apparent but which are failed of answer. The questions unanswered are probably more important than those which are answered.

May I not submit herewith some questions which I have not found the answer to and which suggest the need of further study?

1 Why is the age incidence so high in septic sore throat—why does not the disease occur in the milk drinking age?

2 Is the septic sore throat caused by milk routed haemolytic streptococci more virulent than the contact routed organisms?

3 Is it possible there is one type of haemolytic streptococci which humans have and which may be transmitted to the cow's udder and thereby infect the milk and another type which will cause the disease in humans by contact and yet can not be transmitted by the cow's milk?

4 Is it true that explosive milk borne septic sore throat is more apt to be severe and have complications than contact cases or the cases which are occasionally occurring?

5 Is it a fact that septic sore throat is quite a common community disease which is largely missed because of failure to take cultures and is called just plain sore throat and is only recognized when a milk-borne epidemic occurs and puts everyone on the alert for the disease?

6 Isn't it a fact that while we have done a great deal in a practical way with the epidemiology of septic sore throat there is yet plenty of need for scientific investigation and shouldn't this be done in the field with the laboratory-trained worker, the milk expert and epidemiologist working together?

THE DOG'S GIFT TO THE RELIEF OF SUFFERING

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This article is reprinted from The New England Journal of Medicine of September 15, 1932, at the request of the Committee on Medical Research of the Medical Society of the State of New York. It is a revision of an article entitled "The Dog's Gift to the Relief of Human Suffering," by W. B. Cannon, and published in Hygeia of January, 1926. The revision was made necessary because of the progress in the conquest of disease achieved through the dog since 1926.

YEAR by year bills are introduced into State legislatures designed to prohibit the use of animals in scientific experiments. Year after year, physicians, members of university faculties, and enlightened laymen, who realize that the public welfare would be vitally damaged in case such bills were passed, must exert themselves to justify animal experimentation before legislative committees.

In recent times the antivivisectionists have concentrated their efforts upon attempts to prohibit experiments on dogs. This activity, recognizing as it does the age-long friendship of dog and man, capitalizes sentiment more effectively than would efforts to prevent experimentation on all animals. Antivivisectionists are frank in declaring their hope that through legislation to prevent experiments upon dogs a beginning may be made in the prohibition of all animal experimentation. Such an attitude ignores the fact that experimental observations upon the dog have been more useful in relieving human suffering than those upon any other animal and further, that dogs in general have benefited profoundly from experiments upon a small number of the group.

There are still many maladies from which people and animals suffer and die, because knowledge is lacking that would enable physicians to cope with them. Voters and legislators must decide whether experiments for the understanding and cure of these diseases—experiments justified not only by common-sense reasoning but by past achievement—are to be hampered or even prevented by sentimental protestations. In modern scientific laboratories, experiments upon dogs and other animals are conducted with far greater consideration than is shown to animals of the street and field, and under a supervision which assures that they are done wisely as well as humanely. Citizens should keep informed upon the meaning, the methods, and the results of medical investigation—a field of endeavor which profoundly affects our welfare, indeed our very existence.

THE DOG'S GIFT TO THE RELIEF OF SUFFERING

When an automobile lacks power, runs irregularly, or makes strange noises, the owner, if he be wise, takes the machine to an expert. The expert knows the uses of each part, the signs of its disorder, and the way to remedy the trouble. He has learned this by observing how the machinery works and how its action becomes disturbed. Conditions are similar for the human machine. Experts in knowledge of the human body have, however, little opportunity to watch its activities

directly. Instead they must study the bodies of lower animals. In examining the workings and the disorders or diseases of the various organs, investigators have employed many lower animals—rats, mice, guinea-pigs, rabbits, cats, dogs, and monkeys. Some antivivisectionists affirm that even when an animal is anesthetized, man has no right to look into its body in order to learn how the parts act. There are others who say they do not object to experimenting on most animals, but they would spare the dog.

Dogs are indispensable for certain types of experiment. They will eat both animal and vegetable food and thus, more than any other available animal, live upon the same diet as man. They are large enough to permit surgical experiments under the structural conditions found in man, and live comfortably in surroundings necessary for most scientific observation.

THE DOG AND OUR KNOWLEDGE OF DISTURBANCES OF THE CIRCULATION, OF BREATHING, AND OF DIGESTION

The marvelous growth of modern medical science began about 300 years ago with Harvey's discovery of the circulation of the blood. Among the animals in which he studied the visible motions of the heart was the dog. Since Harvey's time the dog has served in many investigations of the disorders of heart action, thus furnishing information used daily by physicians in treating heart disease in man. Sir Thomas Lewis, perhaps the foremost living authority on this subject, testifies that the painless sacrifice of a relatively small number of dogs has yielded a "wealth of knowledge which so long as medical science exists will continue to confer great and lasting benefits on mankind."

As men and women pass into the later years of life, they are likely to have an increasingly high blood pressure. It may even become dangerously high. When this condition is found, suitable hygiene must be instituted to prevent catastrophe. The common method now in use of determining blood pressure in man was proved accurate by tests on dogs. Whenever a physician applies the simple cuff to the arm, he and his patient should remember their debt to the dog.

The so-called "prone-pressure" method of resuscitation is used in civilized countries all over the world as a means of giving artificial respiration to revive persons apparently drowned, the victims of electric shock, and the unfortunates overwhelmed by noxious gases. This method was devised by Schäfer, Professor of Physiology

at Edinburgh University. It was first proved efficacious by tests on a few dogs which were successfully revived. Dogs were selected rather than other animals because they alone had chest walls nearly enough like man's in elasticity to serve the purpose. The prone-pressure method of resuscitation has already been the means of saving innumerable human lives and it will continue its beneficent service.

Vital facts about the work of the digestive glands and the course of digestion of different foods in the stomach and intestines have been learned by experiments on dogs. In 1904, Pavlov, the noted Russian physiologist who carried on these studies, was given the Nobel prize in medicine for his many new contributions to our knowledge of the digestive system. Since successful treatment depends greatly upon normal conditions, Pavlov's discoveries are in daily use by physicians.



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Fig 1 Each of these boys is seven years old. Both have rickets. Today, through dietary experiments on puppies, we know how such deformity can be prevented

The well-known children's disease, rickets, had long been a mystery and the rational treatment of it awaited explanation. By feeding experiments on puppies the cause of this disease was found to be the lack of essential food factor commonly present in animal fats. The way to prevent or cure the disorder was at once obvious and today sufferers from rickets can be cared for success-

fully. Rickets is one of many diseases affecting both man and animals. Veterinarians and dog breeders make use of the same dietary measures as are employed in our hospitals for children.

THE DOG IN RELATION TO SURGICAL PROGRESS

In no realm has progress been more rapid or more serviceable to mankind than in surgical technic. When a new operation must be tried it may be attended by great risk. Shall the risk be taken by the sick man or woman, or by a lower animal? Small animals are too tiny for surgical operations, therefore the size of the experimental animal is important, and many operations now performed daily on man were first tried on the dog. Harvey Cushing, the renowned brain surgeon, has testified that knowledge of ways to operate on the pituitary gland—a small body at the base of the brain—was derived from a series of surgical experiments on dogs, and that every patient operated on for pituitary disease, and thereby possibly saved from a life of blindness, may thank the dog for this blessing. Furthermore, the amount of kidney substance as well as the amount of the small bowel that can be safely removed—questions made important by accident and disease—was first learned by surgical tests on dogs. The dog helped in discovering methods of uniting the ends of the cut bowel, and of uniting the stomach with the bowel by way of a new opening. By experience with the dog, surgeons have learned to operate on the chest. Operations on the heart, even on the interior of the heart, were first perfected on the dog and later done effectively on human beings. A recent line of surgical progress has been concerned with the relief of the very dreadful pain of that form of heart disease called angina pectoris. Through experiments upon dogs the nerves leading from the heart, and responsible for heart pain, were located and the fact determined that these nerves might be cut without disturbing the action of the heart. Sufferers from angina, who formerly had but transient relief through large doses of drugs, may now be cared for surgically—a result entirely due to experiments upon dogs.

THE DOG AND THE TREATMENT OF DIABETES

Another grave condition afflicting mankind is diabetes, a disease characterized by defective utilization of starchy food. In 1889 experiments showed that dogs developed diabetes if the pancreas was removed. Attempts were at once made to treat the disease by feeding pancreas, but it was not until 1922 that Banting and Best in Canada succeeded in making an extract of dog pancreas which could be given to patients and which controlled the disease. This extract is called insulin. Today insulin is made of beef pancreas. Dr. Elliott P. Joslin, the distinguished American authority on the treatment of diabetes, says of the

discovery of Banting and Best, "Insulin revolutionized the treatment of the diabetic. Before insulin was discovered the average patient literally suffered from hunger and thirst and was without hope because he could not find another diabetic who was living comfortably five years longer than himself. The parents of a diabetic child were panic-stricken and doctors broken-hearted when they learned a child had the disease. One of the most noted children's specialists in the United



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FIG. 2. George developed diabetes when five years old. Bob soon became his companion and the picture was taken three years later. George is now a fine young man.

States wished he might never have another diabetic child to treat; so sad was it to see a child starve to death. The average duration of the life of diabetic children was surely less than a year, and that of the largest group of diabetic children in the world under careful observation was less than two years." Today all this is changed. Prior to the discovery of insulin, through experiments on a small number of dogs, no such pictures of diabetic children as those which illustrate this article existed. A short period of miserable invalidism was followed by death. Dr. Joslin writes again, "Thirty years ago when I began treating diabetic children I counted the days they lived. It is hard to believe, but it is true, that now I am beginning to measure their lives in decades of years."

It has been estimated that in the United States alone there are now 1,000,000 people who already have diabetes or will develop it. To this vast horde, knowledge gained by experiments upon the dog gives comfort, hope, and useful lives. If the dog had aided us in no other struggle against disease, we could never repay him for the ammunition he has given us in fighting diabetes.

THE DOG AND THE TREATMENT OF PERNICIOUS ANEMIA

A few years ago pernicious anemia was one of the most distressing diseases with which man was afflicted. It usually affected adults in good health, and, while it required a long time to kill, it invariably did so. Today the patient with pernicious anemia can continue to live usefully and contentedly.

Experiments upon rats and other animals had shown that a diet rich in liver promoted growth in an unusual way. Physicians had thought that



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FIG. 3. Betty, age two years and eleven months, injecting her own insulin. Many diabetic children do this every day.

in pernicious anemia the patient needed something to promote formation of the blood, but no one had an idea of the nature of the necessary substance. Dr. Whipple and his associates in the University of California undertook the systematic study of the blood under various conditions in dogs rendered anemic by bleeding. In 1922 they found that such dogs, if fed a diet rich in liver, restored the lost blood more quickly than if given any other food. With this knowledge, gained by experiments upon the dog, two practicing physicians in Boston, Dr. Minot and Dr. Murphy, who had long struggled over the terribly distressing task of attempting to prevent patients with pernicious anemia from dying, began to feed such patients with liver. The results were almost miraculous. Pernicious anemia treated with liver was not a fatal disease. The liver supplied something by means of which these unfortunate people could manufacture blood. In the beginning, patients had to eat raw liver. Then various means of concentration were found possible. Today small capsules containing liver extract are furnished the patient. This extract,

when taken daily, controls the disease and allows a wholly normal life.

It is an interesting fact that about one year before the discovery of insulin Dr. Minot, the principal in the discovery of the liver treatment of pernicious anemia, found that he had diabetes. When insulin became available he was treated with this substance. Experiments upon the dog, resulting in the discovery of insulin, in this way saved the man who, later, taking advantage of other experiments upon the dog, developed a method for controlling another formerly fatal disease, pernicious anemia.

THE DOG AND THE TESTING OF DRUGS AND PROTECTIVE APPLIANCES

Still another way in which the dog is helpful to mankind is in the proving of drugs. The strength of some of the most important medicinal



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FIG 4. Several dogs used in anemia experiments to demonstrate the potency of liver for blood regeneration after blood loss. It was a short step from the experiments on these dogs to the cure of pernicious anemia in man.

agents can be learned only by being tested upon animals. For example, the United States Government requires that the drug epinephrin, also called "adrenalin", must be standardized by injection into dogs. This drug is used universally to check bleeding and to abolish the acute distress of asthma. Cannabis indica, an important sedative, must also be standardized by canine tests. The dangers of many chemical substances in common use have been discovered by experiments on dogs. In this way wood alcohol was first shown to be harmful and capable of causing blindness and death.

Dogs have been of indispensable value in reaching conclusions as to the amounts of dangerous gases, such as carbon monoxide, which can be permitted in the air of tunnels and mines, or in manufacturing processes. They have had an equally important part in the development of protective appliances worn in atmospheres containing poisonous gases, in diving, and in work in compressed air.

THE DOG AND THE TREATMENT OF DISEASE IN THE DOG

Not only have experiments upon the dog alleviated human suffering but they have been profoundly helpful to the dog himself. Two instances will illustrate the striking advances which have been made.

Hookworm in dogs. In 1915 there was no satisfactory treatment for hookworm disease of dogs — a disease widespread over the United States. It was so severe in parts of the South that it was impossible to raise dogs successfully. As a result of experiments on dogs, Dr. Hall of the Bureau of Animal Industry in Washington found that carbon tetrachloride is a satisfactory drug for removing the worms. Ascertaining the value of this drug involved the use of 30 dogs which had been condemned to death in the pound. These dogs were given doses of the drug and painlessly killed after four days. The value of the drug was judged in the only satisfactory way known at present, by collecting the hookworms passed after treatment and ascertaining whether any remained in the dogs' intestines. Since 1921 another and better drug for hookworm, tetrachlorethylene, has been discovered by work on the dog. This has been used with success by the veterinary profession not only upon innumerable dogs but upon cats, foxes and sheep.

It is often a contention of antivivisectionists that dogs are so different from man that nothing of value can be learned through them. The result in the treatment of hookworm is one of the many instances which refute this statement. Carbon tetrachloride and tetrachlorethylene, discovered by experiments upon dogs to benefit dogs, are the drugs used today in treating hookworm in man. The good these drugs have done is evident in the bettered health of millions of human beings who otherwise would be ailing or incapacitated.

Distemper in dogs. Distemper is a highly infectious disease of dogs, attacking chiefly animals from a few weeks to a year old. It is widely disseminated throughout the world, and, in those countries where it has not become established, the introduction of an infected animal at once gives rise to a severe outbreak among exposed dogs. The mortality is invariably high; most authorities consider 50% to be a conservative figure.

It is hardly necessary to describe the picture of a puppy stricken with distemper; for who has not seen one or more aspects of this disease and who does not know the suffering it entails? If the puppy does not die—and, as we have said, 50% do—the disease often leaves its mark in the form of a severe nervous affliction, chorea, or a lingering paralysis. The disease is strictly an animal plague, however; man goes free of it. Why, then, did so many dog owners and dog lovers in the British Isles contribute generously during the

years 1923-1928 to the "Field Distemper Council," which planned to carry on investigations to determine the cause, prevention and treatment of the disease? It was because these persons cherished dogs as friends and wished to save them from preventable illness and death. The subscribers were men, women, and children from all ranks of society. They gave knowing that their donations would be used to carry on animal experiments, to do vivisection, as it is invidiously termed, in the hope of discovering the cause, prevention and cure of distemper. They were willing that dogs should be used in the attempt to save more dogs; and their intelligent perception that the few could be used to rescue the many has been amply justified. As a result of the experimentation, the British scientists developed a vaccine for prevention of distemper and a serum for its effective treatment. The vaccine, the use of which is spreading in this country, prevents distemper in 99% of instances. Indeed it is conservatively estimated that in the United States alone many tens of thousands of puppies are saved each year by means of it.

THE GREAT WAR AGAINST PAIN

The medical profession is continuously engaged in a much greater war than the World War—a struggle against the needless pain, crippling, and premature death not of men alone but of animals too. The recent great victories over disease have been largely won by means of the knowledge gained through experiments upon animals. Man is better justified in enlisting the dog in the struggle against pain and disease than he has been in utilizing his aid in actual warfare, for the dog shares in the victories that are gained.

In the United States all institutions in which animals are used for medical and biological research have adopted regulations providing for the comfort and sanitary surroundings of the animals. All operations must be sanctioned by the laboratory director. He is held responsible for

the importance of the problems studied and the propriety of the methods applied. Furthermore, the regulations require all operations likely to cause greater discomfort than anesthetization itself to be done under anesthesia and to be followed by painless death. Only the director can make exceptions to these provisions, and he can do so only in the cases in which anesthesia, or death of the animal, would defeat the purpose of the experiment.

The advances that have been described indicate that the dog has played an essential rôle in bringing relief from pain and freedom from many sorts of avoidable death. Yet men and animals still suffer and die because their maladies are not understood. The death-rate from cancer is high and this mysterious disease is even more common in dogs than in men. Recent work in England has shown that the means to cure cancer in man can be utilized for animals as well. The skin cancers of dogs yield to treatment with x-ray and radium. In this instance the means of cure was tested first on man because his need was the more pressing; but it has helped the dog too.

The loyalty, devotion, and self-sacrifice of the dog have often been emphasized. The instances that have been given prove that the sacrifices made by dogs have resulted in rich and manifold contributions to human and animal welfare. It is plain that much remains to be learned before both dogs and men shall be free of dreadful scourges which menace their health and existence. Because the dog has rendered to us and to his own kind such immeasurable benefits in the past, we turn to him now with assurance of further benefits. Of the dog used by the medical investigator, William James wrote with appreciative understanding: "If his poor, benighted mind could only be made to catch a glimpse of the human intention, all that is heroic in him would religiously acquiesce." We who know the beneficial results coming from these "intentions" should do homage to the dog through whom they come.

OBJECTIVES OF THE BRONX COUNTY MEDICAL SOCIETY

By WILLIAM KLEIN, M.D., BRONX BOROUGH, NEW YORK CITY

THE inaugural address of the President of the Bronx County Medical Society, delivered on October 19, 1932.

The trinity of objectives of the Bronx County Medical Society must be the following:

Scientific medicine, guarding the public health, and a decent economic status for the physician. Scientific medicine is the easiest of all three. The County Society has already succeeded in arrang-

ing programs that will be helpful to the general practitioner in his daily trials and tribulations.

Guarding the public health is a big problem. The doctor has from time immemorial been the one who did the work, but the credit and, if you please, the cash, went into other channels. It came to pass that the public lost much faith and good will towards the doctor. The reason was simply because the doctor was a secluded person

and organized medicine did not take the trouble to inform the public as to who did the real work. This tendency assumed rather alarming proportions in our own midst. It is high time that we come to the public and inform them of the real truth. We cannot remain cloistered any longer. To this end our Society shall endeavor to accomplish something concrete for the benefit of the public as well as for our own members.

Public health problems have assumed the aspect of a peculiar state of affairs. For the past decade or more, the tendency of City, State and National authorities has been to assume more and more the responsibility of the work that was previously done by the general practitioner. The pendulum along this line has swung too much toward paternalism. The encroachment became almost confiscatory. While the doctor was really the man who accomplished much in this field, public health became a political football which was thrown into the eyes of the public at certain periods of the year. No one foresaw the consequences that would follow the cessation of this work in times of economic depression. At present the philanthropic organizations must abandon this work. Even the City and State have come to a realization that they cannot continue along these lines. The result is a state of affairs that may have serious consequences. Our Society is ready to resume this work, and, in cooperation with certain authorities, hopes to gather the loose ends and stand by the public needs. The indigent poor

must not point a finger at our profession for not doing all we can for them. Along these lines certain definitely outlined plans are already in operation. Others are shaping themselves and with a little effort will be taken up and, I am sure, work out for the benefit of all concerned. Above all, our Society will jealously guard the contact between the family physician and the patient.

The economic distress of our profession, I believe, is worthy of serious thought. In times of hardships many plans and suggestions are forthcoming. Each is sure to bring about the millennium. It would not be wise to be rash and decide upon one course or another without due deliberation and foresight. The immediate and necessary thing to do now is to take our opportunity and cause the family that was weaned away from the family doctor by too much paternalism to revert back to him. The patient will be cared for and the tendency to pauperization must be kept at a low tide.

All this and many other future activities cannot be accomplished by your officers without your hearty cooperation. The cynical indifference and at times the unjust criticism of members are never helpful and often a hindrance. Members must understand that the Comitia Minora is doing more than the average member realizes. The open meetings are the outcome of the hard work that is done behind the scenes. I bespeak your indulgence and cooperation with Society work during the coming year.

THERAPEUTIC MASSAGE

By KRISTIAN G. HANSSON, M.D., NEW YORK, N. Y.

Read as part of a course on Physical Therapy in Traumatic Conditions, arranged by the Committee on Public Health and Medical Education of the Medical Society of the State of New York, for New York and Bronx County Medical Societies.

THE purpose of this paper is to present the fundamental principles of massage to the medical practitioner. It is not intended as instruction in this much-neglected branch of physical therapy; for such instruction I refer to Mennell's excellent text book on massage.

Massage belongs to the so-called natural therapeutics. We might trace massage back to the animals licking their injuries with their tongues. The inventive human mind substituted heat for the animal breath, our hands for the tongue, and a lubricant for the saliva. The practical application ranged from the stimulative treatment of the healthy to the laying on of hands of the dying.

It was with Harvey's explanation of the circulation that the scientific basis of massage was first explained. The next development we see in the establishment of schools for massage. The best known of these schools were in Sweden, where they were under medical control.

Much of the action of massage is directly or indirectly on the circulation. When the physiology of the capillaries is better understood, we will probably find further scientific use of massage. For practical purposes we will divide the action of massage into mechanical action and reflex action. Mechanical action is the more important of the two and may be exerted in four ways.

1. By assisting the circulation of blood through the affected part.
2. By aiding the flow of lymph.
3. By tension on structures that can be freed or stretched.
4. By pressure on the abdominal viscera.

By assisting the venous return we can lessen the blood column in front of the arterioles; thus allowing the blood to pass through the capillaries more readily. It is rather important to place the

part under treatment in such a position that one works with gravity instead of against it.

Effect on the Lymphatics.—Stagnation of the lymph is a common occurrence. The pressure in the lymphatics is even less than in the veins and therefore even less force is used in the treatment of edema or lymphatic deficiency. It is important to treat the proximal part first for the same reason that we open the nozzle of a hose before we can get any water out of it. Muscular relaxation is important. Elevation of an extremity alone can reduce an edema but in order to restore the vasomotor tone, massage must be added.

Effect on Repair Tissue.—Injury and disease are healed by the production of connective tissues. When this repair tissue is laid down in the soft parts, contractures often occur. When laid down in a joint, stiffness or ankylosis may follow. Massage will help to prevent or overcome soft tissue contraction and stiffness in a joint. The treatment of such pathologies requires forceful and penetrating manipulation.

Reflex Action of Massage.—We are familiar with the muscular spasm accompanying low back pain, fractures, and other painful pathological conditions. These are reflex contractions for protection. We may therefore say that peripheral irritation may produce reflex contraction. It seems only reasonable to believe, with Mennell, that if an irritating form of peripheral stimulation can produce muscular contraction, a sedative application can produce relaxation.

Our instinctive rubbing of the eyes and temporal regions gives relief from fatigue. The results obtained with massage in generalized fatigue of the nervous system and in insomnia must be explained by a reflex action. Lucas-Champoniere's often quoted treatment of fresh fractures is another example of how one can relax the muscular spasm by means of massage and thus easily reduce the fracture.

Hand Movements of Massage.—Stroking or effleurage is any sliding of the hand over the patient's body. We divide the stroking into superficial and deep.

The superficial stroking is the chief movement to secure reflex action and also the mechanical action on the superficial circulation. The stroking must be unidirectional, slow, gentle, and rhythmical. The direction is the same as that of the flow in the veins and lymphatics. The average stroke should take about five seconds and should be continuous and even. It is better not to touch the patient's body on the return stroke. Each hand movement should be identical: it must be firm enough so that the patient is conscious of the hand throughout the entire stroke. Rhythm is necessary to make stimulus even and to prevent jarring at the beginning and at the end of the

stroke. The time of the return stroke should be the same as the active stroke. Complete relaxation of the operator's hand is essential. Needless hurry and scratching with the fingertips at the beginning or termination of the stroke are the commonest mistakes made.

Deep Stroking or Effleurage.—This requires complete relaxation of the patient. The action is mechanical on the return flow of blood and lymph and also increases the tone of the vasomotor system. It differs from the superficial stroking in the force applied. This should be strong enough to empty the veins but not deep enough to act on the circulation in the arteries.

Compression Movements, also called Petrissage, Friction or Kneading.—These include any localized kneading of the soft tissues. The whole hand or part of it is used in apposition to the other hand. Small or large circular movements are performed with the hands as a whole, the hyperthenar eminence or fingers which work clockwise. The direction of the stroke is toward the heart but the proximal part should be treated first.

Complete relaxation of the patient is necessary. Even and steady pressure is essential and the largest surface of the hand is always preferred to a small surface; *i.e.*, a fingertip exerting strong pressure will produce a protective reflex with muscular contraction—a grave error in technique. The main effect of this movement is on the soft tissues, especially the muscles. While exercises will result in an acid reaction of blood serum due to the accumulation of waste products, heat will produce an alkaline reaction. Massage, however, will restore the normal balance of a muscle, eliminate waste products and increase fresh blood with nutrition and repair material. It will bring a sense of comfort and well-being to the muscles and thus render them more ready for new functional activity. Massage will restore a muscle after exertion much quicker and more completely than rest will.

Percussion Movements or Tapotement.—These are a series of short, rhythmical blows delivered in rapid succession. By means of applying the hands and fingers in different ways, we speak of hacking, clapping, tapping and beating.

Hacking is the most common form. Hands must be relaxed with fingers separated. Both hands are used alternately. As the blow falls, the fingers strike together. The hacking should strike the muscle transversely and will produce a mechanical compression. We can use all fingers separated or only the little finger separated from the rest or all fingers closed striking the patient's body with ulnar surface of the little finger.

Clapping is performed by cupping the hands and letting them strike the body sharply when they produce a deep, clapping sound.

Tapping is done by the finger tips and is the most delicate percussion while beating is the most vigorous form. The fist is half-closed and the palmar surface is used for beating the heavy muscles of the body. The predominant action of these percussion movements is that of stimulation, by which we mean an increase of the normal activities of the muscle. Vibration is a form of percussion. The action in this is also stimulative. The hand vibration is strenuous to perform; hence mechanical vibration is probably superior.

Rules for Patient.—When massage is given for stimulation, the first half of the day is preferable. When it is intended for repair, the latter half of the day should be preferred. No general massage should be given within one hour, at least, after a meal. The skin of the patient should be clean and the patient should be undressed—at least no constricting clothing should be worn. It is wise to make it a rule that a patient must be in the recumbent position, well supported from head to foot—for only in this position can the patient relax completely. This should also be observed when local treatments are given.

Rules for Technician.—In no other form of treatment does the patient and the technician come in closer contact than in massage. The cleanliness and neatness of the operator is therefore a necessity. Another prerequisite for a massage technician is dry and warm hands. Intelligence is, however, much more important than strength in the hands. The technician must place herself in such a position in relation to the patient that there is a minimum strain on her own body.

Lubrication.—There is little or no absorption through the skin and the various preparations in use for massage can therefore be considered as lubricants, to overcome the resistance of the skin. We have two main lubricants, the powder and the fatty acid base production. The powders should be used when the patient has a hairy skin, when there is a tendency to eruptions or when the skin is moist. The fatty acid productions should be used on a dry skin. A lubricant is not always necessary but such application requires more skill. When a lubricant has been used it should be removed by a solvent, such as alcohol.

Prescription of Massage.—Massage should be preceded by some form of heat. For local treatment, moist heat—a towel wrung out with hot water is efficient and convenient. For general

treatment, heat from incandescent lamps is more practical. Massage should be followed by exercises and for this reason a massage technician should be trained also in therapeutic exercises.

Application of Therapeutic Massage in Industrial Cases.—When the employer and the state took over the responsibility for injuries suffered by the employee in his work, we all thought that the medical relation between modern industry and modern man had been solved. This is far from true because the physical therapy clinics that were fostered by the insurance carriers were very inadequate—to say the least. It is true that modern electro-therapy was introduced in these clinics but I believe that the results obtained were worse than if only massage, heat and exercises had been given. So many patients are treated by one operator that it is impossible to do justice to anyone. When this short treatment is divided into heat, electrical treatment, massage and exercises, the patient does not get enough of anything. The physical therapy treatment becomes a farce.

At the present time when there are indications that the general practitioner may become a part in the compensation work, my plea is for honest and rational treatment of the patients. When electrical treatments are indicated, they should be used with discrimination. The general practitioner should become familiar with the advantages and limitations of massage. When injuries are sustained to the soft tissues, rest is the immediate treatment; in order to restore normal circulation massage is added and to regain normal function exercises are necessary.

If the physiological action of massage is understood, the indications are evident. The contra-indications are pathological conditions that might be spread by manipulation. Such pathologies are neoplasms, myositis ossificans and acute infections. Febrile diseases are also contra-indications for therapeutic massage, nor should patients with skin diseases be given massage. Precautions must be used in advanced arteriosclerosis, and edema, and massage is especially dangerous in phlebitis.

A well-balanced mind must be used when we employ physical therapeutic measures. When this is done, massage should be used extensively in industrial therapeutics. It must, however, be applied with intelligence rather than force and this can only be done by well-trained technicians, directed by physicians, who are able to prescribe massage with discriminating understanding.

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POLIOMYELITIS

A Plan for a Study and After-Care of the 1931¹ Brooklyn Epidemic

By MURRAY B. GORDON, M.D., BROOKLYN, N. Y.

From the Sub-Committee on Poliomyelitis, Medical Society of the County of Kings.

Read at the Annual Meeting of the Medical Society of the State of New York, at Buffalo, N. Y., May 24, 1932.

THIS is a preliminary report of a study undertaken by the Medical Society of the County of Kings of the recent epidemic in Brooklyn. The Committee on Poliomyelitis is a sub-committee of the Committee on Public Health and is composed of 3 pediatricists, 3 orthopedists, 2 physio-therapists (who are physicians), 2 neurologists, 2 public health experts, 1 pathologist and 1 hematologist.

The purpose of the study is the clinical investigation of the acute and chronic stages of the disease, the effects of various methods of treatment, the efficiency of after-care and the ultimate fate of the children.

It was decided to limit the scope to the 1931 epidemic in the Borough of Brooklyn of the City of New York, which comprises the County of Kings of the State. Its population in 1930, according to the census, was 2,560,401. There were 2,166 cases of acute poliomyelitis reported in this borough during the epidemic which lasted from about the first of July to the end of September, 1931. Scattered cases during the next three months brought the grand total from July 1st to December 31st to 2,325 cases. The death rate was about ten per cent.

In the 1916 epidemic, which lasted for about the same length of time, Brooklyn, with a population of 1,928,432 had 4,312 cases with 1,147 deaths, a mortality incidence of 26.6 per cent.

Under 1 year of age	86
One year of age	206
Two years of age	338
Three years of age	296
Four years of age	234
Five years of age	156
Six to twenty years of age.....	677
Above twenty-one years of age....	27
Age not given	146
Total of 1,316 under school age.	
Total of 1,993 under 21 years of age.	

Table 1. Age Distribution of Cases in 1931

The distribution of the cases was about the same in both epidemics and showed a tendency to be grouped more or less in proportion to the varying density of the population. There was a greater relative increase in two sections in the recent epidemic, those of Coney Island and Gerritsen Beach, probably due to an increase in the population within the last ten years. The two pin dot maps illustrate the distribution in 1916 and 1931, each dot designating a case. The colored population was apparently less susceptible

to the disease in spite of its being "sandwiched" in between the affected areas.

The age distribution in the 2,166 cases in the recent epidemic is shown in table 1.

The following procedure of investigation has been planned for the next five years:

STUDY OF EPIDEMIC OF 1931

A. Acute Stage

1. Epidemiology, number of cases, distribution, etc., as compared with that of 1916.

2. Study of all clinical records of hospitals and private physicians by means of a special form.

3. Special emphasis on the preparalytic stage—its clinical course, the evaluation of spinal fluid findings in the diagnosis and the effects of various methods of treatment employed in this epidemic; convalescent serum, transfusion from immune donor, immune horse serum and simple lumbar puncture without any other specific treatment.

4. Comparison of the subsequent course of cases diagnosed in the preparalytic stage as compared with those not seen until the paralytic stage.

5. Respirator cases studied from the viewpoint of the clinical picture, the number which died in the acute and post acute stages. The cause of death in those children who died after discharge from the hospital to be investigated to determine any possible relationship to the paralysis. Present condition of those who are still living.

6. General treatment.

B. Chronic Stage

1. Follow up of patients in hospitals and out patient department and through communication with private physicians for those receiving home treatment.

2. Comparative studies of condition on discharge and that found on periodic examination at stated intervals.

3. Non-paralyzed and recovered cases to be observed and followed up for one year after discharge.

4. Paralyzed cases to be under study for the entire period of this investigation.

5. All deaths subsequent to the acute stage to be investigated to determine any possible relationship to previous or existing paralyses. Causes of death to be reported by Department of Health (Bureau of Vital Statistics).

6. Comparison of death rate in these children and that of general population of the same age and period.

7. Final evaluation at the end of five years as

to the effect of various forms of orthopedic and other therapeutic treatment.

The following plan is to be employed in the after care and preparation for future epidemics:

Community Plan

A central bureau is to be established with representation from the following:

1. Medical profession as represented by Committee on Poliomyelitis of County Society. It is to study the disease as outlined elsewhere in this report and is to keep abreast of all new information on the subject.

2. Nursing as represented by the Visiting Nurses' Association of Brooklyn. This is an organization with a staff of 135 registered graduate nurses who are giving nursing care to the sick in their homes and health supervision to individuals or families requiring their services within the Borough of Brooklyn. The cost per visit is \$1.10 and patients are expected to pay in whole or in part or nothing at all, depending upon their economic conditions. The borough is divided into seven zones, each under the jurisdiction of a supervisor.

The Medical Society of the County of Kings has since 1924 acted through its Committee on Public Health as the Medical Advisory Board of the Visiting Nurses' Association. At that time, standing orders covering the bedside work of the visiting nurses were prepared by a joint committee of the nursing group and the county society. In 1929 the Society prepared similar standing orders for public health educational work.

As a result of this close contact the possibility for cooperative work in any public health procedure is always present. In our plan for the present study, we are receiving valuable statistical case report and other assistance from this association and expect to receive even greater help in follow-up work as outlined elsewhere in this report.

The nurses of the Visiting Nurses' Association have cared for 2,362 poliomyelitis cases in 1931 which included practically all those in Brooklyn and in the adjacent county of Queens. The organization has supplied to the Committee information as to the present condition on almost all of the Brooklyn cases.

3. The City Administration as represented by the Departments of Health and Hospitals. It is to provide all possible facilities in fighting the disease, have police powers during an epidemic and provide adequate beds for all requiring hospitalization. During the recent epidemic, about 1,300 cases were admitted to city hospitals in this borough. The City should also provide transportation facilities for all poliomyelitis victims.

A need exists in the Borough of Brooklyn for

the transportation of crippled children to and from their homes and the various clinics. We are indebted to the Transportation Committee of the Public Health Committee of the Brooklyn Chamber of Commerce for the following information. The Board of Health does not in any way enter into the field of transportation, so that when an epidemic is over the question becomes an individual problem. All of the hospitals in the borough that have orthopedic clinics and physiotherapy departments report that transportation is necessary and are now collecting data on this matter.

The Committee for the crippled of the Brooklyn Bureau of Charities is supporting one bus with chauffeur and attendant six days a week to three hospitals. Transportation to another clinic is provided for by a private individual through the Visiting Nurses' Association. The latter states that 120 children are receiving treatment at their respective homes by their nurses two to three times a week who could be treated at clinics if adequate transportation facilities were available. All in all there are about 80 children, mostly in the pre-school age, who are being transported.

Some of the transportation will be withdrawn soon because of lack of funds and the likelihood of obtaining additional funds from private sources seems remote. It is estimated that a bus operating for approximately 19 children making three trips a week and being in use from early in the morning until late in the afternoon costs approximately \$40.00 per week. On the basis of 100 children requiring transportation the expense involved for the city would be less than \$1,000 per month and at time goes on there will be a decrease in the frequency of visits.

4. Private hospital as represented by the Hospital Council of Brooklyn. Private hospitals should be permitted to take care of acute cases if they can provide proper isolation for those whose parents wish to pay for their care. Free cases should be sent to city institutions. The city should reimburse for free cases in private institutions only in the event that the particular hospital has a special accepted method of treatment which cannot be obtained in a city institution or in the event of lack of beds in city hospitals. About 500 cases were treated in private hospitals during the recent epidemic on both a free and paying basis. There are about 253 paralyzed children who are being treated at present in both city and private orthopedic hospitals.

5. Social welfare organizations such as the Brooklyn Bureau of Charities, Association for Improving the Condition of the Poor and Children's Welfare Federation should be represented.

6. The public as represented by the Chamber of Commerce, Rotary Club and other lay organizations. They should assist in providing transportation and in the raising of money for the

financing of this plan, social welfare purposes, establishment of convalescent homes, etc.

7. The Board of Education should provide proper schooling for those unable to go to school. Older children should be trained for vocational occupation adaptable to their deformities.

For over a quarter of a century there has been organized in the public schools of New York City a system of special education for physically handicapped children. Today this special school and health care includes special classes in public school buildings, hospitals and convalescent homes and also home instruction for home-bound children of normal mentality.

A thorough preliminary education is provided, giving the same training as that imparted to children in regular classes leading to graduation and High School privileges. The direct supervision and administration of the crippled and other physically handicapped children are in charge of an assistant director of health education in the Board of Education who is a physician.

The children attend graded classes in special class-room located upon the ground floor. The rooms are especially equipped with furniture which is adjustable for all types of physical defects. Classes are also conducted in practically all hospitals and convalescent homes, instruction being given to those children who are certified by their physicians as being physically fit to receive it.

Home instruction is provided for those children who are discharged from hospitals to their homes but are too helpless to attend the special classes in schools. The home teaching is given in both elementary and high school work.

The Board of Education furnishes transportation for crippled children to and from home and school but not to clinics.

The Central bureau is to have the following functions and authority:

1. To define and allocate the function of each constituent agency.
2. To co-ordinate and supervise the activities of each.
3. To list all possible donors of convalescent serum so as to assure contact at all times. This is to include all former poliomyelitis patients irrespective of the date of illness. Change of address is to be obtained through field workers of Visiting Nurses' Association or voluntary notification by patient.
4. All prospective donors to be also listed as to type of blood grouping, year of illness, name of hospital in which treatment was obtained or if treated at home, name and address of attending physician at the time. Every case must be authenticated. Every individual who is to be a blood donor must meet all the requirements of professional donors as to Wassermann reaction, general health, etc.

Procedure in Time of an Epidemic

1. On the first appearance of an epidemic, a meeting of all the constituent agencies is to be called and plans formulated for combatting it. Subsequent meetings to be held at least once a week or oftener.
2. The borough is to be divided into definite zones corresponding to those of the Visiting Nurses' Association (at present the latter organization has 7 districts).
3. The central bureau is to control the collection and distribution of all convalescent serum and the allocation of blood donors for transfusion.
4. A supervisor is to be assigned to each district who must be a physician who is capable of performing lumbar puncture and typing of blood. He is to be responsible for the activities of his district.

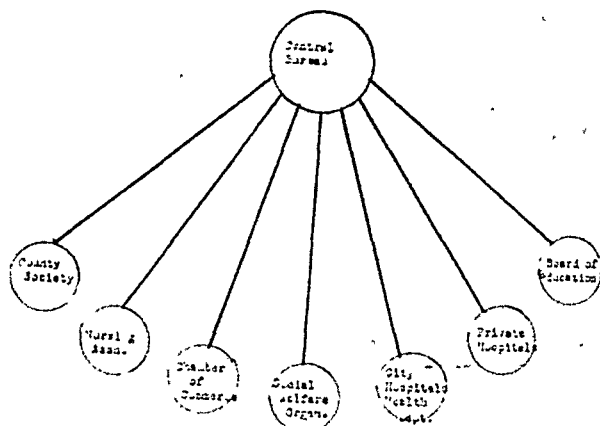


FIGURE 1.

Plan of organization of Community plan for the study and after-care of Poliomyelitis.

5. Contact is to be made immediately with each individual on the list of the Bureau.
6. Patients in the preparalytic and acute stages are to be typed for blood grouping at the same time that a lumbar puncture is done.
7. A list of all new patients is to be forwarded daily by each hospital to the Central Bureau in duplicate, the bureau retaining one and the Visiting Nurses' Association the other. A similar list of those treated at home is to be supplied by the Health authorities.

Record forms, nomenclature and designation of degree of paralysis should be standardized.

The following procedure is that employed by the Visiting Nurses' Association in the recent epidemic and may serve as an example:

"All the nurses on the orthopedic staff of the Visiting Nurses' Association of Brooklyn have special preparation for this field of nursing.

"When a new case of poliomyelitis is reported to the Visiting Nurses' Association by the Board

of Health, hospitals, Children's Welfare Federation, or other sources, the call is sent to the nurse in that district. She makes a visit in the home as soon as possible. The patient may be in the home under quarantine or may be in the hospital. In either case the nurse instructs the family to call the Visiting Nurses' Association when the child is released from quarantine or returns home. Families usually do this. During the 1931 epidemic Kingston Avenue Hospital sent daily reports to the Visiting Nurses' Association which stated all patients discharged to the family or an institution, change of diagnosis, no case and deaths. This was an enormous aid in reducing the time between the first and second visit of the nurse to the family.

"When the patient is released from quarantine the nurse plans with the mother for medical care:

"1. If the family has a private physician the patient is referred to him for examination and after-care.

"2. If during the acute illness no physician was in attendance or there is no family physician and the family is unable to pay for such service the nurse suggests that the patient attend the nearest orthopedic clinic. She makes subsequent visits to see that this suggestion has been followed.

"If the clinic physician advises massage and muscle re-education and for some worth-while reason the family is unable to take the patient to the clinic for this treatment a Visiting Nurse gives the treatment in the home. The child returns to clinic for examination. The treatments are given in the home when the patient is under the care of a private physician and when the family is unable to afford a private masseuse.

"All patients are visited at regular intervals over as long as is necessary or until discharged by the physician."

PRELIMINARY FINDINGS

Since its organization in September, 1931, the Committee has been in close contact with all of the agencies listed in the plan and has acted as the Central Bureau during this time. It has practically all of the records of the hospitalized cases. Through the Visiting Nurses' Association, the orthopedic clinics, special orthopedic hospitals and private records of orthopedists, it has knowledge of the present condition of the majority of the children. It has a record of every child who is obtaining transportation and home schooling. It has a record of all the children who have died with the cause of death.

Types of Treatment	Convalescent Serum	Transfusion from Immune Donor	Immune Horse Serum	Lumbar Puncture*	Total
Number of Cases	67	25	12	180	284
Number Paralyzed	26 (39%)	4 (16%)	6 (50%)	47 (26%)	83 (29%)
Number Not Paralyzed	41 (61%)	21 (84%)	6 (50%)	133 (74%)	201 (71%)
Number Died	1	1	0	6	8 (3%)

* Designates no other treatment in addition to this.

Table 2. Results of Treatment

"3. If a physician sent the child to the hospital and the family can no longer afford his continuance service, the association sends him a form letter, endorsed by the Kings County Medical Society, advising him of the financial condition of the family, and asking him if he wishes to attend the patient or have him referred to a clinic.

"These suggestions are made even though there may be no evidence of paralysis.

"While waiting for definite orders from the physician the nurse instructs the mother in the general hygienic care of the patient and demonstrates the means of preventing deformities of the affected parts.

It has been impossible, however, to correlate these facts as yet. It was not our intention to include any clinical studies in this preliminary report, but we will briefly refer to two procedures which were used on a large scale in this epidemic, the treatment of the preparalytic stage and the use of the Drinker respirator.

Of 1,304 hospital cases which were analyzed, 284 were admitted in the preparalytic stage. The effects of the various methods of treatment are indicated in table 2.

The administration of convalescent serum (intramuscularly, intravenously and intraspinal) was not followed by as good results as with lumbar puncture alone. Transfusion from an im-

mune donor was more effective but on the whole, only 10 percent better than with no specific treatment. On the basis of the findings, we feel that the last word has not been said on this type of treatment.

This is too small a series to permit any definite conclusions but some generalizations may be permitted of the entire group. Irrespective of type of treatment, 71 percent did not develop any paralysis and only about 3 percent died. This tends to show either that there were milder cases or that recognition in the preparalytic stage, and lumbar puncture with or without any additional treatment tend to cut down on the severity of the subsequent clinical course.

We have record of 65 cases in which the Drinker respirator was used in paralysis of the intercostal muscles. This number does not include any cases of the bulbar type. The results obtained in "respirator cases" are as follows:

Died in acute stage.....	42
Died subsequently (days, weeks or months after removal from respirator).....	7
Still living	16

All of the children who died subsequently succumbed to pneumonia. Of those who are still living, practically all have almost complete paralysis. The longest period in which it was necessary to continue respirator treatment was 9 months. This was in a boy who is still in the Kingston Avenue Hospital and requires the respirator every night.

The Committee wishes to acknowledge its indebtedness to the agencies and hospitals of Brooklyn who by their hearty co-operation have demonstrated that this plan is feasible and practical. We especially wish to thank Dr. Alec N. Thomson, Director of Medical Activities of the Medical Society of the County of Kings. Dr. Alfred E. Shipley, Chairman of the Public Health Committee, Miss Elizabeth Stringer and Miss Marion Ballantyne of the Visiting Nurse Association and Miss Sadie Engel, formerly of the Russell Sage Foundation.

SUMMARY

This is a preliminary report of the Committee on Poliomyelitis of the Medical Society of the County of Kings which is undertaking a study of the recent epidemic in Brooklyn. The Committee consists of 3 pediatricists, 3 orthopedists, 2 neurologists, 2 medical physiotherapists, 2 public health experts, 1 pathologist and 1 hematologist.

A five-year plan is advanced for community study, after-care and control under a Central Bureau consisting of seven organizations: 1. Poliomyelitis Committee of the County Medical Society. 2. Visiting Nurse Association. 3. The City Administration through the Departments of

Health and Hospitals. 4. Private hospitals. 5. Chamber of Commerce and similar lay organizations. 6. Social service and Welfare agencies. 7. Board of Education.

The procedure is divided into the following phases:

1. Study of the epidemic of 1931 in Brooklyn. This will be investigated from both the clinical and epidemiological viewpoints. All clinical records of hospitals and private physicians are to be studied on special forms, paying special attention to the preparalytic stage, the effects of various methods of treatment employed and the subsequent course of cases diagnosed in this stage as compared with those coming under treatment later.

2. All patients are to be followed up for five years or until the time of death. All courses of death subsequent to the acute stage are to be studied to determine any possible relationship to previous or existing paralyses. Respirator cases are to be especially investigated from this viewpoint. Final evaluations of all treatment and methods are to be made at the end of the study.

3. Plans for after-care call for coordination of all the agencies in the Central Bureau with the Committee of the County Society in a prominent role. Periodic examinations, transportation and schooling and means for convalescent care are to be provided.

4. The Central Bureau is to have available at all times a list of all patients for the purpose of obtaining convalescent blood or immune whole blood for transfusion. It is to be responsible for their collection and distribution in times of epidemics. The functions of the Bureau are described.

5. The preparation against epidemics from a community viewpoint calls for cooperative action of all the organizations in the plan. The procedures are described including the subdivision of the city into zones.

6. In times of epidemics, hospitals are to form "poliomyelitis teams" consisting of a pediatricist, an orthopedist, a neurologist, a hematologist and a pathologist.

An evaluation of the various methods of treatment employed in 284 cases in the preparalytic stage shows the following percentage of subsequent non-paralysis:

Convalescent serum, 61; transfusion from immune donor, 84; immune horse serum, 50; lumbar puncture without additional treatment, 74. These figures tend to show that the other methods of treatment are apparently of no better benefit than simple lumbar puncture.

Of 65 cases in which the Drinker respirator was used in intercostal paralysis, 42 died in the acute stage, 7 died within the next few months and 16 were still living at the time of report.

A CLAMP TOURNIQUET

By HARRY COHEN, M.D., F.A.C.S., NEW YORK, N. Y.

Presented before the Surgical Section of the New York Academy of Medicine, Friday, May 6th, 1932.

THERE are many tourniquets now on the market. This is readily conceivable considering the enormous amount of blood and vein work being performed daily. However, it is surprising that with this large number of tourniquets now in use no particular one has met with universal approval and the one most used is still the ordinary piece of rubber tubing tightly wound around the arm and held in place with an artery clamp. This new instrument is therefore presented and is termed "A Clamp Tourniquet." I believe that because of the advantages which it possesses this clamp-tourniquet will replace all the contrivances now in use.

As its name implies it is essentially a clamp and works on the same principle as any other clamp as for example an artery-clamp, sponge-forceps, etc. The tourniquet end or distal part of the clamp is made of flexible steel and curved to fit the average arm. There is a larger model to fit an average thigh and leg for varicose-vein work.

The clamp is made of steel, of rugged construction yet very light in weight, firm, strong, dependable, practical and as near fool-proof as possible. It is a surgical instrument in every sense of the word and can be sterilized where sterilization is necessary as when used in blood transfusions. It is positive in action. It takes but a few seconds to apply and its release is instantaneous. After the clamp is applied the pressure can be regulated by means of a fine adjustment screw. In this manner the pulse can be made to disappear or become palpable again by a few turns of this adjustment screw. It is of especial value and ideal for office use for the introduction of any solution intravenously and where assistants are limited or even absent. The clamp is applied and the vein for injection made prominent; the needle is then inserted into the vein and then by means of the fine adjustment screw the doctor or even the patient himself can release the obstruction

to the vein without disturbing the needle. The solution is then injected into the vein without the aid of any assistants.

Professional donors have remarked that the clamp-tourniquet exerts a more even pressure on the arm, does not tire or pain the arm, does not



FIG. 1.
A Clamp Tourniquet

pinch the arm, does not slip and can be tolerated a longer time without discomfort. They usually inquire why others do not use the clamp. The clamp has been employed by the technician of our hospital for the past few months for the taking blood for blood-chemistry, blood-sugars and Wassermanns. In this department it has been found almost indispensable. The clamp has also been used on the forearm to control a hemorrhage in a traumatic laceration of the radial artery. In this case the demonstration of the clamp was prompt and spectacular.

RUBELLA*

By JOHN RANDOLPH GRAHAM, M.D., NEW YORK, N. Y.

RUBELLA is generally conceded to be the mildest of the Acute Exanthematous diseases, and inasmuch as it is devoid of serious possibilities to the patient infected, the medical profession at large treat it more or less as a joke. Why, then, it may be asked, waste time in considering so unimportant a subject? Well, the explanation or excuse is that after a good many years of intimate contact with all its phases, the writer finds it about the most interesting of all the eruptive diseases; and, furthermore, he is of the opinion that from a viewpoint of diagnosis, it offers as many puzzling problems as all the other exanthemata combined. With this thought in mind, I would like to go into the details of this affection rather minutely, if I may, though I shall try to be as brief as possible.

The correctness of the assertion made above as to the diagnostic troubles afforded by Rubella, can be verified to the satisfaction of any one sufficiently interested to glance through the literature bearing on this disease; for it will be found there that since it was first accurately described about the middle of the 18th century, it has on frequent occasions figured as the storm center of heated controversy and discussion. That it has been studied with great interest, the long list of synonyms noted in the average textbook also bears witness.

Rubella can with truth be described as the creature of many moods. It can be, unmistakably, *itself*, but it also has the peculiar faculty of resembling real measles in one instance, scarlet fever in another, and then it may simulate both measles and scarlet fever in successive stages of the same attack. For those of us to whose lot it has fallen to see much of this interesting disease, the varying ways in which it presents itself to the eye of the observer, make it a very fascinating subject for study, and it has always been particularly hard for the writer to understand how such a profuse and intense cutaneous disturbance as is so frequently seen in rubella, can at the same time be so ephemeral. A characteristic feature of this malady, however, is that the most marked of the rashes often disappear over night.

Rubella was made a reportable disease by the Board of Health of New York City in 1904. The number of cases varies greatly year by year, the largest number recorded being in 1917, when 8,556 reports were registered, a total of 2,000 more than the scarlet fever reports for the same year. Naturally, because of its extreme mildness, a great many cases never get in the records. A few years ago the Division Chief in one of the boroughs of the city noticed that an unusual num-

ber of rubella cases was being reported, and that at the same time there was a notable drop in the scarlet fever figures. Recalling the fact that there was a strong tendency to error in differentiating between these two diseases, he inaugurated a follow up campaign, but found nothing to indicate that an abnormal number of mistakes in diagnosis were being made. With rubella fairly prevalent each spring, and with the notable decrease in recent years of the incidence of scarlet fever cases, accompanied also by a marked lessening of the severity of the symptoms in this disease, there has been added a new and interesting feature to the matter of eruptive disease diagnosis. It may be stated, in this connection, that a good part of the work of the Department of Health diagnosticians is along the line of rectifying errors of diagnosis, resulting from the similarity of the symptoms found in rubella and scarlet fever.

Unquestionably, instances in which measles is confounded with rubella are frequent enough, but the short period of isolation and the absence of rigid supervision by the department in the former disease, result in comparatively few requests for revision of diagnosis. A striking fact in base hospital service, as experienced by the writer, was that although there was considerable rubella, characterized, let me say, by eruptions that were wonderful to behold, there was almost a total lack of recognition of the true nature of the affection by the majority of the medical officers.

The opinion that rubella is a mild form of scarlet fever or a modified measles is met with from time to time. The fallacy of such an idea is readily proven by the fact that this disease reproduces itself exactly after a different period of incubation than that which precedes scarlet fever or measles.

Rubella is probably spread by the secretions, and, perhaps, by the exhalations from the nose and throat. It is not as contagious as measles, but more so than scarlet fever. The exciting organism has never been isolated. It occurs in this locality, only in the period from January to June inclusive, and I would personally view with suspicion a diagnosis made at other times in the year. To be more exact, our annual visitation usually starts about March 15th, the outbreak occurring very suddenly; it gains in force for about two weeks, holds its own for six weeks or two months, and then subsides as suddenly as it began. It is more prevalent in school children, between six and fifteen years of age, than at any other period of life. It is exceedingly rare under one year, and adults appear to be quite immune except when gathered in camps, institutions and

* Read before the West End Medical Society, March 26, 1932.

other places where grownups are closely associated with each other.

Symptomatology: The incubation period appears to be the longest found in any of the eruptive diseases—between two and three weeks. Often there are no prodromes, the child frequently going to bed perfectly well, and awakening in the morning with the face peppered with the rash. Generally, though, the patient will complain of a little headache, malaise, drowsiness, and perhaps may sneeze a few times before the rash appears. This rash is first noted behind the ears, on the scalp and on the face, being particularly prominent around the mouth, a point, you will observe, of great value, when it comes to considering its differentiation from scarlet fever. It spreads with great rapidity and involves in quick succession the neck, trunk and extremities, the whole movement rarely taking over 24 hours to complete its development. The eruption fades with about the same rapidity that characterizes its appearance, and it is not uncommon to find a brilliant rash on the legs, with the face and neck entirely clear, and the intervening areas clearing. The initial character of the rash is macular as a rule; it is also spoken of as slightly papular. This latter characteristic is difficult of detection, however, while the macules are discrete, but when the rash becomes confluent, the elevation becomes quite distinct. The macules range in size from that of a pinhead to that of a split pea, the lesions of the latter size commonly predominating. The edge of the macule when fresh is clean cut, the larger lesions having an oval shape and in the early life of the rash, the macules appear to be set on the skin, which seems very white by contrast. It should also be stated that there is another type of eruption in this disease, not merely so frequently observed as the macular form, just described, but it occurs often enough to cause much trouble. I refer to the scarlatiniform type of rubella. In this type, the scarlet like eruption very early and quickly spreads from pinhead sized macules as nuclei. You can generally detect these small macules outlined in the fresh rash, giving it a punctate appearance. This form I believe to be just as truly rubella as is the more common macular form. In this connection, we should not lose sight of the fact that there is always a tendency for the lesions in this disease to coalesce, even where the eruption is primarily of the discrete macular type, and a superficial examination in such cases may also lead one to make an erroneous diagnosis of scarlet fever. Let me remind you that coalescence of the rash in rubella does not indicate any undue severity of the attack, as a similar condition in real measles frequently does.

The color of the rash is light pink, and when fresh is much lighter than the fully developed

rash of either scarlet fever or measles. There is no real conjunctivitis, but the conjunctiva may be slightly injected. The face looks puffy, the eyelids especially so; the eyes are watery, the nose runs and the observer gets the impression that the patient has just been crying. There is no photophobia; there is sometimes a slight hoarseness and a hardly noticeable cough, and there is always more or less sneezing at the onset of the attack.

Examination of the chain of lymphatics behind the sterno-mastoid muscle reveals a very significant condition. These glands while much enlarged, are practically painless, and the individual glands stand out prominently, being outlined to the touch as though they were beads arranged under the skin. A large isolated gland is always found at the tip of the mastoid process, and this is, I believe, pathognomonic of the disease. It is often stated by adults that they noticed this enlarged gland twenty-four hours before the appearance of the other symptoms, and it is more than likely that it is a regularly premonitory disturbance. Other groups of lymphatics may be enlarged, though nothing unusual is noted about the gland at the angle of the jaw.

The throat is red but does not call forth complaint from the patient. The uvula is congested and this congestion spreads up on the soft, and sometimes on the hard palate. On either side of the median line of the palate may be seen *Forscheimer's* spots. These consist of small, dark red granular bodies on the lighter mucous membrane, or as *Forscheimer* himself describes them, "small discrete dark red, but not dusky papules." These spots make their appearance early in the attack, and fade with the rash. The tongue is lightly coated and may possibly display some red papillae. The coating in some instances clears off, leaving the tongue a pale red, and this change naturally adds to the perplexity of the physician, who possibly has already been in doubt as to whether he is dealing with scarlet fever or rubella. It can be affirmed in this connection that the rubella tongue is never the clear, moist, beefy-red tongue, studded with papillae, which is well known as the *strawberry* tongue of scarlet fever.

The temperature will range between 99 and 101 degrees, seldom higher. Furthermore, it does not outlast the full development of the rash. The pulse is moderate, often not at all increased in rate, a notable fact, considering the marked cutaneous disturbance. Very rarely vomiting is said to occur, but this is a symptom which, when present, may well furnish food for reflection as to the correctness of our diagnosis. No emphasis seems to be laid in the literature bearing on this subject upon the itching which is a concomitant of the rash, but the writer well remembers the intolerable pruritus and the intense burn-

ing of the skin which tortured him when he had this disease as a child.

Desquamation is not often seen; when observed, it is fine and branny. In some of the intense eruptions, however, it can be extensive and profuse. The question of second attacks frequently comes up in this, as in the other acute exanthemata. The writer for many years checked up on the erroneous differentiations in the realm of eruptive diseases for the Department of Health, and while doing this work he observed the frequency with which non-contagious eruptions were diagnosed as one of the contagious diseases: it requires, therefore, a lot of corroborative evidence to make him believe that second attacks of rubella or any other eruptive disease are at all common.

As to the blood picture, it is said that the leucocytes are increased in number and the eosinophiles are diminished or absent during the stage of eruption, and I have seen it stated that there is a definite increase of lymphocytes, even preceding the appearance of the rash.

Sequela and complications are rare. As in the other infectious diseases involving the skin or the respiratory tract, the kidneys, ears and lungs may be attacked, but I have personally never seen or heard of a single instance of such complications in rubella.

Diagnosis: We may reasonably expect to find the following combination of symptoms:

1. Sudden onset, with signs of a cold in the head, the eyes being suffused and the nose running.
2. Moderate rise in temperature and possibly in the pulse rate.
3. Throat congested, but not troublesome, and the palate studded with Forscheimer's spots.
4. A rash, generally macular in character and pink in color, appearing early, spreading rapidly and fading just as rapidly. It markedly involves the face, is especially prominent in the circumoral area, and has a strong tendency to coalesce.
5. A much enlarged post cervical lymphatic chain, with one gland standing out prominently at the tip of the mastoid process.
6. The patient withal, is obviously not very sick.

Such an association of symptoms means rubella, But in addition to the picture drawn here, to those familiar with the disease there is even in atypical attacks an indefinable something which in most instances gives one his clue at a glance.

In discussing differential diagnosis, it may be said that the various toxic rashes and indeed scarlet fever and measles can usually be eliminated by careful study of the case. The latter

two diseases, however, are so frequently mistaken for rubella that they call for special consideration. Taking up first,

Scarlet Fever: The fact must be emphasized that the modification of the character of the attacks of scarlet fever in the last few years, taken in conjunction with the undoubted similarity of many of its signs and symptoms to those found in rubella, has laid an added burden of vigilance upon the conscientious diagnostician. In scarlet fever, however, the onset is liable to be more stormy and may be accompanied by vomiting; the throat is invariably truly congested; the pulse very much increased in rate, in proportion to the symptoms present; the temperature is higher, and drops by lysis as a rule, in contrast to its rather sudden fall in rubella; the rash is distinctly punctate, does not markedly involve the face, there is circumoral pallor, and the eruption fades deliberately; the lymphatic gland at the angle of the jaw is always enlarged and generally tender in scarlet fever, but there is no involvement of the post-cervical chain, nor of the gland at the tip of the mastoid, so characteristic of rubella; finally, desquamation always occurs in scarlet fever.

Measles: The principle points to bear in mind in differentiating measles from rubella are as follows: There is in measles a prolonged prodromal period; the rash is much slower in appearing, in developing and in disappearing; the patient is quite evidently ill, the constitutional disturbance being severe; there is marked conjunctivitis and a distinct bronchitis; there is a leucopenia, and last and most important, there is the Koplik spot, the most outstanding and dependable single sign in the whole field of eruptive diseases.

In conclusion, let it be admitted that in spite of all that has been said, and even though you may be the happy possessor of a practical experience that extends over many years, you will more than once meet with a case of eruptive disease, the identity of which at first glance appears shrouded in mystery. It may resemble rubella, or scarlet fever, or measles; or it may exhibit signs characteristic of each of these affections, and one cannot definitely tie himself down to a decision. Dr. William L. Somerset, at whose feet the writer sat for many years, and from whom he learned practically all he knows about this branch of medicine, very wisely recommended that in such a situation the patient should be isolated over night and looked over again next morning. This harms no one, and it is remarkable how diagnostic difficulties, that appear insuperable today, can vanish into thin air by tomorrow.

ALOPECIA ASSOCIATED WITH HYPOTHYROIDISM IN A CHILD

By I. NEWTON KUGELMASS, M.D., NEW YORK, N. Y.

From the Department of Pediatrics, the Fifth Avenue Hospital, New York

ALOPECIA is a rare condition in childhood requiring systemic study for diagnosis and therapy. It may be a congenital developmental anomaly characteristic of certain families or it may appear as an early manifestation of progeria or infantilism. It may be a manifestation of thyroid dyscrasia early in infancy or approaching puberty. It may be the only clinical expression of lues or the end effect of an infectious disease; it may be the result of a post-inflammatory fungus infection or a non-inflammatory microspore. It is never an expression of nutritional deficiency as in deprivation of vitamin G in experimental animals or of an anxiety neurosis as is the case in adults.

General alopecia of the scalp in a boy of nine is indeed a rarity. It may be the result of an anomaly of development but usually the loss of hair over the occiput is partial and acquired. In luetic the anterior of the scalp is frequently free from hair; in severe seborrhea of the scalp the loss of hair may be extensive; in acute infectious diseases it is less likely to affect the hair in children than in adults; in hypothyroidism the hair is scanty and dry and brittle. Fungus infections are the more common offenders, favus forming light yellow flakes around the hair follicles which on healing result in scarring and even permanent baldness without affecting the rest of the body. Microsporon occurs on the scalp without inflammatory changes producing grey scaly foci. The hair becomes dull, breaks readily and the alopecia is necessarily transient. The non-inflammatory trichophytosis spreads readily amongst children. It is characterized by small desquamating foci from which the hair protrudes.

When hair is shed after reaching the limit of its existence the epithelial cells surrounding the hair papillae continue to multiply in the formation of new hair. Alopecia results from a failure of the blood vessels of the papillae to furnish the required nutrition or from the dysfunction or destruction of the epithelial cells as a result of failure of endocrine and sympathetic stimuli essential for their functioning. Systemic disturbances must needs be included in a fundamental consideration of the etiologic factors involved in the progressive development of alopecia in children. It must be determined to what extent the normal growth stimuli are interfered with before the problem is considered local in origin.

R. F., an Italian boy, nine years of age, began suddenly to lose his hair from the posterior aspect in June, 1927. This loss continued to

become manifest in well defined areas throughout the head until complete alopecia occurred in the course of that year. Treatment for two years in various dermatological clinics by local applications and ultra-violet irradiation was without avail. At a general hospital the child was considered as a glandular problem with an undescended testicle as the etiological factor. This was corrected surgically without any subsequent effect upon bodily growth of hair. Each new therapeutic procedure proposed, whether external or internal, seemed to bring about a fine fuzz over the calvarium but no actual continued growth of hair.

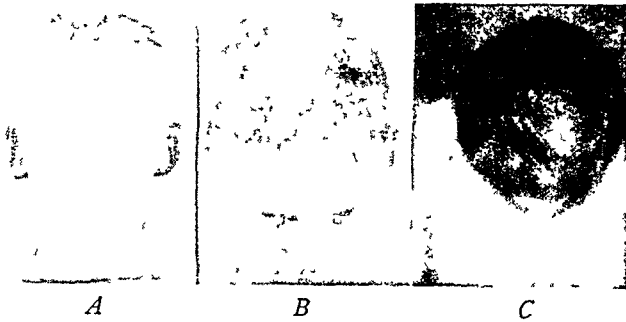
We have approached the problem of alopecia in children from a systemic standpoint with striking results. Physical examination of the boy, first seen in August, 1931, showed nutritional dystrophy, coarse sallow skin and complete absence of hair from the scalp, eyebrows, armpits and genitals. The nasal breathing space was restricted, the mucous membrane congested and subsequent roentgenographic evidence of a sinusitis. The mucous membranes were pale and dry, the pharynx injected. There was a marked cervical and moderate general lymphadenitis. The thyroid was not palpable. The heart normal but slowed, the lungs clear, the spleen palpable at the costal margin, the liver not enlarged, the abdomen distended with gas and the musculature flabby. The hemoglobin was 65 per cent, the red cells 3.0 million, the white blood cells and differential normal. The blood sugar 78 mg. %. The basal metabolism minus 14. The complement fixation test negative. Smears for fungi negative.

The boy was put on a raw base-forming diet including raw milk, eggs, fruits, vegetables and meat reinforced with cod liver oil at each meal. The glandular therapy consisted of anterior pituitary (Zondek) 1 cc. subcutaneously and anterior pituitary 5 grs. and iodized thyroid $\frac{1}{2}$ gr. offered in ice water between meals. The anemia was corrected by the administration of 10 grains of ferric ammonium citrate, 1/100 of a grain of cobalt chloride and 1/100 grain of copper chloride. The scalp was massaged with cod liver oil at bedtime. Improvement was observed within a month, and a complete growth of hair was acquired after four months of the treatment.

The old teaching of Hebra considering the skin picture as a complete entity apart from the functional physiology of the rest of the body no longer maintains. The skin is the largest organ of the body and reflects in the thousand hair follicles to the square inch a multiplicity

of systemic factors. The case presented is illustrative of a dermatological error corrected by pediatric approach in the examination and treatment of the whole child.

Alopecia areata is a self-limited disturbance. But generalized alopecia associated with hypothyroidism only results in recovery after the readjustment of the endocrine mechanism. Four years of alopecia without semblance of acquisition of new hair following local treatment in contrast with the regaining of bodily hair fol-



THE APPEARANCES OF THE SCALP:

(A) One month after systemic therapy; (B) Two months; and (C) Six months.

lowing a systemic therapy for four months is certainly conclusive of the etiologic relationship of the alopecia with the condition of hypothyroidism.

The first determination of the basal metabolic rate gave a result of minus 19 while the second one taken before glandular administration gave a minus 14, as given above, and after four months of therapy the basal rate rose to plus 12. While the initial basal metabolic rate was not markedly low it has significance when interpreted with the clinical manifestations presented by the boy on first examination. While a basal metabolic rate of minus 14 in another boy of 13 would be at the border line of so-called low normal, obviously no such evaluation could be given

this problem. A single laboratory or clinical fact never determines the status of a clinical problem. The fine textured hair which was first lost at 9 was subsequently replaced by dry, coarse, and sparse growth which fell out again following local therapy. It was not until the combination of thyroid and pituitary treatment was instituted that a complete crop of hair was regained. Adolescence undoubtedly accelerated the rate of recovery. The present basal metabolic rate is plus 12.

The boy's activities, behaviour and psyche have undergone considerable change paralleling the six months of treatment. During the previous four years he had no considerable interest in activities, failed to participate in play with his friends, became markedly retarded in his school work, complained of cold to the extent of excessive interest in radiators and was not observed to perspire at all in comparison with previous performance. These negative developments have been transformed to the extent that the boy is now radiant, active and adept at his school work.

The raw base-forming dietary instituted as part of the therapy was based upon the rôle of the nutritional minutia in the maintenance of the metabolism of end tissues of the body. We have come to appreciate that during food deprivation the gross constituents of the dietary provide for the adequacy of the parenchymatous organs at least for the time being. During such periods of dietary limitation the end tissues—hair, nails, teeth and skin—undoubtedly suffer from lack of mineral minutia which have been demonstrated necessary for their function. It is for this reason, for example, that during illness there are kinks in the hair and ridges in the nails and teeth as indications of deprivation of minutia in minerals. It is on this ground that raw foods were advocated for the continued inclusion of those mineral elements that are most apt to be missed in the daily dietary.

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Annual Meeting, April 3-5, 1933, in the Waldorf-Astoria, New York City

THE PHYSICIAN AS A HOST

What is the secret of a doctor's well deserved popularity? One answer is found in this paraphrase of a full-page advertisement in the leading New York dailies

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MEDICAL RESEARCH ON LIVING ANIMALS

The New York Anti-Vivisection Society and the New York State Committee Against Vivisection have announced an intensive effort during the next session of the State Legislature to pass a bill to prevent the use of dogs in animal experimentation. Their action is doubtless based on sincere sympathy for dogs engendered by a personal sentimental attachment to one or more of them. However, stripped of emotionalism and reduced to essential elements, the members of the New York State Legislature must decide this question in a common sense way as to what is best for the public and the State.

One alternative is to retain the existing law and the universally accepted rules of procedure which have proven quite sufficient to prevent animal experiments in unauthorized places or cruelty in any form; to uphold the tradition of research and education established the world over by universities of all lands and scientists of all branches these hundreds of years; and to allow untrammelled the continued progress by research workers in the interest of public health and medical progress.

The other alternative is to yield to the desires of the emotionalist, and to stultify the very men who are responsible for the brilliant achievements which have lessened human suffering and prolonged human life, and to ignore the prominent leaders of education and science who are the heads of our universities and constitute boards of regents.

If the citizens of our commonwealth are put

in full possession of the facts, there is but one logical conclusion possible and that is, that the scientist must not be hampered in his work in any way.

In the meantime, however, these well meaning people are flooding the State with arguments based on sentimentality and endorsed by a few physicians evidently activated by similar emotions.

The outstanding facts of uncontrovertible achievements in medical progress due directly and solely to animal experiments on dogs, and for which purpose no other animal was suitable, are well set forth in an article on page 1354 of this Journal.

This present effort to restrict research and hamper progress is not new. In the past the medical profession of New York State has fought this battle in the legislature unaided, and we have had little difficulty in convincing the representatives of the people of the merits of our cause.

Now that the proponents of the restrictive measure are using means other than those concerning the need of the dog in research, namely, political activity having to do with the election or defeat of candidates for the legislature, we must appeal to educators and influential citizens, not for purposes of political activity but solely for the dissemination of the truth.

It is the duty of the members of the Medical Society of the State of New York to do this, and we plead for your help.

COMMITTEE ON MEDICAL RESEARCH.

LOOKING BACKWARD

This Journal Twenty-Five Years Ago

X-Rays—The leading article in this Journal of December, 1907, is entitled "The present status of the Roentgen Rays," by Dr. Arthur Holding of Albany, who says:

"The Roentgen rays are still the x - or unknown rays, although the generally accepted theory is that the wave lengths of this light are far shorter and their rate of vibration far more rapid than those of ordinary light. These short waves of light are destructive to the human organism, as witnessed by the development of carcinomata, and azoospermia among the x -ray operators. Therefore, today, the radiographer avoids all exposure to the rays. This has led to the passing of direct fluoroscopic examination.

"When we remember that the truest of all passions is blind, it is not to be wondered at that 'enthusiasm' has sometimes reported a recession of symptoms as a cure, or mayhap, has reported an improved case as cured. I have known of such instances among specialists other than elec-

tro-therapeutists. But it is today generally known that:

"1. The x -ray causes degeneration of epithelial tissues, especially those of the skin and its appendages.

"2. The x -rays cause endarteritis.

"3. The x -rays cause destructive of lymphatic tissue.

"Furthermore, the x -rays have proved curative in intractable or inoperable cases of tubercular adenitis, pruritus, acne, sycosis, lupus vulgaris, lupus erythematosus, spleno-myelogenous leukæmia, pseudo-leukæmia, and eczema. The rays are a specific cure for epidermoid cancers. While we are not willing to say that the x -rays are a specific cure for all cases of cancer and sarcoma, we must admit that they do have a beneficial effect in cases of malignancy to which the rays can be applied directly. It is our duty to increase this action rather than to deny its presence."



MEDICAL PROGRESS



The Treatment of Burns in Out-Patients with Reinforced Tannic Acid Dressings.—Over a period of six months J. H. Hunt and P. G. Scott have treated a series of 63 consecutive cases of minor burns, in the out-patient department of St. Bartholomew's Hospital, with a modification of the recognized tannic acid method. If the crust formed by the usual method is covered with a dressing and bandage it tends to soften, become septic and detached. This difficulty has been overcome by reinforcement of the crust, either with a thin layer of gauze, gauze and collodion, or collodion alone. In the majority of second and third degree burns the method of choice is to paint the burned area with a 5 per cent solution of tannic acid in water, and apply a dressing soaked in the same solution. No anesthetic is required. Next day when the dressing is removed the burn will be found covered with a thin brown crust, and the dressing is repeated. On the third and fourth day this crust is reinforced with collodion. The surface then remains hard and dry and the crust separates toward the end of the second week, exposing the new epithelium which has grown beneath it. For the first aid treatment of all burns and scalds the authors urge the use of dressings soaked in a 5 per cent solution of tannic acid in water (20 grains of the powder to an ounce of warm water). Vigorous cleaning and scrubbing are avoided, as these do more harm than good. The tannic acid solution is applied with a soft camel-hair brush instead of a spray, because with the brush exudates are wiped away, allowing the tannic acid direct access to the burned surface. The effect of reinforcement is entirely mechanical. It prevents separation of the crust at the edge where it is in contact with the skin and its organisms. The results with this procedure have been very encouraging, especially in burns of the face and hands which often give so much trouble.—*The Lancet*, October 8, 1932, ccxxiii, 5693.

Treatment of Malignant Diphtheria with Glucose and Insulin.—As the death rate from diphtheria in Leeds had been steadily rising, and the type of disease had become much more severe, with the result that treatment with antitoxin was often disappointing, Hester E. de C. Woodcock decided to attempt an auxiliary line of treatment by giving intravenous glucose together with intramuscular insulin. This treatment was suggested by Schwenker and Noel (1930) as a result of their researches into the disorders of carbohydrate metabolism occurring in diphtheria. The routine procedure consisted in giving, on admission, 20,000

units of antitoxin intramuscularly. Two or three hours later 20 to 40 c.c. of a 50 per cent solution of glucose in distilled water were given intravenously with 20,000 to 40,000 units of diphtheria antitoxin intravenously and 10 to 20 units of insulin intramuscularly. This treatment was followed by daily doses of antitoxin until the membrane began to clear, or at any rate ceased to spread. In the first few cases the glucose and insulin were given only occasionally, while in the later cases this medication was repeated daily. In all, 25 cases were treated and the results compared with 11 cases of similar severity in which antitoxin alone was used. The figures show that in the glucose-insulin cases the mortality rate was 68 per cent, in the antitoxin cases 81.9 per cent. In the glucose-insulin series the paralysis rate in the fatal cases was 29.4 per cent, in the toxin antitoxin series 33.3 per cent. In the recovered cases of the glucose-insulin series the paralysis rate was 87.5 per cent, in the antitoxin cases 100 per cent. While the series is too small to be of statistical value, the impression was that, after treatment with glucose and insulin, the discomfort and distress, even in patients who succumbed rapidly, were relieved. The author believes the treatment is worth while from this point of view alone. She emphasizes the fact, however, that continued intravenous medication is difficult and frequently impossible. The veins of small children are not always easy to negotiate, and in severe cases of all ages the veins collapsed very readily, especially as the disease advanced.—*The Lancet*, October 22, 1932, ccxxiii, 5695.

Diathermy Treatment in Nephritides.—Fresh interest in the treatment of nephritis by diathermy, says H. Cohen, has recently been aroused by the good results reported by Ewig and Gantenberg in acute cases. Opinions differ, however, as to the indications for the treatment, some authors recommending its use only in acute cases, others in chronic, and still others in both types of cases. Cohen accordingly treated 15 cases of nephritis with diathermy, among which were 1 acute case, 5 sub-acute cases, 8 chronic cases, and 1 case of nephrosis. The method employed was to give on every other day a 2-hour diathermy treatment with 3-3.5 ampères, using one electrode of 30.30 cm. on the abdomen and the other of 15.20 cm. on the kidney region, the patients having been previously prepared by bed rest and proper diet. In neither the 8 cases of

chronic nephritis nor in the single case of nephrosis was an effect worthy of note observed; but in 4 of the 5 subacute cases (2 of which are outlined by the author), the impression was gained that the course of the disease process was possibly shortened somewhat. In the single acute case, which was in a very critical condition following an angina attack, with complete anuria for 26 hours, the patient died in a state of uremia and cardiac insufficiency on the day following the treatment. It is extraordinarily difficult to form any exact judgment of the effect of diathermy upon subacute nephritis, since even with the use of such measures the course of the disease is very variable. If we take into consideration the fact of the rest in bed and the special diet, the judgment expressed here might be regarded as a more or less subjective one. It is clearly objective, however, in the cases of chronic non-hypertonic nephritis and in the case of nephrosis, in which, despite months of treatment administered, no visible effect upon the course of the disease could be observed. It is Cohen's opinion, on the basis of his own experience, that diathermy finds its chief indication in cases of delayed recovery from acute nephritis. —*Deutsche medizinische Wochenschrift*, September 30, 1932.

Arterial Resection and Ligation.—To test the correctness of his impression that resection of important arteries is better tolerated than their ligation, Pierre Stricker undertook a series of experiments in rabbits. For purposes of comparison the local peripheral temperatures were ascertained between the claws, after careful drying. After ligation of the principal artery of one paw and resection of the same artery on the other, a marked transitory drop in temperature was observed in both paws, but for some 2-3 weeks the temperature remained higher on the resected than on the ligated side, before equilibrium was restored. Thus in one animal the difference was 0.6°F . a few hours after operation, 1.9° 24 hours later, and 4.4° on the second day, in favor of the resected side, which for 10 days remained above 85°F ., while on the ligated side it was always below that figure. By the third week the two curves had merged in one. When operation was done lower down, on the femoral arteries, equilibrium was restored by the 15th day, but when done higher up, on the common iliac, it resulted in death of the animal from ischemia in 2-3 days. Hence it was necessary for this test to use 2 animals, tying the common iliac of one paw in one and resecting it in the other. The ligated animal developed moist gangrene and died on the 15th day; the resected one suffered only a dry gangrene of the extremity, and continued in excellent health. When two

younger rabbits were used for the same experiment, resection was so well tolerated that the animal did not even limp and there was merely a slight paresis of the claws for a few days. The difference in local temperature was 4.8° on the third day, 2.3° on the eleventh, and none after a month. The ligated animal, on the other hand, developed gangrene and had to be killed on the eighth day. In a third experiment, also on young rabbits, the resection caused so little disturbance that 3 days after operation one could not tell which side had been operated on, with a differential temperature of only 0.2° in favor of the non-operated side, whereas the difference in the ligated animal varied between 9.6° and 5.8° , an abscess developed and death ensued on the twentieth day. The difference of temperature between the two sides remains appreciable much longer in the ligated than in the resected animal, sometimes for as much as 8 weeks in the former, as against 1 week in the latter. These experiments show afresh the role of the periarterial sympathetic and the benefits obtainable through its suppression by arteriectomy. —*Lyon chirurgial*, September-October, 1932.

Treatment of Human Anthrax with Creolin.—According to Warringsholz, who is a veterinarian, human anthrax is found sporadically in all countries. In Germany it reached its low point in 1919 with 18 cases and 2 deaths, its high point in 1928 with 252 cases and 22 deaths, to fall again in 1931 to 118 cases and 11 deaths. Although for the last 30 years creolin has been extensively employed by veterinarians in their treatment of anthrax in cattle, Warringsholz, despite its good results, had failed until 1929 in his efforts to persuade physicians to make use of it as their first treatment in their human cases, owing to its supposed toxicity. Since that year two cases, of which he reviews the histories, have come to his notice in which a physician has consented to administer creolin externally and internally, as soon as the diagnosis was made. In an adult running a high temperature, the dosage should begin with an even teaspoonful (6-8 gm.) every 2 hours, preferably in cream on account of its disagreeable taste. Gelatin capsules are inadvisable, since their action is too slow in a disease where speed in treatment counts for everything. As the fever declines the intervals may be lengthened to 3 hours, giving a total of about 70 gm. a day, or, if proportioned to body weight, about 1 gm. per kilo. It is important not to discontinue treatment too early, since relapses are frequent. Administration should be continued for at least 1 week after the temperature has become normal. Creolin is superior to serum in its action and is much cheaper; it is without toxicity,

even in such large dosage as is called for in anthrax. For this reason it can be administered prophylactically in cases regarded as suspicious. It has the further advantage of being easily obtainable in any drug store, or if necessary a veterinarian can be appealed to for it. To those who might offer the objection that 2 cases prove nothing, that the first cure may have been due to a previous injection of neosalvarsan, and that the second case ran a mild course and would have recovered anyway, Warringsholz replies that in the first case, which was very severe, neither a drop of temperature nor any indication of improvement had followed the neosalvarsan injection, and in the second the appearance of fresh signs of inflammation a week after the carbuncle of the right arm had seemingly healed, would indicate that the case was not so mild after all. The thousands of animals cured by creolin in the course of the last 30 years afford sufficient proof of the specific action of creolin in anthrax. — *Münchener medizinische Wochenschrift*, September 16, 1932.

The Dangers of Serotherapy.—On the basis of 3 personal cases, G. Combi, writing in the *Schweizerische medizinische Wochenschrift* of September 10, 1932, emphasizes the need of caution in the use of serum injections in cases in which infection is merely suspected. That such injections should not be given lightly without assured data is evident from the occasional cases that have been published in which symptoms of paralysis have followed their administration. In most of the cases reported antitetanus serum, administered prophylactically, has been the offender; in some cases, antidiphtheria, and in exceptional instances antistreptococcus, antigonococcus or antituberculosis serum has been responsible. Practically all cases observed have been in adults. The usual order in which symptoms appear is urticaria, arthralgia, and, after a few days, paralysis. The most frequent localization is the brachial plexus, with violent pains in one or both shoulders, motor disturbances, functional impotence, and with muscle atrophy as a constant and dominating symptom, the reflexes being lost or greatly diminished, whereas sensibility is little if at all affected. It is the general opinion that the serum responsible for the disturbances acts through the heterogenous protein it contains. While the nature and mechanism of the lesions are not well established, the sudden appearance of the symptoms and the presence of urticaria make it probable that there is a vascular disturbance within the nervous tissue, but whether this is due to hemorrhage, thrombosis, interstitial edema, a simple congestion of the connective tissue, or some other mechanism is not yet clear. The

predilection of the paralysis for the superior radices of the brachial plexus seems due to a mechanical factor which Sicard found in the anatomical course of the nerve roots to the dura mater of the brachial plexus; these, being the shortest in length, would be the most readily compressed by edema of the epidural space. The subject is of some importance in its medicolegal aspect. If a paralysis develops in the course of a treatment, its relation to the serum is evident; but if, as is usually the case, the paralysis appears after a prophylactic injection of antitetanus serum, insurance companies may consider themselves obligated to compensate only for trauma, and not for the results of preventive measures.

The Spine Sign in Poliomyelitis.—L. Charles Rosenberg calls attention to the value of the spine sign in the preparalytic stage of poliomyelitis. The sign consists in definite resistance to anterior flexion of the spine, but unfortunately it is not present during the period of systemic invasion before the beginning of meningeal irritation. The sign can be elicited in an older child by standing him on the floor and asking him to bend over and touch his feet without bending the knees. At the bedside of a child with feverish symptoms suspicion will be aroused by noticing that the back is held rigid when the patient is told to turn over. In the case of an infant lying prone the feet may be grasped by the physician in one hand while the other hand is placed on its back; then the limbs are swung from side to side and are elevated, causing extension of the spine. With the physician's hand under the abdomen, upward pressure may be made while the legs are lowered, thus causing flexion of the spine which will be resisted if the maneuver causes pain. — *Archive of Pediatrics*, October, 1932.

Acute Bacterial Endocarditis.—Cadis Phipps reports the results of a study of 44 cases of endocarditis resulting from various forms of bacterial invasion. Of these 21 cases were due to *Streptococcus hemolyticus* of which 17 were in males and 4 in females, the ages of the patients varying from 11 to 74 years. In about 60 per cent of the cases there were evidence of old lesions, especially arteriosclerotic changes in the endocardium. In 11 cases, 9 male and 2 female, with ages from 2 to 70 years, the infecting agent was a staphylococcus. *Bacillus coli communis* was responsible for 5 cases, 3 male and 2 female varying in age from 13 to 75 years. In 2 cases, both females, aged 21 and 26 years, the gonococcus was the infecting agent. The meningococcus was responsible for 2 cases, one male and one female, age 20 and 21 years. One case of *Staphylococcus albus* was in a girl of 17 years. In one

case in a man of 31 years, ¹¹¹ with pneumonia, the infection was a double one—*Streptococcus hemolyticus* and *Staphylococcus aureus*. Finally, there was another case, in a man of 45 years, of double infection—*Staphylococcus aureus* and *Bacillus coli communis*. The diagnosis of acute bacterial endocarditis will rest upon a picture of sepsis arising in the midst of some acute or chronic infection, together with the appearance of murmurs, often in addition to preexisting ones. Blood cultures are useful, but a negative one does not exclude the possibility, nor a positive one prove the existence of a diseased valve. The prognosis is practically always fatal, but recovery might be possible in meningococcus endocarditis for which we have a specific serum. The treatment is almost entirely symptomatic (digitalis, salicylates, etc.) The author obtained a cure some years ago, following a blood transfusion, in two cases, but has never since seen any benefit from such a procedure. In meningococcus endocarditis only does serum treatment offer any hope of cure.—*The New England Journal of Medicine*, November 3, 1932.

A Study of the Pathogenesis of Myocardial Fibrosis ("Chronic Fibrous Myocarditis").—Madelaine R. Brown calls attention to much misunderstanding of the term "chronic myocarditis." For the clinician it means myocardial insufficiency, as evidenced by the poor quality of the heart sounds and decompensation; while the pathologist uses it to describe areas of fibrous tissue in the myocardium. A more accurate term would be "scarring of the myocardium" or "myocardial fibrosis." In a material consisting of 1,000 consecutive autopsies she found 110 in which were described areas of scar tissue in the myocardium. In these 110 cases myocardial scarring was associated with arteriosclerosis 59 times, with syphilitic aortitis 24 times, with rheumatism in 10 instances. Of the 12 remaining cases, 3 at least gave evidence of old healed rheumatism, 4 were cases of tuberculosis, 1 chronic nephritis, while 3 were in children in whom the process was quite different. Of the 110 cases 98 were plainly associated with arteriosclerosis, syphilitic aortitis, or rheumatism. In the series of 1,000 cases the clinical histories gave evidence of such infectious diseases as pneumonia, typhoid fever, diphtheria, scarlatina and malaria quite as often in the 890 cases without myocardial scarring as in the 110 cases with this lesion. It is therefore impossible to ascribe the scarring to these infections. In this series direct invasion of the heart muscle in syphilis and rheumatism played a minor rôle in the pathogenesis of myocardial scarring. None of the cases in the series gave evidence of having suffered the effects of any known toxin. Disease of the coronary arteries

was present in 70 of the 110 cases. The rheumatic group showed the least myocardial scarring. The arteriosclerotic cases, 59 of the 110 cases, showed every degree of narrowing of the coronary arteries, often with calcification and complete occlusion, in which terminal thrombosis played a part. The evidence in this series thus indicates that disease of the coronary arteries is the important agent in myocardial scarring ("chronic fibrous myocarditis").—*American Journal of the Medical Sciences*, November, 1932, clxxxiv, 5.

Acute Osteomyelitis in Children.—Cecil P. G. Wakeley, writing in the *British Medical Journal*, October 22, 1932, ii, 3746, quotes statistics from hospitals in the United Kingdom which indicate that acute osteomyelitis is a disappearing disease and is not as fulminating as formerly. This is due to the fact that the general health of children is much better. Tonsils and adenoids are removed at an early age, thus doing away with septic infection from the throat and many complications occurring after infectious fevers. In addition debilitating and deficiency diseases are treated very effectively. In all probability trauma plays no important part in the causation of osteomyelitis, though the text-books have always stressed it as an initial cause. In children osteomyelitis begins on the diaphyseal side of the epiphyseal plate, and over 50 per cent of the cases occur in the femur and tibia. The abundant blood supply to the growing end of the bone and its anatomical arrangement favor the occurrence of embolism which would cause devascularization of the bone adjacent to the metaphysis. As a diagnostic aid the x-rays are of little use in the early stages of the disease. If the surgeon waits until there is something definite in the x-ray picture, he will wait too long, and valuable lives will be lost. Every case of acute osteomyelitis requires immediate drainage, since any delay may result in extension of the primary focus to the medullary cavity. In the early stage this cavity is not involved and should not be opened as a routine measure. Simple trephining of the diaphysis just above the epiphyseal plate often is all that is required. In well-established cases the medullary canal must be opened and one-third of its circumference removed. The making of multiple drill holes down to the focus of infection is not an efficient method of drainage, as there is a tendency for granulations to fill up the holes and for pus to become pocketed beneath them. Wakeley is convinced that if the case is a late one and the whole of the diaphysis is involved, diaphysectomy is the only method to be adopted, followed later by a bone graft. In the after-treatment of these cases he recommends packing the gutter in the bone with antiseptic gauze and changing the dressing every other day. Immobilization in a plaster splint is essential.



LEGAL



THE SCOTTSBORO CASE

By LORENZ J. BROSNAN, ESQ.

Counsel, Medical Society of the State of New York.

Seldom in the history of the administration of the criminal law in this country has a case caused such widespread comment or attracted so much public interest as the so-called Scottsboro case. The case made its way through the courts of Alabama and was carried to the Supreme Court of the United States on a writ of certiorari, and only a few days ago that court delivered its opinion in the matter. The decision of the highest court of the land relates to matters of such general interest and involves constitutional rights so fundamental, that it seems appropriate to consider the case at some length in these columns.

From the facts it appeared that on March 25, 1931, two young white girls were riding on a gondola car of a freight train in Alabama. They were in the company of some white boys who were likewise hitchhiking. There were a number of young negroes in adjoining cars, and while the train was traveling at a fair speed the blacks crossed into the gondola car where the girls were. In some manner a fight started between the whites and the blacks, and all of the white boys except one were either thrown or driven from the train by the negroes. According to the story told by the girls, each of them was then forcibly raped by six different negroes in turn. Word was sent ahead and when the train arrived at Scottsboro, Alabama, a sheriff's posse and a large crowd of people met the train and took into custody the negroes. Apparently a few of the negroes had made a getaway before the train was stopped. There was considerable excitement attendant upon the arrest of the negroes, and they were in such danger of mob violence that the sheriff called for the militia to assist in safeguarding the prisoners.

Six days after the crime was committed eight of the negroes were indicted for the crime of rape, and on the same day they were arraigned and entered pleas of not guilty. On April 6th, only six days after the indictment, the trial of the defendants began, the collective case against them having been severed so that they were tried in three groups. The juries found the defendants guilty. The Alabama law permits juries, in their discretion, upon a conviction for rape, to send the defendants to prison or condemn them to death. In the exercise of this discretion the juries imposed the death penalty upon all the defendants.

From the judgments of conviction appeals were taken to the Supreme Court of Alabama, which court affirmed the conviction of seven of the defendants and ordered a new trial as to the remaining defendant because he was under sixteen years of age and should have received special treatment as a juvenile delinquent. From the decision of the court affirming the conviction, there was a vigorous dissent by the Chief Justice.

The case had attracted widespread attention and various organizations became interested in the defense of this case, with the result that the case was carried to the Supreme Court of the United States on the ground that the defendants had been denied due process of law and equal protection of the laws under the Fourteenth Amendment to the Federal Constitution. Specifically, it was contended (first) that they were not given a fair, impartial and deliberate trial; (second) that they were denied the right of counsel; and (third) that negroes were excluded from the juries in the trial of their case. The highest court of the nation, with two of the Justices dissenting, reversed the conviction on the sole ground that the defendants had been deprived of their constitutional rights to the proper assignment of counsel. The other grounds of error were not considered by the court.

The defendants had been indicted and arraigned on the same day. On the day of the arraignment the defendants were apparently not asked by the court about counsel, or asked if they wished to communicate with friends or relatives. The court on that day stated that "all the members of the bar" were appointed for the purpose of the arraignment of the defendants. The responsibility for conducting the defense was not fixed upon any one member of the bar and was in fact not definitely fixed on any of the bar.

Six days after the arraignment the case was called for trial, and the trial court asked if the parties were ready to proceed. The district attorney answered in the affirmative and no one responded for the defendants. A certain Mr. Roddy, an attorney from Chattanooga, then addressed the court and stated that while he had not been employed in the case he had been consulted, and would like to appear as counsel associated with such counsel as the court might appoint to represent the defendants. A discussion ensued among the trial judge, the said Mr. Roddy and various members of the bar in a

very casual manner, in the course of which Mr. Roddy stated that he had come to Alabama, though inexperienced in Alabama practice, to help the defendants if possible. One of the members of the local bar finally agreed to "help do anything" he could for Mr. Roddy, the Chattanooga lawyer. The trial proceeded immediately with this very vague arrangement as to counsel for the defendants. Clearly, whatever may have been the merits of the case, the defendants were at a disadvantage. Counsel representing them went into the case practically without preparation or without investigating the facts. As the opinion of Mr. Justice Sutherland, who delivered the majority opinion for the Supreme Court of the United States, states:

"The defendants, young, ignorant, illiterate, surrounded by hostile sentiment, haled back and forth under guard of soldiers, charged with an atrocious crime regarded with a special horror in the community where they were to be tried, were thus put in peril of their lives within a few moments after counsel for the first time charged with any degree of responsibility began to represent them."

The court's further comment is interesting:

"It is true that great and inexcusable delay in the enforcement of our criminal law is one of the grave evils of our time. Continuances are frequently granted for unnecessarily long periods of time, and delays incident to the disposition of motions for a new trial and hearings upon appeal have come in many cases to be a distinct reproach to the administration of justice. The prompt disposition of criminal cases is to be commended and encouraged, but in reaching that result a defendant, charged with a serious crime, must not be stripped of his rights to have sufficient time to advise with counsel and prepare his defense. To do that is not to proceed promptly in the calm spirit of regulated justice but to go forward with the haste of the mob."

After having concluded that the defendants had been denied their rights to counsel, the court in its opinion proceeded to explain the reasons why such a denial of the right to counsel contravened the "due process clause."

The court showed that the fundamentals of our system of government, starting with the colonies prior to the War of the Revolution, and as embodied in the United States Constitution, had ever jealously guarded the rights of a defendant charged with a crime. The Sixth Amendment to the Federal Constitution which was cited by the court reads as follows:

"In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining Witnesses in his favor, and to have the Assistance of Counsel for his defense."

The court quoted the famous words of Webster that by "the law of the land" is intended "a

law that hears before it condemns," and discussed the requirements of a hearing such as is required under due process of law as follows:

"What then does a hearing include? Historically and in practice in our own country at least, it has always included the right to the aid of counsel when desired and provided by the party asserting the right. The right to be heard would be, in many cases, to little avail if it did not comprehend the right to be heard by counsel. Even the intelligent and educated layman has small and sometimes no skill in the science of law. If charged with crime, he is incapable, generally, of determining for himself whether the indictment is good or bad. He is unfamiliar with the rules of evidence. Left without the aid of counsel he may be put on trial without a proper charge, and convicted upon incompetent evidence, or evidence irrelevant to the issue or otherwise inadmissible. He lacks both skill and knowledge adequately to prepare his defense even though he have a perfect one. He requires the guiding hand of counsel at every step in the proceedings against him. Without it, though he be not guilty, he faces the danger of conviction because he does not know how to establish his innocence. If that be true of men of intelligence, how much more true is it of the ignorant and illiterate, or those of feeble intellect? If in any case, civil or criminal, a State or Federal court were arbitrarily to refuse to hear a party by counsel, employed by and appearing for him, it reasonably may not be doubted that such a refusal would be a denial of a hearing, and, therefore, of due process in the constitutional sense."

The court in concluding that the judgments of conviction should be reversed and new trials granted the defendants, stated in part:

"All that it is necessary now to decide, as we do decide, is that in a capital case, where the defendant is unable to employ counsel, and is incapable adequately of making his own defense because of ignorance, feeble-mindedness, illiteracy, or the like, it is the duty of the court, whether requested or not, to assign counsel for him as a necessary requisite of due process of law; and that duty is not discharged by an assignment at such a time or under such circumstances as to preclude the giving of effective aid in the preparation and trial of the case. To hold otherwise would be to ignore the fundamental postulate, already adverted to, 'That there are certain and immutable principles of justice which inhere in the very idea of free government which no member of the Union may disregard.' In a case such as this, whatever may be the rule in other cases, the right to have counsel appointed, when necessary, is a logical corollary from the constitutional right to be heard by counsel."

The court further stated:

"Let us suppose the extreme case of a prisoner charged with a capital offense, who is deaf and dumb, illiterate and feeble-minded, unable to employ counsel, with the whole power of the State arrayed against him, prosecuted by Counsel for the State without assignment of counsel for his defense, tried, convicted and sentenced to death. Such a result which, if carried into execution, would be little short of judicial murder, it cannot be doubted would be a gross violation of the guarantee of due process of law; and we venture to think that no Appellate Court, State or Federal, would hesitate so to decide. * * The duty of the trial court to appoint counsel under such circumstances is clear, as it is clear under circumstances such as are disclosed by the record here; and its power to do so even in the absence of a statute, cannot be questioned. Attorneys are officers of the court and are bound to render service when required by such an appointment."

"The United States by statute and every State in the Union by express provision of law, or by the determination of its courts, make it the duty of the trial judge, where the accused is unable to employ counsel, to appoint counsel for him. In most states the rule applies broadly to all criminal prosecutions. In others it is limited to the more serious crimes and in a very limited number to capital cases. A rule adopted with such unanimous accord reflects, if it does not establish, the inherent right to have counsel appointed at least in cases like the present, and lends convincing support to the conclusion we have reached as to the fundamental nature of that right."

It should be kept in mind that the merits of

the case were not before the Supreme Court of the United States. It is difficult to imagine a more reprehensible crime than that of rape, but whether or not the defendants were guilty of the crime charged, they were entitled to have their constitutional rights safeguarded by the court. Far more than the individual case was involved in this appeal, and the highest court of our land demonstrated once again its zealotry in safeguarding and protecting the constitutional rights of every citizen, irrespective of race, creed or color.

CLAIMED NEGLIGENT PRENATAL CARE AND DELIVERY

A doctor engaged in general practice was consulted by a young married woman with respect to her condition of pregnancy. The doctor examined her and found her to be in about the sixth month and that apparently her condition was normal. He advised her to return in about a month and at that time to bring to him a specimen of her urine.

She did not return, or communicate with him, however, until about ten days after the date her delivery should have been due in normal course when he was called to examine her at her home. He found that the child was alive and in normal position in the womb, and that from her condition the patient would deliver in about a week. The doctor directed her to notify him when labor started.

Five days later the doctor was again called to the patient's home and an examination showed no dilatation. The following morning examination revealed one finger dilatation, and that afternoon and evening the doctor examined her but found no further dilatation. The doctor at that time decided that her condition was not progressing normally and he arranged for her to enter a hospital and called an obstetrician into consultation on the case. The said consultant advised that a cesarean section was necessary and performed the said operation. The child when delivered was not breathing although his heart was beating. The general practitioner, who was assisting at the cesarean delivery, gave respiration to the child with oxygen, also hot and cold tubs and adrenalin into the heart directly. The child be-

gan to breathe, his color improved and he became normal in about two hours, at which time the doctor left the child in care of a nurse.

Together with the obstetrician, the general practitioner continued to care for the mother who, however, failed to improve normally from the cesarean operation but developed pulmonary oedema, intestinal stasis, sepsis and her kidneys refused to function. Although enemas were administered and irrigation done, the doctor and the others called by him to treat the woman were unable to do anything to cause her kidneys to function, and finally seven days after delivery the patient died. The child, which had been apparently in good condition when the doctor turned him over to the nurse, had failed to continue to improve and had died late the day of his birth.

Suit was thereafter brought against the general practitioner by the husband as administrator of his wife's estate to recover damages, charging the defendant with having negligently caused the death of the wife. His chief complaint was that the doctor, in his care of the patient during her period of pregnancy, was negligent in failing to discover that she was suffering from kidney trouble.

After the action had been noticed for trial and had appeared on the calendar for trial, the plaintiff's attorney, apparently realizing that he was unable to prove by medical testimony that the doctor had failed to follow proper practice in his treatment of the woman, voluntarily discontinued the action.



NEWS NOTES



ANNUAL MEETING ARRANGEMENTS

PRELIMINARY ANNOUNCEMENT.

The committee on Arrangements of the Medical Society of the State of New York has outlined its plans for the One Hundred and Twenty-Sixth Annual Meeting of the Society to be held April 3, 4 and 5, 1933, in the Waldorf-Astoria Hotel, Park Avenue and Fiftieth Street, New York City. The times and places of the ten previous annual meetings are shown in the following table:

Time	Place	President
1923 May 21-24	New York	Arthur W. Booth
1924 April 21-23	Rochester	Orrin S. Wightman
1925 May 11-14	Syracuse	Owen E. Jones
1926 March 29-April 1	New York	N. B. Van Etten
1927 May 9-12	Niagara Falls	George M. Fisher
1928 May 21-23	Albany	James E. Sadlier
1929 June 3-6	Utica	Harry R. Trick
1930 June 2-4	Rochester	J. N. Vander Veer
1931 June 1-3	Syracuse	William H. Ross
1932 May 23-25	Buffalo	W. D. Johnson

The place of this year's meeting will be the Waldorf-Astoria Hotel. This hotel has abundant space for the meeting and exhibits, as was demonstrated by the meeting of the American College of Surgeons last year. The date is considerably earlier than usual, owing to the meetings of numerous other medical societies, especially those of national importance.

The general features of the meetings of previous years will be preserved, and some new ones will be introduced.

Clinic Day: The opening event of the annual meeting will be a clinical day on Monday, April 3, when leading clinicians of New York City will conduct clinics in several hospitals in both the morning and the afternoon.

House of Delegates: The House of Delegates will meet at two o'clock on Monday, April 3, and will continue in the evening and the following morning. The members will dine together in the Roof Garden during the recess between the two sessions on Monday.

Scientific Sessions: Dr. Arthur J. Bedell, Chairman, and his associates on the Committee on Scientific Work, are arranging the programs of the eight scientific sections, whose meetings will be held on Monday and Tuesday, April fourth and fifth.

A general session will be held in the Grand Ball Room on the afternoon of Tuesday, April fourth. The full programs of all the scientific sessions will be published a month before the meeting.

Dinner and Anniversary Meeting: An Anniversary Meeting of the Medical Society of the

State of New York must be held in accordance with the Charter of the Society. This meeting will take place in connection with the annual dinner, which will be held on the evening of Tuesday, April fourth. The Committee expects to secure speakers of national reputation.

Public Meeting: Tentative plans are being considered to hold a public meeting on the evening of Wednesday, April fifth, in the Grand Ball Room.

Scientific Exhibits: The features of the scientific exhibit, which has proved successful in past years, will be repeated in an amplified form. The committee in charge for its arrangement and management consists of Dr. Arthur J. Bedell, Albany, Chairman; Dr. Frederic E. Sondern, New York; Dr. E. R. Cuniffe, Bronx, and Dr. P. E. Bechet, New York.

Commercial Exhibits: A pleasing feature of the annual meeting will be the exhibit of medical wares shown by manufacturers and dealers. The importance of this exhibit is equal to that of any other feature of the annual meeting, for without the modern tools of his profession, and his instruments of precision, the physician would be compelled to practice the medicine of his forefathers. Ample space and a convenient arrangement of booths will contribute essentially to an ease of demonstration of the wares.

Committees: The scientific phases of the annual meeting are in charge of the Standing Committee on Scientific Work, consisting of the following members:

Dr. Arthur J. Bedell, chairman, Albany
Dr. Edward C. Reifenshtein, Syracuse
Dr. Edward R. Cuniffe, Bronx
Dr. Edward C. Hughes, Syracuse
Dr. Brewster C. Doust, Syracuse
Dr. Davis F. Gillette, Syracuse
Dr. Daniel R. Reilly, Cortland
Dr. Henry W. Williams, Rochester
Dr. Paul E. Bechet, New York
Dr. Frederic E. Sondern, New York

Committee on Arrangements: The general arrangements for the annual meeting are under the Standing Committee of Arrangements assisted by a local committee of the following physicians living in Greater New York:

Dr. Samuel J. Kopetzky, Manhattan
Dr. William Klein, Bronx
Dr. Edward R. Cuniffe, Bronx
Dr. Edward C. Podvin, Bronx
Dr. Terry M. Townsend, Manhattan

Dr. David J. Kaliski, Manhattan
Dr. Iago Galdston, Manhattan
Dr. John J. Masterson, Kings
Dr. Charles H. Goodrich, Kings
Dr. Alex N. Thomson, Kings
Dr. Frank D. Jennings, Kings
Dr. H. P. Mencken, Queens
Dr. Carl Boettiger, Queens
Dr. Edward A. Flemming, Queens
Dr. James R. Reuling, Queens
Dr. Andrew J. McGowan, Richmond

The following committee has charge of the plans for press releases and publicity generally.

Dr. Chas. Gordon Heyd, President, Medical Society of the State of New York

Dr. Frederic E. Sondern
Dr. Iago Galdston
Dr. George W. Kosmak
Dr. Clarence G. Bandler
Dr. John A. Gerster
Dr. Samuel J. Kopetzky (ex-officio).

Publicity: The annual meeting of the Medical Society of the State of New York is an event of civic importance, and the need of organized publicity of the proceedings has been demonstrated in past meetings. General publicity of this year's sessions will be handled by Mr. Dwight Anderson. Radio Publicity will be handled by Dr. Iago Galdston, and Mrs. R. S. Hirshman.

The Committee on Arrangements,
SAMUEL J. KOPETZKY, *Chairman.*

SECOND DISTRICT BRANCH

The twenty-sixth annual meeting of the Second District Branch of the Medical Society of the State of New York, composed of the four counties on Long Island, was held in the Garden City Hotel, Garden City, Long Island, on the afternoon and evening of Thursday, November 12, 1932. The meeting was highly successful owing to the efforts of the President, Dr. Louis A. Van Kleeck; the Secretary, Dr. Alec N. Thomson, of Brooklyn, and the Chairman of the Scientific Committee, Dr. Irving Gray, of Brooklyn. Seventy members were present at the scientific session, which was held in the afternoon, and two hundred at the supper meeting in the evening when many ladies were present also.

The ladies were entertained during the afternoon by a lecture on contract bridge by Janet A. Krantz, after which demonstration games were played.

Garden City is in the aviation section for Greater New York, and several members saw Long Island from the air in a transport plane.

The scientific session consisted of a symposium on the subject: "Diseases of the Bones and Joints," presented from six points of view of six physicians, all Long Island practitioners:

"Internal Medicine," Dr. Tasker Howard, Brooklyn.

"Surgery, Diagnosis and Treatment," Dr. Frank S. Child, Port Jefferson.

"Roentgenology," Dr. Richard A. Rendich, Brooklyn.

"Pediatrics," Dr. Walter C. A. Steffen, Flushing.

"Physical Therapy," Dr. Jerome Weiss, Brooklyn.

"Arthritis," Dr. George E. Anderson, Brooklyn.

The papers were highly practical and interesting and will be published in the *Journal*.

The after-dinner speaking in the evening was

of unusual practical value both in subject and presentation.

Dr. Henry F. Vaughan, Commissioner of Health of Detroit, Michigan, described that city's plan of cooperation between the Department of Health and the family doctors. The Department does not conduct free clinics, but sends patients to their family doctors. It took up the subject of diphtheria immunizations first, and secured the approval and cooperation of the County Medical Society in a campaign to get the physicians to agree to set aside certain office hours when they would give the immunizations at one dollar for each injection. Each signed a card stating the days and hours on which he would give the immunizations at reduced rates. But he could make his usual charge to those who came at other hours. If a patient could not pay, the doctor gave the treatment and sent the bill to the City Health Department which paid it at half the usual rate.

There are about 1,100 doctors in Detroit, and 750 signed the agreements early in the campaign. The City Department then canvassed the remainder principally by means of public health nurses, and secured the agreements from 300 more. Practically all the physicians in Detroit are cooperating in the plan.

When a child needing an immunization is brought to the City Department of Health, the city physician refers the mother to a list of co-operating doctors near her home, and afterward checks up the case with a call from the public health nurse.

Dr. Vaughan described the results of the plan, and summarized the advantages. The doctors were benefited in four ways:

1. No free clinics.

2. It introduced them to well persons and encouraged them to do preventive practice among the well group.

3. It promoted cordial relationships of the doctors with the Department of Health and other groups doing preventive health work.

4. The doctors received pay for their work.

The Health Department benefited financially, for the cost of the preventive work has been far less than that of the hospital care of diphtheria cases before the preventive work was started.

Dr. Vaughan concluded with an outline of plans for introducing a similar method in dealing with smallpox and tuberculosis, and in periodic health examinations.

(A description of the Detroit plan is contained in the September, 1932, issue of the *American Journal of Public Health*.—EDITOR'S NOTE.)

Dr. Charles Gordon Heyd, President of the Medical Society of the State of New York, spoke on the subject, "The Stand the Organized Medical Profession Should Take." He said that the medical service available to the people of the State of New York was the first in the world. Its effectiveness may be appraised by the tremendous reduction in deaths and sickness and the lengthening of the years of life. Doctors of the United States give a million dollars worth of free treatment daily. They are the greatest givers in the whole land. The value of the free services of doctors in hospitals, if estimated at current rates, would exceed all other costs of running the hospitals. Dr. Heyd developed the unjustness of saddling this cost on a small group of citizens,—the doctors,—when it should be distributed over the entire community.

Dr. Heyd called attention to the great results of mass health work, meaning such activities as the purification of water, the disposal of sewage, and the pasteurization of milk. The next great advance in health work will be that doctors shall engage in the individual practice of preventive medicine, and shall be paid for it. The field is not merely in communicable diseases, but also in diabetes, heart disease, kidney affections, and other insidious conditions whose control are the hands of the *individual* rather than the community.

Dr. Frank L. Babbott, Jr., President of the Long Island College of Medicine, outlined the plans of the College in teaching preventive medi-

cine (directed to the individual), and community health (directed to the community). The College makes a personal approach to each student by means of a health examination; and at the end of the year it tabulates the records and presents the results to the class as a concrete example of actual conditions among a group whose members know one another intimately. Dr. Babbott believes that this method of approach will make a deep impression on the future practitioner of medicine.

Dr. Babbott also described the close cooperation of the Division of Preventive Medicine and Community Health with that of Internal Medicine, so that when a subject, such as typhoid for example, is taught, its epidemiology shall be taught as fully as the diagnosis and treatment of the sick patient.

Dr. Frederic E. Sondern, Chairman of the Committee on Research of the Medical Society of the State of New York, called attention to the urgent need of enlisting the support of every member of the State Legislature in opposition to any bills that may be introduced during the approaching session that will hamper medical progress by restriction on animal experimentation. (See this Journal pages 1354 and 1374.)

Dr. Sondern, who is also Chairman of the Committee on Insurance, urged the physicians to keep up the indemnity insurance sponsored by the Medical Society of the State of New York.

Dr. Orrin Sage Wightman, Editor-in-Chief of the NEW YORK STATE JOURNAL OF MEDICINE, gave a brief talk on the *Journal*, and asked for a show of hands by those who actually read its several departments, such as "Medical Progress" and "Book Reviews," and wish them to be continued. The members gave striking evidence of their desire to continue all the departments of the *Journal* in their present size and scope.

The officers elected were:

President, Louis A. Van Kleeck, Manhasset.

First Vice-President, Carl Boettiger, Richmond Hill.

Second Vice-President, Irving Gray, Brooklyn.

Secretary-Treasurer, Alec N. Thomson, Brooklyn.

SUFFOLK COUNTY

Annual Meeting: The one hundred and twenty-seventh annual meeting of the Suffolk County Medical Society was held in the Henry Perkins Hotel, Riverhead, on Thursday, October 27, 1932, with the Vice-President, Dr. J. H. Marshall, in the chair, and 35 members present. A business session was held from eleven to one o'clock, at which items which had been proposed by the

Comitia Minora were discussed. Luncheon was served in the meeting room, after which the scientific program was carried out. The meeting adjourned at four o'clock.

The Secretary, Dr. E. P. Kolb, reported that the Comitia Minora had met monthly excepting during the summer, and had spent much time in friendly, informal discussion of a number of top-

ics concerning the Society. The members felt that the discussions of specific topics by a small group of leaders would relieve the general meetings of the Society of unnecessary debates, and would enable the officers and committeemen to give prompt answers to questions which might be asked.

The discussions and conclusions of the Comitia Minora were printed in the monthly *News Letter* of the Society, and so the members would come to the meeting informed on the questions that were before the Society, and prepared to take intelligent action.

It was further felt that the method of procedure of the Comitia Minora would greatly facilitate the action of the Society at its general meetings.

(These expectations were amply justified by the facility and completeness of the action of the Society. The reports of the officers and committeemen were already known to the members, and the trend of the proposals was understood. The business was therefore transacted with facility and according to a time schedule.—*Editor's Note.*)

It was unanimously voted that the Library Service, offered by the Kings County Medical Society, be approved.

The Public Health Committee reported on a proposed plan of mosquito elimination based on that of Nassau County. While some malarial-carrying mosquitoes were breeding, there were no known cases of malaria. However, the Public Health Committee and the Comitia Minora had reported the opinion that mosquitoes generally constitute a public health problem, in that they are causing intense annoyance and discomfort to everybody in certain areas, especially low grounds.

The attitude of the committees was supported by the Society with one member dissenting on the technical ground that boards of health would find it utterly impractical to undertake mosquito elimination.

Dr. W. H. Ross, for the Economic Committee, reported on the cordial cooperation of the County Welfare Department with the physicians in the care of indigent patients. Dr. Ross also reported on the unsatisfactory relations of the insurance companies to physicians treating injured workmen, citing especially their insistence that workmen should consult a particular doctor designated by the companies. The Committee asked for the records of specific cases in order that it may take effective action. The Economic Committee without specific evidence is like a district attorney going before a grand jury without concrete evidence against the accused.

The Society gave its enthusiastic approval to the action of the Comitia Minora in appointing a committee to prepare a memorial dinner to seven of its members who had attained a half century of the practice of medicine. Drs. F.

Overton, Ross, and Healy were appointed to prepare such a dinner on Wednesday, November 9, at Leo's Inn, Patchogue.

Dr. Louis VanKleeck, President of the Second District Branch of the Medical Society of the State of New York, paid his official visit to the Society, and told of the splendid response to his plan of calling a conference of the chairman of each committee of the four county societies on Long Island. A conference of the chairmen of the Legislative committees had already been held, and one of the Economic committees will be held in the near future.

Dr. Alec N. Thomson, Secretary of the Second District Branch, and Medical Director of the Kings County Medical Society, spoke of some of the details in the leadership of the Suffolk County Society in demonstrating the good results of co-operation not only among the individual members, but also among the medical societies.

The Society adopted an amendment to the by-laws that the Society should meet four times a year instead of two, as at present.

The following new members were admitted to the Society:

Dr. Leslie T. Clary, Kings Park.
Dr. Charles Tainbor, Port Jefferson.
Dr. Cyril E. Drysdale, Northport.
Dr. Frank E. McGilvery, Smithtown Branch.
Dr. T. W. Falkner, Huntington (by transfer from Jefferson County).

The following officers were elected:
President, Dr. J. H. Marshall, Southold.
Vice-President, Dr. Louis A. Garben, Islip.
Secretary, Dr. E. P. Kolb, Holtsville.
Treasurer, Dr. Grover A. Silliman, Sayville.
Censors: Dr. W. H. Barnhardt, Central Islip.
Dr. J. Mott Heath, Greenport.
Dr. Burge P. MacLean, Huntington.

Delegates to the State Society:
Dr. C. C. Murphy, Amityville, and Dr. A. E. Payne, Riverhead.

Alternates:
Drs. J. H. Marshall and W. H. Barnhardt.
Representative on the Second District Branch Executive Committee:

Dr. W. H. Ross, Brentwood.
The presidential address of Dr. C. C. Murphy was read by the Vice-President, Dr. J. H. Marshall.

The scientific program consisted of two moving pictures.

Dr. Frank S. Child, Port Jefferson, showed two reels on the treatment of osteo-myelitis with fly maggots. These pictures had been taken by Dr. Child in the Mather Memorial Hospital and the St. Charles Hospital for Crippled Children, both situated in Port Jefferson. (See this *Journal*, August 1, 1931, page 937.)

Four reels on the subject of Cancer Research, made by Dr. Francis Carter Wood, Jr., were

shown by courtesy of the Suffolk County Cancer Committee. The opinion of the members was that while the subject was presented clearly and interestingly, yet it would be vastly improved if the repetitions and the non-essential scenes were eliminated so that the series could be shown within twenty or thirty minutes.

Anniversary Dinner: The anniversary dinner to the seven members of the Suffolk County Medical Society who had been in practice for half a century, was held on the afternoon of Wednesday, November 9, 1932, in Leo's Inn, Patchogue, with fifty-four members present. The honored guests were introduced after dinner in accordance with the following program, Dr. John B. Healy, Babylon, presiding:

OUR GUESTS

Seven honored guests today we see,
Wise men for half a century,
Our elders in the healing art,
Endeared by deed and warmth of heart.

Dr. George H. Donahue, Northport, P. & S., 1882, introduced by Dr. D. C. MacClymont, Northport:

Our Donahue—calm, true, and kind,
His modesty with skill combined.

Dr. William B. Gibson, Huntington, McGill, 1878, introduced by Dr. Burge P. MacLean, Huntington:

Our Gibson—patriarch and sage—
Whose wit and wisdom grow with age.

Dr. William A. Hulse, Bay Shore, Bellevue, 1883, introduced by Dr. William H. Ross, Brentwood:

Our friendly Hulse, financial fan,
Real doctor and true gentleman.

Dr. John Nugent, Southampton, University of Michigan, 1881, introduced by Dr. Morley B. Lewis, Sag Harbor:

To Nugent sly, our hats we raise,
By drollery he gives us praise.

Dr. George A. Smith, Superintendent of the Central Islip State Hospital, Bellevue, 1881, introduced by Dr. E. M. McCoy, Central Islip:

Our Smith, endowed with occult powers,
Boon comrade in our crazy hours.

Dr. Arthur H. Terry, Patchogue, P. & S., 1882, introduced by Dr. Frank Overton, Patchogue:

Our Terry wise, with equal skill
To make a poem or a pill.

Dr. Ralph Waldo, Westhampton, N. Y. U., 1882, introduced by Dr. R. E. Wyman, Westhampton Beach:

Our Waldo, who for rural joys,
Forsook the city and its noise.

The introducer of each guest presented him with a fountain pen on behalf of the Society.

Rev. Thomas W. Connolly, East Islip, gave an invocation before the dinner, and closed the exercises with an address on the priestly work of the doctor in comforting the sick.

The addresses, both introductory and responsive, were of a high order, and had been prepared with care. They will be published in the monthly *News Letter* of the Suffolk County Medical Society.

There were present five sons of the guests who are following their fathers' example and are practising medicine:

Dr. Gordon Gibson, Brooklyn.

Dr. Arthur H. Terry, Jr., New York.

Dr. John H. Nugent, Southampton.

Dr. Paul Nugent, East Hampton.

Dr. Paul Waldo, St. Luke's Hospital, New York.

The Suffolk County Medical Society had given a similar dinner to two of its members a half century in practice, Dr. Edwin S. Moore, Bay Shore, and Dr. Clarence C. Miles, Greenport, on December 11, 1925.

EDWIN P. KOLB, *Secretary*.

RENSSELAER COUNTY

At their regular meeting Thursday, November 10, 1932, the Medical Society of the County of Rensselaer were the guests of the Leonard Hospital.

A very interesting variety of cases was presented by the Medical and Surgical staff of the hospital. They were as follows:

1. Dr. Wm. Kirk: Case of Cardio-Vascular Disease with Cerebral Hemorrhage and Hemiplegia.

2. Dr. B. T. Baker: Reports of cases of Mastoiditis.

3. Dr. E. F. Connally: Case of Gas Bacillus Infection of arm following compound fracture of arm.

4. Dr. S. H. Curtis: Case of Diabetes Mellitus complicated by obliterating arteritis of leg with infection.

5. Dr. John Connor: Case of Toxaemia of Pregnancy.

6. Dr. E. M. Wells: Case of Gunshot injury to eye.

7. Dr. C. W. Hamm: Case of General Septicæmia of Blastomycetes origin with complications.

8. Dr. E. F. Connally: Case of Intestinal Perforation due to presence of a chicken bone.

The attendance was good and the discussion was active.

Two years ago the society abandoned the custom of having all meetings at the Health Center and also limited their papers to members of the society instead of an occasional or regular out-of-town speaker at each meeting.

The members have supported both plans about equally as well, the attendance averaging between one-fourth and one-third of the total membership.

At the close of the scientific program the nom-

inating committee reported the following as candidates for office during the year 1933:

President Emeritus, Dr. Osman F. Kinlock.

President, Dr. Warren St. John.

Vice President, Dr. Walter McShane.

Secretary, Dr. Clement J. Handron.

Treasurer, Dr. John F. Russell.

Delegates, Dr. A. J. Hambrook and Dr. John Reid.

Alternates, Dr. John J. Quinlin and Dr. John Connor.

Censors, Dr. C. W. Hamm and Dr. T. F. Judge.

It was announced at the close of the meeting that one of the speakers at our annual banquet would be the President of the Medical Society of the State of New York.

Meeting adjourned at 10:55 p.m.

WM. B. VAN AUKEN, *Reporter*.

FRANKLIN COUNTY

The regular annual meeting of the Medical Society of the County of Franklin was held in the Nurses' Lecture Room of the Alice Hyde Memorial Hospital, Malone, N. Y., November 2, 1932, with the President, Dr. H. B. Brown in the chair, and twenty-two members and seven visitors present.

The following officers were elected for the year 1933:

President, Dr. J. W. Kissane, Malone.

Vice-President, Dr. G. C. de Grandpre, Tupper Lake.

Secretary-Treasurer, Dr. G. F. Zimmerman, Malone.

Censor for three years, Dr. F. W. McCarthy, North Bangor.

Delegate to State Medical Society, Dr. C. C. Trembley, Saranac Lake.

Alternate, Dr. J. E. White, Malone.

Drs. Caroline Macartney Gorman and Philip William Gorman of Fort Covington were elected to membership.

The reports of the Secretary and Treasurer were read and approved.

Dr. R. G. Perkins brought up the County fee bill to be discussed by the Society. The following members joined in the discussion: Drs. Brown, White, Perkins and Stamatiades. All the speakers agreed that the fee bill for County Services was equitable; that no reduction should be countenanced, and that the members should unite in opposition to any curtailment of the present schedule, especially for tonsil operations.

Dr. White brought up the resolution of last annual meeting, petitioning the Committee on Legislation of the State Medical Society to foster

such legislation compelling insurance companies in the case of auto accidents to assume the payment of hospitals and physicians for attendance on the victims, such bills to be paid directly by them to the hospital and physicians concerned.

Dr. VanderVeer stated that the matter had been brought up in the Legislature last year, but had died in committee.

It was moved and seconded that the resolution be re-affirmed and sent to the Legislative Committee of the New York State Medical Society. Carried.

Dr. Albert Pfeiffer of the State Department of Health stressed the advantages of a County Venereal clinic. He outlined the steps to be taken in its establishment, and instructed the members in the procuring of material for examination by the State Department of Health.

It was moved by Dr. Perkins, seconded and carried, that a committee interview the Board of Supervisors regarding the establishment of a venereal clinic for the County of Franklin, exclusive of the Indian Reservation.

Drs. Van Dyke, Trembley, and Stamatiades were named for that committee.

The following papers were read at the Scientific Session:

1. Bronchoscopy—Dr. Warriner W. Woodruff, Saranac Lake.

2. Diagnosis and Treatment of Common Skin Diseases in General Practice, Dr. Marion B. Sulzberger, New York.

Dr. J. N. VanderVeer gave an interesting talk on the Economics of the medical profession.

G. F. ZIMMERMAN, *Secretary*.



THE DAILY PRESS



ANIMAL EXPERIMENTATION

The plea of Drs. Cannon and Drinker for freedom in animal experimentation, printed on page 1354 of this *Journal*, is supported by an editorial in the *New York Times* of November fifth, which says, in commenting on a lecture by Dr. Cannon before the New York Academy of Medicine:

"It is a pity that Dr. Cannon should find it necessary, in view of the bills annually introduced in Legislatures by well-meaning sentimentals, to review once more the achievements of

experimenters who have made it possible to stamp out epidemics.

"Dr. Cannon appeals to the public 'to sustain medical investigators in their endeavors' and not to leave the struggle with legislators to physicians alone. It has become a social duty to report contagious disease. Those in whom the spirit of progress lies will agree with Dr. Cannon that it is also a social duty not to interfere with legitimate animal experimentation."

SIGNS OF A HARD WINTER

The *New York Sun* of November 16 discusses some of the current predictions regarding the coldness of this winter. It refers to some accurate observations regarding the reliability of popular weather signs based on casual observations, and says:

"The few tests that have been made of nature as a weather prophet reflect no credit on her prophesying powers.

"One scientist recorded for twenty years the amounts of nuts stored by squirrels, and whether muskrats built their houses above ground, 'supposedly a sign of a hard winter. He found no connection between what the animals did in the fall and the kind of winter that followed.

"Southward migration of birds early in the fall means a hard winter, tradition says, but long

records of the biological survey show no connection.

"However, there are plenty of other natural 'signs' of a hard winter. Weeds may grow tall, to give birds and animals more food above the snow; the apple crop may be earlier than usual; barnyard fowls may grow a thick down under their feathers; owls may retire earlier than usual to the woods; the beaver may gather his winter food supply a month earlier than normal; the field mouse may make its burrows with the opening to the south; or onion skins may be thick.

"Any of these, according to ancient legend, are 'certain' signs."

A weather-wise farmer up-State says that he knows that this winter will be cold because women are wearing their dresses longer.

THE DETENTION OF THE DANGEROUSLY INSANE

The American system of considering a man innocent, or normal, until he has been proved guilty, or dangerously abnormal, sometimes works out disastrously, as is shown in the following editorial from the *Brooklyn Eagle* of October 29th:

"The act of a man in Queens who killed his grandson and himself the other day might have been prevented. Accounts indicate that he was held in the Kings County Hospital for some days and there treated for alcoholism and held under observation. He was released and three days later appears to have taken his own life and to have killed his grandchild from a motive of irrational resentment against his daughter-in-law, who had originally caused him to be taken away by the police.

"A few days ago occurred in the Middle West another release of a man who should apparently never have been let out from custody. He had

killed a woman some years before and had served a term in prison for the crime. Liberated in due course, he is alleged to have promptly killed another woman, the wife of a prison employe, seemingly from irrational motives.

"There is a background of other cases of the sort. Too many persons with an obsession to commit a violent act are taken into custody, kept for a time and let out, only to follow the obsession to its cruel end. There is need in many jurisdictions for more effective and particular study of persons detained for mental abnormality connected with violent impulses."

If the standards of evidence required by physicians before they operate or give treatments were those required by law courts, there would be a great decrease in law suits against doctors on the ground of neglect. It is lawyers, rather than doctors, who secure the freedom of those dangerously insane.

THE BRINKLEY CASE IN KANSAS

"The blood of the martyr is the seed of the Church"; and John R. Brinkley has posed as a martyr while he conducted his periodic campaign as a candidate for Governor of the State of Kansas. However, the real object of his campaign seems to have been to advertise himself as a "goat gland" specialist. The *NEW YORK STATE JOURNAL OF MEDICINE* discussed him in the issue of December 1, 1930, page 1425. This fall he achieved sufficient notoriety in his campaign for Governor to be discussed editorially in the dailies of New York City. The *New York Times* of August 31, described his methods in an editorial as follows:

"The doctor always gives a good show. It began with prayer by his pastor, who also led the singing. There were solos, music by a band, phonograph records, one of which startled the air with the doctor's campaign song, 'He's the Man.' There was a dance sponsored by the Brinkley Club at the close, 'with peanuts, popcorn, cracker-jack for the crowd.'"

He welcomes the violent attacks by the *Kansas City Gazette*, for they advertised his goat gland methods. Referring to the editor of the *Gazette*, he said, amid great applause:

"From time to time he has had great pleasure, I suppose, in taking the skin off of me. At times he has taken off my hide and my shirt and my pants—and I have enjoyed it. He helped me get elected Governor two years ago, and he is doing all he can every day now to help me get elected again."

The *Times* continues:

"The *Gazette* reporter curiously misunderstands the political psychology of the famous leech. Everybody wanted to see him and many were disappointed:

"The night was dark, the platform, which consisted of the candidate's own broadcasting truck with two sides let down to form a stage, was poorly lighted and it was close to the ground. He spoke from his wizard's cabinet in a sooth-sayer's mysterious voice. He came and went like a wrath, without handshaking, without personal contact with the common people, a man of mystery!

"That is his method. Apart, heard by multitudes but seen by few, he has built up his legend."

The real motive of Brinkley's campaign is revealed later on in the *Times* editorial, which says:

"Once a man came to the doctor's office with a copy of *The Gazette* containing a fluent and fire-tipped editorial. 'Dr. Brinkley,' said the visitor, 'this is the first time I have heard of you. You must have done something big to get Mr. White to write about you like he has, and if you will accept me as a patient I want to give you \$750.' If the *Kansas City Star* and the *Gazette* keep lambasting him, our medico is sure that he will get at least 500,000 votes in November, for the more he is 'scorched,' the 'madder' his friends get."

Brinkley ran a poor third in his race for Governor, but he came out highly successful in advertising his business.

ASTROLOGY UP TO DATE

Those doctors who think that astrology died a natural death a hundred years ago should read the obituary of Miss Evangeline Adams (Mrs. George E. Jordan, Jr.).

The *New York Herald Tribune* of November 11th says:

"Miss Adams' income from her astrological contemplations is said to have touched \$50,000 a year. She governed her entire life by astrology, even to the selection of her husband. She saw his horoscope, became interested and asked that a meeting with him be arranged. Two years later they were married, in the Little Church Around the Corner.

"She was born in Jersey City and in her infancy was taken to Andover, Mass. In her girlhood Dr. J. Heber Smith, then professor of materia medica at Boston University, selected her as a student of astrology. The mathematical talent necessary for her calculation of astrological indications, the sketch of her points out, probably was inherited from Isaac Smith, an ancestor, who made important locomotive inventions. She

studied palmistry for a while in Boston under Cheiro and opened a studio in the Hotel Copley. She came to New York in 1899."

The *Herald Tribune* gave many examples of her prophecies and said:

"She knew that neither Major General Leonard Wood nor Herbert Hoover would win the Republican nomination for President in 1920, and she told the late John W. Weeks that although he had no chance for the nomination 'he would profit greatly by the election.' President Harding appointed him Secretary of War.

"All these feats of astrology Miss Adams revealed in her book, as well as her contribution to eugenics termed 'The New Natology.'

"I have whole families of happy, healthy and lucky children who have been born on an astrological schedule," she said.

"Aquarius was a sign of success and 80 per cent of those in the Hall of Fame were Aquarius people, Miss Adams said. Pisces was a good sign for health, but the natural tendency was toward colds and abdominal disorders."



BOOK REVIEWS



INTERNATIONAL STUDIES on the Relation between the Private and Official Practice of Medicine with Special Reference to the Prevention of Disease conducted for The Milbank Memorial Fund. By SIR ARTHUR NEWSHOLME, K.C.B., M.D. Volume I. Octavo of 248 pages. Baltimore, The Williams & Wilkins Company, 1931. Cloth, \$4.00.

The medical profession must agree with the first sentence of the foreword on behalf of the Milbank Memorial Fund in presenting the first volume of the series of International Studies on the Relation between the Private and Official Practice of Medicine with Special Reference to the Prevention of Disease by Sir Arthur Newsholme—"One of the major problems in present day public health administration is that of ascertaining the proper sphere of the private physician in the field of public health."

This volume discusses the Netherlands, Scandinavia, Germany, Austria and Switzerland.

Following a general scheme which presents a preliminary summary, discusses the national or general conditions, the government's provision of medical care for the poor, hospitals and special topics such as midwifery, tuberculosis, venereal disease—and the vast amount of detail to be considered under each sub-head.

Sir Arthur succeeds in presenting the picture as he sees it in a readable way and in an interesting manner.

ALEC N. THOMSON.

THE VITAMINS. By ETHEL BROWNING, M.D. Quarto of 575 pages, illustrated. Baltimore, The Williams & Wilkins Company, 1931. Paper, \$10.00. (Monographs of the Pickett-Thomson Research Laboratory, Volume I.)

To quote McCarrison:—"Vitamins are but the links in the chain of essential substances requisite for the maintenance and harmonious regulation of the chemical processes in the tissues."

The Pickett-Thomson Research Laboratory of St. Paul's Hospital, London, assigned to Dr. Browning the task of compiling the heterogeneous mass of some 3,000 contributions to the knowledge of vitamins into an organized monograph. The result is an extensive work, well classified, complete, and written in a fascinating style. Part I deals with vitamins in general. The author introduces this part with an historical sketch of the discovery of the vitamins. The long line of experimentation starting with the first observations of Lunin in 1881 is accurately recounted and makes interesting reading. It represents a fitting introduction to this important book. There follow chapters on the origin of vitamins, descriptions of various theories regarding their mode of action such as the hormone theory, the chemical and physiological nature of vitamins, vitamin-mineral relationships, effects of vitamin deficiency on health and nutrition, and chapters on biological and chemical quantitative methods for estimating the vitamin content of foods. Part II is concerned with a detailed description of the chemical and physiological properties of the Fat Soluble vitamins and Part III deals equally with the Water Soluble vitamins. There follows an up-to-date and complete listing of all foods used for human consumption with a quantitative tabulation of their vitamin content.

The author has wisely condensed all this data in a final summary and conclusions in which she takes the opportunity to present a critical interpretation of contributions to this relatively new field of knowledge. The reader is thus fortunate in having the privilege of ob-

taining the expert opinions of an experienced observer on the relative merits of the many conclusions drawn from experimentation. The author closes the book with a bibliography of over 100 pages and containing some 3,000 references.

It is the feeling of the reviewer that this is one of the best books on the subject of vitamins and would prove of great value to any one interested in learning the part played by the so-called accessory food factors in the biological history of man.

WILLIAM S. COLLENS.

THE PENALTY. Must We Pay It? By DR. ABRAHAM STRACHSTEIN. 12mo of 136 pages, illustrated. New York, Good Health Publishing Co., (c.1931).

This little book is intended for the edification of laymen and ventures a synopsis of gonorrhea and syphilis from the standpoint of etiology, symptoms, course, diagnosis, treatment and prophylaxis. The advisability of such a work for general distribution may be open to question. General advice is essentially the same as contained in the literature distributed by hygiene and health societies, as well as the popularized lectures on the so-called social diseases. The author has apparently been successful in imparting fundamental scientific data in the language of the lay reader.

The introduction is devoted to a discussion of the prevalent "unwarranted attitude toward the social scourge." The author believes that regular courses on sex matters should be given in high schools and colleges, as well as public lectures in large meeting places. He advocates wide distribution of this knowledge through the national government as well as through magazines and periodicals by authoritative writers.

AUGUSTUS HARRIS.

A MANUAL OF PHARMACOLOGY. By TORALD SOLLMANN, M.D. Fourth edition. Octavo of 1,237 pages. Philadelphia, W. B. Saunders Company, 1932. Cloth, \$7.50.

In this revision of one of the standard works on the subject some of the sections which have been re-written are those on Barbiturates, Arsphenamine fate, Cinchophen toxicosis, Gold, Liver extract, Bismuth, Mercury, Pituitary, Quinine and plasmoquin, and Sexual hormones.

As in previous editions, the main facts bearing on medical practice appear in the ordinary type and matters of less practical use are presented in smaller type. This arrangement is useful in facilitating quick reading.

It is important that this book be kept up-to-date as it is one of the mainstays of the practitioner and always a safe guide in the matters of which it treats.

W. E. MCCOLLOM.

PHYSIOLOGY OF BACTERIA. By OTTO RAHN. Octavo of 438 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc. (c. 1932). Cloth, \$6.00.

This is an advanced contribution to biology and bacteriology. As the author states, it is an attempt to co-ordinate the various simplest functions of life, to study each function itself and its effects upon the other functions. He divides his vast subject into four parts—endogenous catabolism, energy supply of the cell, growth and mechanism of death.

The work is not merely a review of the literature on the subject, it is very critical, presenting the strong and weak points of all theories, and a great many of the author's own experiments on all doubtful points.

J. COHN.

SURGICAL PATHOLOGY OF THE FEMALE GENERATIVE ORGANS. By ARTHUR E. HERTZLER, M.D. Octavo of 346 pages, illustrated. Philadelphia, J. B. Lippincott Company, (c.1932). Cloth, \$5.00. (Hertzer's Monographs on Surgical Pathology.)

This volume is profusely illustrated, mostly by the author's own specimens.

The book is very interesting reading. It is concise and to the point, and is excellent for quick reference. The author's vast experience in that branch of surgery can be used with great advantage. PHILIP OGINZ.

MENTAL NURSING (SIMPLIFIED). By O. P. NAPIER PEARN, M.R.C.S., L.R.C.P. 16mo of 304 pages, illustrated. New York, William Wood & Company, 1932. Cloth, \$2.00.

As the subtitle implies, the book is a simplified abstract of the principles of mental nursing. It is so simplified that "he who runs may read it." It is very brief, practical, and I suppose, will have a following in those who need brief reminders when dealing with mental patients. IRVING J. SANDS.

MODERN GENERAL ANESTHESIA. A Practical Handbook. By JAMES G. POE, M.D. Second edition. Octavo of 231 pages, illustrated. Philadelphia, F. A. Davis Company, 1932. Cloth, \$2.50.

The author properly calls this second edition a small volume. Its limitation to the practice of the ART accounts for this. Incidentally, one is ready to compliment him upon another limitation; and that is to write out of his own experience. So we have here another one of those smaller books which call attention to the precision of the work of the anesthetist—to those many details sometimes not regarded as important, which, however, are the very secret of ability and success. For instance, the recognition of the usual ignorance of the student whose impression of the importance of the subject has been carefully protected by the lack of instruction while at the college, and by the indifference with which the subject has been relegated in the hospital to some non-medical person. So, while the book is directly addressed to the student who has to learn the ART from the very beginning, Doctor Poe's sixteen years of experience enable him to suggest to his older fratres some matters of apparently minor interest, yet proving to be of major importance. For instance, holding the head sideways, changing the method according to the need, the description in detail of the therapeutic stage, the carefully worked-out chart of signs. The very fact that the writer has so consistently recognized the need of the student, gives his work a particular value to that ever-increasing number of surgeons whose knowledge of anesthesia is so lamentably circumscribed. In the third edition the author will add to the chapter on preparation of the patient, it is hoped, greater details in the matter of preliminary medication; none of the books cover that important subject sufficiently. A careful review of the nation of t circumstances set a atropin will be of certain value. Perhaps Doctor Poe will find it of sufficient importance to include also some description of other apparatus which is more readily procurable in other portions of the country. A discussion of the principles of their construction would certainly be at least interesting. A. F. E.

REFLEX ACTIVITY OF THE SPINAL CORD. By R. S. CREED, D. DENNY-BROWN, J. C. ECCLES, E. G. T. LIDDELL and C. S. SHERRINGTON. Octavo of 183 pages, illustrated. New York, Oxford University Press, 1932. Cloth, \$3.50.

"Reflex Activity of the Spinal Cord" possesses all of the attributes we have learned to associate with books

originating from the laboratory of C. S. Sherrington. Its purpose, to quote from the preface, is to present "a concise account of elementary features of reflex mechanism, as illustrated particularly by the mammalian spinal cord." Despite the use of the words "elementary features" by the authors, the full worth of the book probably can only be appreciated by the advanced student in neuro-physiology. In fact, the beginner, unacquainted with this subject, would quickly be lost in the maze of details presented. Starting out in an elementary vein, the contents soon become quite involved, with the result that they necessitate being read as one would a text-book. Since they are limited to a discussion of reflex in the strict sense of the word, no reference is made to the higher centers, the anatomical range extending as far as the mid-brain.

The first and second chapters deal with the structural consideration of the reflex arc, the nerve cell, the synapse and the gray matter of the spinal cord. The remainder of the contents is taken up with the physiological aspect of the matter. Such subjects as the mechanism of the flexor and stretch reflexes, inhibition, spinal "shock," occlusion and the various elements making up the latent period, which are but sparingly referred to in text-books of physiology and neuro-anatomy, are herewith discussed in detail. The phenomena of rebound, reciprocal innervation and decerebrate rigidity are also investigated. Many charts and graphs are presented in order to clarify and make the subject matter more complete. A discussion of the anatomical features of muscle receptors in mammals, together with plates illustrating the various types, is especially interesting and instructive. The bibliography, although not voluminous, appears to be quite complete in its scope. DAVID I. ABRAMSON.

RECENT ADVANCES IN PATHOLOGY. By GEOFFREY HADFIELD, M.D., F.R.C.P., and LAWRENCE P. GARROD, M.A., M.B., B.Ch., M.R.C.P. Octavo of 390 pages, illustrated. Philadelphia, P. Blakiston's Son & Company, 1932. Cloth, \$3.50.

In this volume the authors present a résumé of the latest investigations in a number of important or interesting disease processes. New discoveries in pathology and allied sciences are constantly changing our conception of disease. This volume provides much new knowledge in a very readable form. One does not have to be a pathologist to read it.

There is a full discussion of the functions of the reticulo-endothelial system, the latest in cancer research and chapters on cardio-vascular disease, pneumonia and the pneumoconioses. The discussions of necrosis of the liver and Bright's disease give the latest thought on these subjects and should clarify one's ideas about them. The chapter on the encephalitis problem is excellent and timely, with a simple, workable classification. In the concluding chapters, the authors present the latest findings in parathyroid and adrenal physiology and pathology. The illustrations are numerous and good and there are many references to the newest literature for more detailed study. E. B. SMITH.

THE EXPECTANT MOTHER'S HANDBOOK. By FREDERICK C. IRVING, M.D. 16mo of 199 pages, illustrated. New York, Houghton Mifflin Co., 1932. Cloth, \$1.75.

A handbook for mothers by the Professor of Obstetrics at Harvard. It goes rather deeply into the anatomy and physiology of reproduction, and the biological aspects of pregnancy, and is written apparently for the benefit of the patient with somewhat more than average intelligence and education. The general hygiene of pregnancy is well handled. Not much space is devoted to the baby itself, but many questions which arise in the patient's mind are adequately answered. Of handy size, and well printed, it is a good book for the type of patient who has an intelligent interest in her condition. CHARLES A. GORDON.



OUR NEIGHBORS



CONTRACT PRACTICE IN TEXAS

The expulsion of a number of members of the Medical Society of the County of Dallas, Texas, on the ground of doing contract practice was noted in this Journal of August 1, 1932, page 936. *The Texas State Journal of Medicine* for November, 1932, has a three-page editorial on the case. The expulsion by the County Society was upheld by the State Medical Association, but with the provision that the members be reinstated immediately on their abandonment of the objectionable contracts.

The State Association appealed to the American Medical Association, which sustained the decisions of the Texas State Association and the Dallas County Society.

The editorial in the November issue of the Texas State Journal explains the grounds of the decisions as follows:

"Prosecution in this case was based primarily upon Section 2, Article VI, of the Principles of Medical Ethics of the American Medical Association. This section reads as follows:

"It is unprofessional for a physician to dispose of his services under conditions that make it impossible to render adequate service to his patient or which interfere with reasonable competition among the physicians of a community. To do this is detrimental to the public and to the individual physician, and lowers the dignity of the profession."

"This amendment was approved by the board of councilors, but it is of interest to note that the board of councilors in rendering its decision based the same on the provision of the Principles of Medical Ethics involved, declaring the by-law out of order because not necessary.

"The Judicial Council of the American Medical Association, in its effort to interpret the above section of the Principles of Ethics, some time ago published five basic points of consideration in connection with contract practice. We quote these:

"1st. When the compensation received is inadequate, based on the usual fees paid for the same kind of service by the doctors in the same community.

"2nd. When the compensation is so low as to make it impossible for competent service to be rendered.

"3rd. When there is competitive bidding in order to secure the contract.

"4th. When a free choice of physicians is denied.

"5th. Solicitation of patients, directly or indirectly."

"The contract believed to be of less ill-effect was as follows:

"Upon the payment of \$200.00 per month, the services of your staff are available to the officers and employees of this bank for consultation, examination and treatment of minor cases of illness in our building when necessary. However, employees are not required to accept this service, but are free to employ the services of their family physician at their expense if they so desire.

"Any treatments given our employees at the clinic and all home visits are made at the request of the employee, without any knowledge or liability on the part of this bank, and we presume the charges made in such instance are in accordance with the economic standing of such employee."

"The other contract was as follows:

"For the consideration herein stated, the clinic agrees to render all necessary surgical and medical treatment for members of the Association, such members to be composed of white employees, male and female, of the Dallas Railway Company and Texas Interurban Railway, through physicians connected with the Dallas Medical & Surgical Clinic, the Clinic agreeing to appoint a competent person, graduate in medicine and surgery as Chief Physician and the Clinic agreeing to furnish consultation service and active assistance when necessary so as to fully cooperate in the performance of the services herein contemplated."

The contract continues in considerable detail regarding offices, x-ray, and other details:

"The decision of the Judicial Council of the American Medical Association, which is final so far as our own tribunals are concerned, is as follows:

"The fundamental issue in dispute in this case is the ethical character of certain contracts held by the appellants to give medical service to groups of people on a monthly per capita plan of payment. No essential facts of the contracts were in dispute.

"It is contended by the appellants that these contracts are not in violation of all or any of five conditions which the Judicial Council has declared at various times are conditions, which obtaining, make a contract unethical. The Dallas County Medical Society which sentenced these appellants to suspension contended that these contracts violated all five of these conditions. When, in its constitutional function as authority over ethical matters, the Judicial Council expounds the

(Continued on page 1394—adv. xiv)

PERSISTENT, AGONIZING NEURAL PAINS RELIEVED!

In a series of cases of obstinate, agonizing distress resulting from neural pain, definite relief was obtained from the following basic treatment, as outlined by Dr. M. D. Bloomfield in American Medicine, September, 1932.

Plan of Procedure Followed:

1. Removal of all suspected and visible foci of infection;
2. Physiotherapy in the form of diathermy, heliotherapy, irradiation therapy, and hydrotherapy;
3. Dietetic measures instituted toward corrective assimilation and metabolism;
4. Magnesium sulfate for its eliminative hepatic and detoxicating effect;
5. Mono-Iodo-Cinchophen for the absorptive and alterative effect of the nascent iodine and the analgesic and sedative action of the cinchophen.

Mono-Iodo-Cinchophen is available for clinical use under the name Farastan. This is the same product which has proved so effective in the alleviation of pain, reduction of swelling, and increase of motion in arthritic and rheumatoid conditions.

REG. U.S.

FARASTAN

PAT. OFF.

MONO-iodo-CINCHOPHEN
COMPOUND

*May we send you a full-size package for
clinical trial together with an abstract
of Dr. Bloomfield's paper which
includes his technique?*

THE LABORATORIES OF
THE FARASTAN COMPANY
131 South 11th Street PHILADELPHIA, PA.



Free Metallic Silver
in Aqueous Colloidal suspension.
Soothing, Non-Irritant.

For Use in

EYE, EAR, NOSE, THROAT AND
GENITO-URINARY AFFECTIONS.

For SAFETY and SIMPLICITY in
ADMINISTERING IODINE.

COLLOSOL IODINE

CROOKES

an aqueous liquid containing
IODINE 0.2%
as a colloidal compound of protein and
hydriodic acid.

Diminishes risk of iodism; large
doses may be given when necessary.

Palatable for Oral Use
Safe and free from pain and
reactions when injected
intravenously or
intramuscularly.

USE IN

RHEUMATOID AFFECTIONS,
ARTHRITIS, FIBROSITIS, SYPHILIS, ETC.

*May We Send You Full Details and Sample
Package of Either of These Products?*

CROOKES LABORATORIES
INCORPORATED

145-147 E. 57th St. New York City

(Continued from page 1392)

subject of contract practice and lays down certain principles which, when present, create an unethical contract, it is not to be assumed that those are the only principles which may have that effect. A fundamental of medical ethics is that anything which in effect is opposed to the ultimate good of the people at large is against sound public policy and therefore unethical. On the five points mentioned the appellants presented a strong argument which might be convincing if a narrow or local view only is considered. Nevertheless the Judicial Council is of the unanimous opinion that this type of contract is unethical on the basis of being contrary to sound public policy.

"The appellants were at the same time convicted of violation of a by-law of the society forbidding the holding of certain contracts and pleaded error in the trial on a technical procedure. This phase of the appeal was not pressed by either side, but from such records as were submitted to the Council it is of the opinion that no reversible error was proven.

"The action of the Board of Councilors of the State Medical Association of Texas is confirmed."

The concluding comment of the editor of the Texas Journal is as follows:

"It was not charged in the Dallas case, we believe, that there was any direct solicitation of patients by the group involved, but it was not clear, and the facts were not presented in the pleading, that those responsible for the organization of the group to be served did not solicit members. Certainly that would be an element that could not be very well controlled by the medical profession, and most doctors have every reason to be leery of high-pressure salesmen. We are convinced that this phase of the situation is of extreme importance. No matter how we safeguard any plan looking to the insurance of our people in the matter of health and sickness and incidental medical service, there is always the thought to be considered and the possibility, may certainly, that financial consideration will eventually prevail, and control will pass to those not so considerate of medical ethics and public policy."

ADMINISTRATIVE FUNCTIONS OF STATE SOCIETY OF IOWA

An editorial in the October Journal of the Iowa State Society discusses the administrative functions of the Society, as follows:

"It is the central office, through which flow all currents of Society policy and activity, guided, directed and unified by the Society officer. Each officer, department and committee fills a particular role in the scheme, some advisory, others more specifically administrative. In the House of Dele-

(Continued on page 1396—adv. xvi)

When Vitality is Low



Demineralization causes many cases of cachexia, debility, undernutrition, neurasthenia, anemia and other run-down conditions. Remineralization is the remedy.

The ingredients of Fellows' Syrup are sodium, potassium, calcium, iron and manganese, together with phosphorus, quinine and strychnine.

Dose: 1 teaspoonful t. i. d.

▲
Samples on Request

Fellows Medical Manufacturing Company, Inc.
26 Christopher Street, New York, N. Y.

Fellows' Syrup

It supplies the needed Minerals

**P
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POMEROY specializes in Elastic Stockings. Elastic Stockings for varicose veins—and for swollen ankles and just “tired legs.”

The “Master”—Hand-made

*“For uniform support
and durability—
the finest type made.”*

The “Special”—Hand-made

*“Correct for comfort
and fit.”*

The Seamless—Machine-made

“Easy to adjust.”

The Lastex—Factory-made

“Very light in weight.”

Prices Reduced—Quality Maintained

Pomeroy Company, Inc.

SURGICAL APPLIANCES

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AND

ROGERS BLDG. (Fordham Rd. at Webster Ave.) NEW YORK

BROOKLYN
NEWARK

SPRINGFIELD
WILKES-BARRE

DETROIT
BOSTON

(Continued from page 1394—adv. xiv)

gates each year are determined the policies which shall shape the Society for a twelve months' period, and it becomes the responsibility of the officers to interpret and enact these policies.

“The commodity which the physician offers for sale cannot be measured by the yardstick, pound or liquid measure. Nor can its quality or amount be ordered by the customer. As merchant of his wares, it is the physician's peculiar province to determine the needs of the customer. This determination, multiplied to the needs of a population, becomes tangibly involved in the economic and political problems of a state. The medical profession, willingly or not, finds itself imbued with the responsibility of gaining by legislation enactment of those measures which it deems necessary to the health of the public. Thus, through its Committee on Public Policy and Legislation, is directed the legislative function of the state society. By cooperation with the Department of Health, through the Law Enforcement Division, the health laws of the state are enforced.

“That health legislation should have its origin and leadership in the medical profession is self-evident. For some time, popular lay journals have been furnishing much material to further excite our already health-sensitive public, with the result that numerous lay organizations have sprung up, like mushrooms, to direct the interests of the public in health matters. These activities should have the direction and guidance of the medical profession.”

A second administrative function of the State Society is directed cooperation with the various state and local lay health agencies. Here, again, the activities of these agencies should be supervised by the medical profession. This fact was recognized in the Forty-third General Assembly by the passage of the permissive county health unit law. A united county medical society, the unit of organized medicine, has the qualifications, the willingness, the interest in its own citizenry, to promote and execute the health activities of the county. Where state or federal subsidy is needed, the request for such subsidy will win its merited consideration if coming from the medical profession.

“The correlation of the activities of the various county societies is a third administrative function of the Society. In the strength of the integral units, the component county societies, lies the strength of the parent organization. The State Society is directed by the policies of these units, but upon the wise guidance of these policies and the furtherance of fraternity, depends the effectiveness of their combined purpose. Certain agencies of the State Society render specific assistance to the individual members, such as medico-legal defense and protection. The Medical Economics Committee has been effective in ad-

(Continued on page 1397—xvii)

*Fills the need for a dependable
antacid mineral water*

VICHY CÉLESTINS

This long renowned naturally alkaline mineral water assists in neutralizing excess acid and in regularizing functions of the digestive tract.

Bottled at the Spring in Vichy, France, under Government supervision, it meets the great need of the physician for constancy of composition.

Sole U. S. Agents: AMERICAN AGENCY OF FRENCH VICHY, INC.
503 Fifth Avenue, Rooms 200-212, New York, N. Y.

(Continued from page 1396—adv. xvi)

vising the members as to the fallacy of schemes offering pseudo-ethical collection services, and participation in various professional listings of doubtful value to the physician. These are sub-heads under the general classification of 'service' to the members of the organization, but their numbers and types are numerous. They represent, as a group, one of the more concrete aspects of the administrative function of the Society.

"Prosaically entangled in the execution of all activities of the Society is the administration of its fiscal affairs. The very momentum of Society enthusiasm, doubling and trebling the activities and expenses, places a heavy burden on the Society's dollars. A judicious budgeting of these dollars, and an occasional forceful tightening of the purse-strings is by no means the least of the administrative functions."

JOURNAL IN PENNSYLVANIA

The editor of the *Pennsylvania Medical Journal* describes the several departments of the Journal in the October issue, and says:

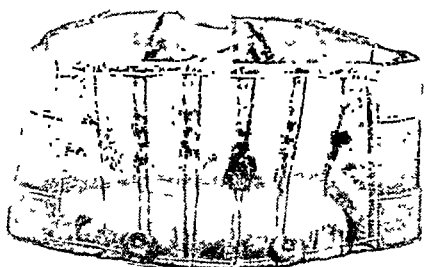
"The Journal is the house organ of our State

Medical Society, and is delivered to you every month. It brings to you a wealth of material and information, and keeps you regularly advised of the advancements in the art and science of medicine, and the activities of organized medicine, within and without the State.

"The members must read their State Journal to know why cooperation is essential, and how they can best do so. Unless we solve our own problems, working as a unit with our State Officers, the laity will solve them for us, much to our humiliation, embarrassment, and detriment. Hence the need for 100 per cent concerted action.

"The 'Table of Contents,' the Publication Committee and editorial personnel, and other matters pertaining to the business of the Journal, are always to be found on page v of the advertisement section. On and after October 1, 1932, authors submitting voluntary contributions will be required to inclose postage for return of the article, should it not be accepted for publication. A voluntary contribution is an article that has no relationship with the official transactions.

(Continued on page 1398—adv. xviii)



Devised by Dr. A. Bassler, New York City

The original uplifting abdominal belt with the incurved steels for Ptois Cases, devised by Dr. Anthony Bassler, is made by

S. EITINGER

Manufacturer of

SURGICAL APPLIANCES

of all descriptions are made at premises and correctly fitted.

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Tel. PLaza 3-8228

Est. 1912

PHILLIPS' Milk of Magnesia

THE IDEAL LAXATIVE-ANTACID

The name "PHILLIPS" identifies The Original and Genuine Milk of Magnesia. It should be remembered because it symbolizes unvarying excellence and uniformity in quality.

Supplied in 4 oz., 12 oz., and 3 pt. bottles.

**THE CHAS. H. PHILLIPS
CHEMICAL CO.**

New York, N. Y.

(Continued from page 1397—adv. xvii)

"The Transactions must be published within one year from the Annual Session of the State Society, and require eleven numbers of the Journal. This affords the acceptance of a limited number of voluntary contributions each year, and they are all published at one time in the October number.

"The Officers of the State Society, the Chairmen of Committees, and the Section Officers are always to be found on page vi of the advertisement section.

"The Officers, and Committee Chairmen of the Woman's Auxiliary to the A.M.A., are always to be found on page viii of the advertisement section.

"**EDITORIALS:** These columns are used to convey editorial thoughts upon subject matter that is expected to be of more than passing interest to the reader. Any member editorially inclined is cordially invited to contribute to these columns, subject to approval by the Editor. The various committees and commissions could use the editorial columns to distinct advantage, as has been so ably demonstrated by the editorials submitted by the Committee on Mental Hygiene for monthly publication, during the past few years."

The editor also discusses the other departments of the Journal including the following:

- Original articles
- Comments and excerpts
- Hospital activities
- Public health
- Physical therapy
- Industrial medicine
- Tuberculosis abstracts
- Officers Department
- Medical legal notes
- County Society Reports
- Deaths, marriages, births, etc.
- Book reviews
- Advertisements.

The Pennsylvania Journal is comprehensive in its scope, and its varied items make a strong personal appeal to the members of the county societies.

ADVERTISING CHARGES IN COLORADO JOURNAL

The September number of *Colorado Medicine* discusses a complaint that the costs of advertising a medical ware greatly increase the cost of the product to the customer. The editorial says:

"Occasionally a doctor criticizes manufacturers or dealers for their advertising expenditures, in the belief that products could be sold more

(Continued on page 1399—adv. xix)

(Continued from page 1398—adv. xviii)

cheaply if advertising costs did not have to be figured into the price of each product. Happily these objectors are few; but there may be others who think the same way without having ever put their thoughts in writing, and for them this is written.

"Whenever a manufacturer trims his costs he increases his profits, or reduces his prices, or does both. No manufacturer is in business 'for his health,' so when the most firmly entrenched companies spend increasing amounts to keep their products advertised before the medical profession, no other proof of the economy of such advertising should be needed."

The editor then prints a letter from a prominent national advertiser which says:

"Your state medical journal requires 1,700 copies of our colored insert, which cost approximately \$13.50. The carrying charge for this in one issue of the journal is \$45.00, making a total cost of \$58.50. This makes the insert that goes to each physician cost 3.4 cents. It always represents two products or two groups of products.

"From this it can be seen that if we should make an allowance in the price of the product equivalent to the cost of advertising, the fraction of saving to any one patient or to the total amount of the items prescribed by any one physician would be so small that it could not be represented in any of the terms of our U. S. coins.

"Another point that is particularly important is that the greatest possibilities of price reductions come through economies resulting from increased production in response to a demand which advertising helps to create.

"In the case of the colored inserts, practically three-fourths of the amount expended by the manufacturer goes to the journals that carry the advertising; and of the advertising on black and white pages, practically all of it is paid to the medical journal. If it were not for the advertising undoubtedly most of the state medical journals could not be maintained except at a heavy cost to the state societies, which would necessitate charging a very high subscription rate, one that would work a hardship on many physicians. The same is true of other medical journals, so that after all the amount the advertiser pays out rebounds directly to the benefit of the physician."

FULL-TIME SECRETARY IN KANSAS

The August issue of the Journal of the Kansas Medical Society records the following action regarding the employment of a full-time lay secretary:

"At the annual meeting last spring, a resolution was presented empowering the Council 'to arrange for the reorganization of this Society and

(Continued on page 1400—adv. xx)



NO COAXING..

● **As Easy To Take as**
● **Chocolate Pudding!**

NEO-CULTOL furnishes a concentration of the *acidophilus bacilli* in a chocolate flavored mineral oil jelly medium. This medium also acts as a mild lubricant, which in turn permits a soft, easily passed fecal mass.

For constipation and its sequelae, mucous colitis, intestinal toxemia, stasis, etc., NEO-CULTOL is useful, not only for its palliative effect . . . and ultimate correction of the underlying cause, but also in that the patient is enabled to follow the treatment pleasantly and effectively over extended periods.

NEO-CULTOL

By the makers of Liquid Peptonoids with Creosote

**The Arlington
Chemical Co.
YONKERS, N. Y.**



The ARLINGTON
CHEMICAL CO.
Yonkers, N. Y.

You may send me at the address below
a sample of NEO-CULTOL.

Dr. _____

Address _____

City _____ State _____
N.Y.S.J.M.-12-1-32

(Continued from page 1399—adv. xix)

to provide for the employment of a full-time lay executive secretary.

"The plan as proposed was not in any way a reflection on the ability or the work of the officers of the Society. Naturally, the officer of any organization who is employed full-time, devotes his entire time to the work of the organization he represents. Consequently, a full-time secretary would give his entire time in the interest of the organized medical profession.

"According to information available in the Journal office, fourteen state medical societies employ a full-time secretary. Eight of these, namely, Colorado, Georgia, Indiana, Iowa, Maryland, Ohio, Oregon, West Virginia and Wisconsin employ a lay secretary. California, Maine, Massachusetts, Minnesota, Missouri, New Jersey and Texas employ a full-time secretary who is a doctor of medicine. The salaries received by lay secretaries vary from \$3,600 to \$8,000, with an average of \$5,770; the minimum salary of the

medical secretary is reported as \$3,000, maximum \$7,245, the average being \$4,620.

"The full-time secretary, if employed, in reality would be the business manager of the Society. The Council and regular committee would lose none of their power, and undoubtedly would be more active in society affairs. It is not believed the full-time secretary could arrange more attractive programs for the annual meeting, but probably could stimulate the attendance, for he would make personal contact with all of the component societies at their regular meetings. Prior to the meeting of the legislature, he could make a tour of the state, become personally acquainted with each member of the House and Senate and present for their consideration the attitude of scientific medicine. It would be possible for him to be in daily and constant attendance at the legislative sessions and, through the legislative committee, keep the members advised as to contemplated medical legislation. He would, in addition, have many other duties."

DOCTORS IN THE PRIMARIES OF CALIFORNIA

The October issue of *California and Western Medicine* contains the following editorial describing the part taken by the doctors of Los Angeles in the primary elections:

"In the recent primary election the Los Angeles County Medical Association showed how the medical profession may make its influence felt in the selection of candidates to the legislature and other state offices.

"The officers of the Association made an accurate survey of each of the thirty assembly districts of Los Angeles County, and then appointed special subcommittees or key-men for each of the assembly districts, sending special letters of information to all members in each district so that contacts with the key-men were made easy. In a preliminary announcement in the Bulletin of the Los Angeles County Medical Association, printed on August 18, Secretary Harry Wilson stated:

"The association is interested, as any group of intelligent and patriotic citizens should be, in good government. The Association urges its members to support only those candidates who stand for good, constructive government. It asks its members to learn more about the candidates in their districts than they have been accustomed to learning in the past, and for a very definite reason.

"The Association feels that good government is sufficient for the protection of the medical profession. It asks its members not only to vote intelligently, but to aid in the cam-

(Continued on page 1401—adv. xxi)

ELIXIR GOLD TRIBROMIDE

(Pre-eminently a neurosedative and antispasmodic)

Used essentially for the treatment of WHOOPING COUGH. Other Therapeutic Indications: Bronchial asthma, chorea, migraine and petit mal. In four-ounce original bottles. A teaspoonful three or four times a day after meals.

Gold Pharmacal Company

SCHIEFFELIN & CO., 16-20 Cooper Sq., New York, Distributors
At your druggist Doctor, try it

Mercurochrome-220 Soluble

in

OBSTETRICS

A statistical study of a series of over 9000 cases showed a morbidity reduction of over 50% when Mercurochrome was used for routine preparation.

Write for Information

Hynson, Westcott & Dunning, Inc.

Baltimore, Md.

(Continued from page 1400—adv. xx)

paigns of such candidates they as individuals, select as worthy.

"After the primary election it was possible to estimate somewhat the effectiveness of the work which had been done, and it was most gratifying to note that the end-results fully warranted all the efforts that had been put forth. If the largest county medical unit of the California Medical Association was able to do these things in a metropolitan community, where political forces are many and difficult to overcome, then other county units should be able to get results equally efficient. The open letter which Dr. William R. Molony, president of the Los Angeles County Medical Association, submitted to the Los Angeles County Medical Association after the primary election, was printed in the September 15 bulletin and is as follows:

"Politically minded! Our critics have been saying so—these many years, that we have lacked this quality. But no more—at least for this year—can we be accused of being careless and asleep at the switch. The enthusiastic cooperation of the members of our Association during the recent primary campaign was most gratifying and is a source of added zest to the members and officers of the Los Angeles County Medical Association.

"The major credit must go to the group of earnest men who comprised the executive division of the Legislative Committee and who in turn were the 'key-men' in their respective assembly districts. In practically every district the nominees of both the Republican party and the Democratic party were men and women endorsed by the Los Angeles County Medical Association as candidates worthy of our support for good government, education, and public health.

"The Los Angeles County Medical Association has a membership of more than 2,100. Your influence is more widespread and penetrating than any other similar group in the county, and if you do not fully capitalize this asset it is in a sense your own fault. We should not exert our power for selfish purposes, but rather for good government, proper medical standards, and for the public health."

MEDICAL LEADERSHIP IN OREGON

The July number of *Northwest Medicine* has an illuminating editorial on medical leadership, which says:

"Dr. Nicholas Murray Butler has recently given a clever division of the people, or the nations of the earth, into three classes. He said: 'There are

(Continued on page 1402—adv. xxii)



Rich in Bone-Building Calcium

Maltcao, the new scientific food preparation with a delicious chocolate taste, contains a liberal quantity of calcium derived from vegetable sources. As you know, calcium is extremely important to the infant and growing child.

The expectant mother should have a large supply of calcium in order to keep up her own calcium content in the tissues and also supply calcium to the unborn child. The reason so many women lose their teeth during pregnancy is calcium deficiency.

8 oz. sample can to physicians on request
Merckens Chocolate Co., Inc., Buffalo, N. Y.

Maltcao
BUILDS FOR THE YEARS AHEAD

"STORM" The New "Type N" STORM Supporter



One of three distinct types and there are many variations of each. "STORM" belts are being worn in every civilized land. For Ptois, Hernia, Obesity, Pregnancy, Relaxed Sacroiliac Articulations. High and Low operations, etc.

Each Belt Made to Order

Ask for Literature

Mail orders filled in Philadelphia only

Katherine L. Storm, M.D.

Originator, Patentee, Owner and Maker
1701 Diamond Street, Philadelphia, Pa.

Agent for Greater New York

THE ABDOMINAL SUPPORTER CO.
47 West 47th Street New York City

(Continued from page 1401—adv. xxii)

a few who make things happen, the many more who watch things happen, and the overwhelming majority who have no notion of what happens.' Everyone is born into the third, and by far the largest group. Advance to the second group comes through effort and education. As the sum total of concepts and experiences increases, interest and curiosity become aroused and we make opportunities to 'watch things happen'. The first and smallest group are those 'who make things happen'. This group has all of the attributes of the second group, plus initiative and action.

"A survey of the membership of our medical societies on the basis of the above classification may stimulate ways and means of developing medical leadership from group two and an enlightened support from group three. The most efficient way to eliminate group three from our medical society membership is to encourage service on some committee activity where one will contact members of the other two groups. To hear the problems of the profession discussed in small groups where thought-provoking plans are submitted cannot help but stimulate thought and interest. When interest is aroused, action soon follows. With the problems of state medicine, contract medicine and group medicine before the medical profession, we cannot afford to permit many members to remain in group three. The more enlightened the county and state medical society membership becomes with regard to the above problems of future medical practice, the sooner we will develop an intelligent leadership capable of formulating policies and practical solu-

tions to these problems which will be worthy of intelligent and cooperative support."

MEDICAL AIMS IN MICHIGAN

The October issue of the *Journal of the Michigan State Medical Society* prints an editorial in which it enumerates the following ten ideals of the editor:

"1. Reports of every county meeting and what your local society is accomplishing. Reports should be in the State Secretary's hands not later than the fifteenth of each month.

"2. News items of general interest.

"3. Patronage of our advertisers. Give them your business in preference to non-advertisers.

"4. Subscribers to our Medical History—two volumes at \$7.50 per set. They are a splendid and appreciated gift to friends, hospitals and libraries.

"5. A resolve to participate actively in the work of your county society, and to accept and discharge committee duties.

"6. The extending of an invitation to every eligible doctor, urging him to affiliate.

"7. Not knowingly or unknowingly to be the cause for a damage suit against a fellow physician by ill-advised remarks or comments.

"8. Cooperation with your local health officers.

"9. Advising your patients to permit your vaccinating and immunizing their children and to do it yourself at a reasonable fee.

"10. Calling consultation and assistance in all serious cases and those in whom the diagnosis is undetermined."

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THE DIRECTOR,

302 EAST 20th STREET, NEW YORK CITY

TEACHING ECONOMICS TO INTERNS IN WISCONSIN

The instruction of internes in medical economics is described in the July issue of the *Ohio State Medical Journal*, as follows:

"A plan recently inaugurated by the Educational Committee of the Medical Society of Milwaukee County, Wisconsin, of holding conferences for hospital interns, the purpose of which is to discuss some of the practical social and economic problems which confront the young physician just entering practice, suggests similar activities on the part of other medical groups located in centers having hospitals where intern training is given.

"Commenting on the activities of the Milwaukee committee along this line, the *Milwaukee Medical Times*, official publication of the society, said editorially:

"Unfortunately many young physicians do not realize the importance of some business training until they are out of practice. They are then too busy to give this side of their practice much attention, which often results in deplorable situations. A review of the estates left by physicians is an eloquent reminder of this, fact. It is obvious that if all medical schools would include in their curricula a short course in medical economics and simple business methods, this condition in which physicians too often find themselves, would be greatly improved. The Educational Committee has come to the conclusion that it can do something to meet this situation."

"Many county medical societies or academies of medicine in Ohio would be in a position to add some such activity to their programs."

PRESS PUBLICITY IN SOUTH CAROLINA

The September issue of the *Journal of the South Carolina Medical Association* contains the following editorial on press publicity:

"For the first time the South

**Diuresis is recommended
in many forms of
Heart Disease
as an adjunct to other
appropriate treatment.**

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**may be relied upon
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Carolina Medical Association enters upon a publicity program through the newspapers of the State on preventive medicine measures to be carried out by the layman. These articles are being sent out to both the religious and secular press at frequent intervals. The first one was on appendicitis, the second one on the prevention of diphtheria. These contributions have been presented by members of the association on invitation from the Committee on Public Health of the State Medical Association of which Dr. R. M. Pollitzer of Greenville is the Chairman. The copy is prepared and sent out from the headquarters office of the State Association. None of the articles are signed. There has been a splendid response on the part of the press in the publication of these articles. It is entirely a service in the interest of the people of South Carolina."

LENGTH OF ARTICLES IN NEBRASKA JOURNAL

The following editorial in the October issue of the *Nebraska State Medical Journal* will apply to New York as well as Nebraska:

"A contemporary (*Mich. Med. J.*) reminds its readers that medical papers should be brief because there are very few medical journals which can accommodate the lengthy paper. This reminds us to state to our contributors that we have more lengthy papers on hand than ever before. The only thing to do is to cut them into two or three parts for publication. This is not desirable, but necessary. We have a number of times reminded our readers that the short, snappy paper is the one that is read. The lengthy paper tires the reader. Medical journals are picked up by physicians at odd moments and the short, crisp items are read while the lengthy article gets little but a glimpse at the title. No independent medical journalist would accept and publish the long drawn-out papers a state journal must perforce publish. If you wish to reach the reader 'make it short and snappy.'"

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NEW INSULIN PUBLICATIONS

There is a growing recognition of the therapeutic significance of adequate carbohydrate utilization, glycogen storage, and related metabolic processes. Since these fundamental mechanisms are so susceptible to therapeutic manipulation it is quite certain that literature on the dietetic management and use of Insulin, and the use of Insulin in non-diabetic malnutrition will prove of interest to many physicians.

From the press of Eli Lilly and Company there recently appeared two publications which have to do with the far-reaching physiologic and pathologic phenomena of carbohydrate metabolism.

The first booklet is entitled "Diabetes Mellitus—A Method of Dietetic Management and the Use of Insulin." The second bears the title, "The Use of Insulin in Non-Diabetic Malnutrition."

The first is a monograph, precise, clear, dependable, in which special effort has been made to simplify dietetic problems. The second is a condensed review of the literature on the use of Insulin in malnutrition dependent on various causes. Specific indications are mentioned together with details of dosage in infants, children, and adults. Both pamphlets are available without cost to physicians. Address Eli Lilly and Company, Indianapolis, Indiana. See page xii.—*Adv.*

ANNOUNCEMENT

The formal opening of the Chinese Lounge, atop the main building of the New York Polyclinic Medical School and Hospital, took place on Thursday, November 10th, at 3 o'clock, with the Honorable John P. O'Brien, Mayor-elect of the City of New York, and the Honorable Henry K. Chang, Chinese Consul-General, officiating. This Chinese Lounge is for convalescent patients. The opening was attended by a large gathering. Refreshments were served. See page iv.—*Adv.*

WARNS AGAINST PROMISCUOUS DOSING WITH VITAMINS

Ever since 1914, when S.M.A. was developed, the producers of S.M.A. have been interested in proper appreciation and application of the vitamins, particularly A and D.

Vitamin research has been carried on without fanfare by S.M.A. Corporation since its formation in 1921. As a result, when the fad for irradiated products swept the medical world, the research chemists of S.M.A. Corporation were not satisfied with an artificial source of Vitamin D, and reserved judgment, continuing to use the old, reliable cod liver oil in S.M.A. and to remind the medical profession of this fact. (S.M.A. and Smaco products are not advertised to the public.)

As another result of this research, S.M.A. Corporation was recently able to announce the availability of Primary Vitamin A (Carotene) for therapeutic use at moderate prices.

This is not only a boon to physicians in making possible the prescribing of Vitamin A alone, as well as Carotene for its own virtues, but it will also make possible further research on the properties of Vitamin A. Such an important announcement could not long remain a secret from the press of the country, and about two weeks after the announcement to the medical profession, an interview was printed in which W. O. Frohring, Vice President and Director of Laboratories, was quoted as follows:

"We are offering carotene to the medical profession in three convenient forms,—Crystalline carotene for research purposes; Caritol, which is carotene in bland oil, and cod liver oil with carotene.

"While it is confidently expected that these products will prove to be of immense value to the public, they are not intended for use by the public except under the direction of a physician."—See page ix.—*Adv.*

VITAMIN "D"

Winter is a jailer who shuts us all in from the fullest vitamin D value of sunlight. The baby becomes virtually a prisoner, in several senses: First of all, meteorologic observations prove that winter sunshine in most sections of the country averages 10 to 50 per cent less than summer sunshine. Secondly, the quality of the available sunshine is inferior due to the greater distance of the sun from the earth altering the angle of the sun's rays. Again, the hour of the day has an important bearing: At 8:30 A. M. there is an average loss of over 31%, and at 3:30 P. M., over 21%.

While neither Mead's Viosterol in Oil 250 D nor Mead's 10 D Cod Liver Oil with Viosterol constitutes a sub-

stitute for sunshine, they do offer an effective, controllable supplement especially important because the only natural foodstuff that contains appreciable quantities of vitamin D is egg-yolk. Unlike winter sunshine, the vitamin D value of Mead's antirachitic products does not vary from day to day or from hour to hour. See page xxviii.—*Adv.*

PAIN!

For the treatment of pain and stiffness accompanying rheumatic and other disorders in the extremities, the application of heat is the most useful single measure known.

The local application of heat has a pronounced effect upon the circulation of the blood and lymph. It results in the relaxation of tissues, in improved metabolism and in helping to carry away the various exudates, inflammatory products and bacterial poisons deposited in the diseased joints and inflamed nerve sheaths.

Experience has demonstrated that there is no more effective application for dilating the superficial and deep vessels than through the use of Antiphlogistine. Its heat-retaining qualities, coupled with its high glycerine content and other components, produce an intensive hyperemia and causes the blood to flow in larger quantities from the deeper tissues to the surface under treatment. Thus, through the dilatation of the blood-vessels and the locally increased osmotic exchange, the pathological products are poured in larger quantities into the blood and there destroyed.

For the pain, stiffness or swelling associated with arthritis in the wrists, ankles, hands or feet; for sprains and strains; in fibrositis of the palmar or plantar fascia in the manipulative treatment of flat foot, where muscular relaxation is desired, the use of Antiphlogistine is always indicated. Physicians are invited to write to the Denver Chemical Mfg. Co., 163 Varick Street, New York, for sample and literature. See page ii.—*Adv.*

ERYSIPELAS

The recent reports by Symmers and Lewis of Bellevue Hospital covering the results following the employment of Erysipelas Antitoxin are most gratifying. These results are based upon the treatment of three thousand three hundred cases.

The season when erysipelas causes disability is close at hand, and physicians should be acquainted with this development and the results following the use of the product of the LEDERLE LABORATORIES.

Full information will gladly be supplied by communicating with them at 511 Fifth Avenue, New York City. See page vii.—*Adv.*

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SOME CLINICAL FEATURES OF DEFICIENCY DISORDERS

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Read before the Academy of Medicine, Rochester, N. Y., April 7, 1932.

Introduction

THE food deficiency disorders have for many years received study by those who have investigated the problems of nutrition, but only in recent years have they attracted the general attention of clinicians. As information accumulates regarding these conditions, it becomes clear that the tissue changes which result are extremely varied and widespread. This state of affairs naturally leads to a great variety of clinical symptoms and signs. In order to recognize these conditions, it is important that we have some understanding of the circumstances under which food deficiency disorders occur and the changes that follow.

It is now clear that food deficiencies may arise, not only as a result of inadequate diets, but they may occur as a complication of processes which interfere with normal nutrition such as a chronic diarrhoea or when added demands are made on the body, as in pregnancy. Finally, it is now known that a deficiency disorder may arise as the result of the failure on the part of the body to manufacture certain essential substances. The example of this type of deficiency is pernicious anemia, which develops, in most instances at least, as a result of a defect in the stomach which interferes with the manufacture of a factor which is necessary for normal hematopoiesis.

If we remember then, that deficiency diseases can and do occur under the circumstances mentioned, we can appreciate the great variety of conditions under which they may be observed.

There are two other factors which must be borne in mind in order that the clinical picture may be interpreted accurately, first, that dietary deficiencies in man are usually multiple and not single, and secondly, that the tissue changes, which occur as a result of deficiency, are so often the site of infection that the fundamental tissue changes due to the deficiencies themselves may be overlooked.

That deficiency disorders in man are usually multiple is not surprising, because single deficiencies may be studied in animals only after the diet has been planned with meticulous care. The

diet of man is never so arranged and is dictated largely by such factors as geographical location, class custom, habits, race, and the general economic status. It is only natural then that diets which are deficient in one way are usually deficient in others. This is supported by numerous clinical observations.

The relation between food deficiency and infection is not thoroughly understood, but the two are commonly associated under circumstances that make one feel that tissue changes resulting from the deficiency disorders predispose to infection. This question has received most attention in connection with vitamin A deficiency. The conditions in which the various deficiency disorders occur are summarized in Table I.

TABLE I. CONDITIONS IN WHICH DEFICIENCY DISEASES DEVELOP

I. *Keratomalacia.*

- (1) Restricted diets
- (2) Chronic dysentery
- (3) Diabetes
- (4) Celiac disease
- (5) Tuberculosis of intestines
- (6) Ulcerative colitis

II. *Beriberi.*

- (1) Restricted diets
- (2) Chronic dysentery
- (3) Diabetes
- (4) Pregnancy
- (5) Hyperthyroidism
- (6) Celiac disease

III. *Scurvy.*

- (1) Restricted diets
- (2) Pernicious anemia
- (3) Chronic dysentery
- (4) Pernicious vomiting of pregnancy
- (5) Hyperthyroidism

IV. *Pellagra.*

- (1) Inadequate diet
- (2) Carcinoma of stomach

- (3) Carcinoma of ileum
- (4) Tuberculosis of intestines
- (5) Chronic dysentery
- (6) Stricture of rectum
- (7) Carcinoma of colon
- (8) Ulcerative colitis
- (9) Pernicious anemia
- (10) Chronic alcoholism
- (11) Stricture esophagus
- (12) Pyloric obstruction
- (13) Gastro-enterostomy

V. *Rickets.*

- (1) Inadequate diet.
- (2) Celiac disease
- (3) Hypothyroidism

VI. *Tetany.*

- (1) Inadequate diet.
- (2) Osteomalacia
- (3) Rickets
- (4) Sprue
- (5) Malabsorption of fat
- (6) Pregnancy
- (7) Lactation
- (8) Celiac disease

VII. *Osteoporosis.*

- (1) Celiac disease of adults
- (2) Sprue
- (3) Pernicious anemia
- (4) External biliary fistula

VIII. *Osteomalacia.*

- (1) Pregnancy
- (2) Inadequate diets
- (3) Hyperthyroidism

IX. *Edema Disease.*

- (1) Inadequate diet
- (2) Chronic dysentery
- (3) Tuberculosis of intestines
- (4) Pernicious anemia
- (5) Diabetes mellitus
- (6) Pregnancy
- (7) Lactation
- (8) Pellagra
- (9) Celiac disease
- (10) Chronic alcoholism
- (11) Cirrhosis of liver
- (12) Cardiac insufficiency

X. *Combined System Disease.*

- (1) Pernicious anemia
- (2) Gastric anacidity
- (3) Pellagra
- (4) Chronic dysentery
- (5) Cancer of stomach
- (6) Lathyrism
- (7) Gastrectomy
- (8) Ergotism
- (9) Sprue

Vitamin A Deficiency: It has been customary in discussing vitamin A deficiency to consider

xerophthalmia or keratomalacia as the characteristic lesion resulting from this defect. It is now recognized that these conditions may not occur until other manifestations of the deficiency have been present for considerable periods of time. The investigations of Wolbach and Howe¹ and others² have conclusively shown that the characteristic changes of vitamin A deficiency occur in the epithelial tissues. There is a widespread keratinization and replacement of the epithelia by stratified keratinizing epithelium in various parts of the respiratory and alimentary tract, in the eyes, paracocular and salivary glands and in the genitourinary tract. The changes in the various organs result in symptoms or allow infection to take place. In Table II the organs in which changes occur together with their clinical features are summarized.

TABLE II
VITAMIN A DEFICIENCY

<i>Pathologic Lesions</i>	<i>Clinical Manifestations</i>
Keratinization of Epithelial Tissues	Night Blindness
Conjunctivæ	Xerosis Conjunctivæ
Cornea	{ Xerosis Cornæ Keratomalacia
Lachrymal Glands	Diminution Tear Secretion
Parotid Glands	Xerostomia
Mouth	{ Xerostomia Leukoplakia
Trachea and Bronchi	{ Bronchitis—Tracheitis Bronchiectasis—Pneumonia
Intestine	Ulcerative Colitis
Genito-Urinary Tract	{ Cystitis Urolithiasis
Skin	Hyperkeratosis Follicularis

The main ocular symptoms in vitamin A deficiency have been recently discussed and summarized by Pillat.³ Night blindness is an inability of the patient to see at twilight, especially after sunset. The diagnosis is made from the history, because there are no characteristic findings on physical examination, the ocular fundi being normal in appearance. It may occur without any other ocular symptoms or it may be associated with xerophthalmia or keratomalacia. The natural history of the development of these lesions is as follows: the first feature is a dryness of the bulbar conjunctiva with a loss of lustre. In the beginning the areas of dryness occur in small patches near the limbus extending toward the lid angle, then they spread in other parts of the conjunctivæ. The sensibility of the conjunctivæ is reduced and finally there is some wrinkling of the conjunctivæ. The process then progresses to the

cornea and produces dryness, a great increase in the number of epithelial cells and numerous bacteria may be observed in scrapings from these areas. Finally if the process is allowed to progress, softening of the cornea with corneal ulcers occur, which may penetrate the anterior chamber and cause blindness.

The lesions in the respiratory tract consist of desquamation of large numbers of epithelial cells with a replacement by keratinized epithelium. This may lead to the development of localized areas of bronchopneumonia and bronchiectasis.

In the genito-urinary tract one finds changes in the epithelium, giving the appearance of leukoplakia. The urine may contain large numbers of epithelial cells and infection and calculi are common. It would appear as if the altered epithelium allows infection to take place much more readily than when normal epithelium is present.

The alterations in the epithelial tissues of the gastrointestinal tract are similar to those described elsewhere and may lead to ulceration and subsequent diarrhoea. It is common to have diarrhoea in patients with vitamin A defects and it promptly disappears following adequate treatment.

Hyperkeratosis Follicularis: This condition of the skin has recently been studied most carefully by Frazier and Hu.⁴ They pointed out that the essential changes in the skin were similar to those observed in experimentally controlled cases of vitamin A deficiency, and since many of their cases were observed in patients with the characteristic lesions of vitamin A deficiency, there seemed to be little doubt as to the cause of these lesions.

They described the natural history of the development of the skin lesions somewhat as follows: At first the skin becomes dry and slightly rough—then spinous papules appear at the sites of the hair follicles, and involve the antero-lateral aspect of the thighs and the postero-lateral aspect of the forearms. These lesions gradually spread to the extensor surface of both upper and lower extremities, the shoulders, and the lower part of the abdomen and to a less extent to the chest, back, and buttocks.

Histologic examination of these cutaneous lesions showed the pathologic process to be one of hyperplasia and hyperkeratinization of the epithelium of the epidermis and hair follicles, with associated metaplasia of the epithelium of many of the sweat ducts to the keratinizing type, degeneration of the glandular structures of the skin and infection.

Striking improvement in the condition of the skin followed the ingestion of cod liver oil. The cutaneous lesions gradually disappeared, leaving delicate atrophic scars surrounded by a zone of brownish pigmentation at the follicular orifices. Over two months may be required for the skin to regain its normal appearance.

Other conditions, such as xerostomia, may result from changes in the parotid glands due to lack of vitamin A. Changes in the lachrymal glands with diminished or absent lachrymation as a result of vitamin A deficiency are also recognized. In reporting a case of xerostomia and lack of tear secretion, Chamberlin⁵ suggested that the changes producing the clinical picture were probably due to a deficiency disorder.

Vitamin B Deficiency: Due to the fact that vitamin B is a complex substance, and that its lack may result in a variety of changes, it is difficult to define with precision the limits of the changes produced in the body by its absence. In spite of this fact, a variety of disturbances have been attributed to vitamin B deficiency and while our views regarding these lesions may have to be revised later, it is well to review the current notions about them, particularly as they are seen in patients. The various fractions of vitamin B have been divided into the anti-neuritic factor (B1 or F), the pellagra preventive factor (B2 or G), and several other fractions which are supposed to be necessary for weight maintenance and growth. The lack of the anti-neuritic fraction leads to changes in the central and peripheral nervous systems with resulting retrobulbar neuritis, abducens, facial and vagal paralysis and peripheral neuritis. Table III summarizes the pathologic as well as the clinical lesions attributed to vitamin B deficiency.

TABLE III

VITAMIN B DEFICIENCY

Pathologic Lesions	Clinical Features
Central Nervous System Lesions	Abducens Palsy Facial Paralysis Recurrent Laryngeal Paralysis Retrobulbar Neuritis
Peripheral Nerves	Peripheral Neuritis
Heart Muscle Lesions	Cardiac Insufficiency Pellagra (?) Acrodynia (?) Combined System Disease (?)

The peripheral neuritis due to vitamin deficiency cannot be distinguished clinically at least from peripheral neuritis due to other causes. The lower extremities are involved more often than the upper and there are changes both in sensation and motor function. As in other forms of neuritis, touch is often lost over a greater area than pain or temperature. At this point it is interesting to note that patients with polyneuritis as a result of chronic alcoholism usually develop pellagra or peripheral neuritis after a prolonged alcoholic bout which is usually accompanied by a great reduction in the food intake. It is likely, therefore, that vitamin B deficiency plays a part

in the development of polyneuritis following chronic alcoholism.

In recent years it has become generally accepted that pellagra is a deficiency disorder and in some circles, at least, it is thought to be due to a lack of fraction of vitamin B known as the pellagra preventive fraction. There is much evidence to support the deficiency hypothesis of pellagra. Besides the characteristic skin lesion of pellagra other clinical features may be striking and include stomatitis, diarrhoea, peripheral neuritis, combined system disease, psychoses, anemia, and edema. Just how many of these clinical conditions can be attributed to the same cause as the skin lesions remains a question for further solution. In many cases it would appear that one was again dealing with multiple dietary defects.

The condition known as acrodynia or erythroedema polyneuritis or Swift's disease is considered to be an atypical form of pellagra by some observers, or a food deficiency of unknown cause by others. It is characterized by erythema of the hands, feet and face; particularly of the cheeks and nose, with desquamation of the palms and soles, excessive sweating, alopecia, insomnia, anorexia and peripheral neuritis. A disease in rats which has been interpreted as analogous to acrodynia in man, has been reported by Findlay and Stern and was produced by feeding autoclaved egg white. Inasmuch as most patients with this disease recover following a good diet, the evidence that it is due to a food deficiency is convincing.

Some patients with vitamin B deficiency develop cardiac insufficiency. The patients, who develop this condition are those who have slight involvement of the central nervous system and a preservation of muscular power. If they are able to carry on normal activities, a burden is placed on the heart which is already embarrassed by deficiency of vitamin. This causes a failure of the myocardium. If, on the other hand, the nervous system is extensively involved, so that polyneuritis develops, the patient is unable to carry on normal activities. As a result, the burden of exercise is not placed on the heart and failure does not occur. Exceptions to these observations are seen in infantile beriberi in which cardiac insufficiency occurs without exercise.

The clinical features presented by these patients may be summarized as follows: Most of the patients complain of palpitation, edema and some shortness of breath on exertion. These symptoms sometimes are preceded by pains in the calf muscles. If the patient is seen early in the course of his illness, it is noted that the heart rate is somewhat accelerated. The blood pressure might be normal. There are no conspicuous changes in the peripheral vessels. The heart is enlarged both to the right and to the left of the midsternal line; the apex beat is diffuse, and not forceful. There is usually a systolic murmur

over the pulmonary area, and the pulmonary second sound is accentuated. The lungs do not show signs of congestion, and the liver is not enlarged. There is usually edema of the lower extremities.

As the disease progresses, all these signs become exaggerated and the edema increases. The liver becomes enlarged, and nausea and vomiting sometimes appear. Striking changes occur in the peripheral circulation. There might be increased peripheral pulsations of the vessels of the neck and extremities, with a collapsing type of pulse and capillary pulsation. The sounds over the brachial and femoral arteries are increased. Examination of the heart reveals an increased enlargement with a systolic apical thrill, and loud systolic murmurs over the mitral and pulmonary areas. The rhythm, however, remains regular and it seems clear that the common arrhythmias do not occur in this disease. Teleoroentgenograms of the heart reveal enlargement of the right auricle and the right ventricle, with a prominent pulmonary artery and superior vena cava. The electrocardiograms do not show anything characteristic. The voltage might be low or high. Minor abnormalities, such as changes in the T waves, may be present.

All these conditions may occur in the cardiovascular system with slight changes in the nervous system. The latter generally consist of minor sensory disturbances and a loss of the knee and ankle jerks.

When the patient is treated with rest in bed with large amounts of vitamin B and a proper diet, striking improvement rapidly occurs. The heart rate falls, the blood pressure becomes normal, the peripheral pulsations and the collapsing and capillary pulse vanish, diuresis sets in, the heart becomes smaller, the murmurs disappear, and the patient becomes normal. The deep reflexes do not reappear until many weeks after the cardiac signs disappear.

In recent years, combined systemic disease has been suspected to be a deficiency disorder. This view gains support from the clinical observation of its occurrence in pellagra, pernicious anemia, also beriberi, lathyrism, ergotism, chronic dysentery, and carcinoma of the stomach. Animal experiments by Gildea, Kattwinkel, and Castle⁶ and by Mellanby⁷ have shown that lesions not unlike those in human cases of combined system disease can be produced by deficient diets. The precise nature of the deficiency is not definitely settled since Castle's results were obtained following a diet deficient especially in vitamin B, whereas Mellanby's results were observed on vitamin A deficient diets. At the present time, the fact of importance is that the lesions of subacute combined sclerosis have been produced in animals on deficient diets, and this disorder should, therefore, be considered a deficiency disease and should be studied from this viewpoint.

Apart from the conditions mentioned as signs

of beriberi, Hoobler⁸ has called attention to disturbances in infants which he feels are the result of a partial lack of vitamin B in the diet. These symptoms include irritability, anorexia, loss of weight, retardation of growth and rigidity. All of these conditions have been observed to disappear following the addition of adequate amounts of vitamin B to the diet in the form of wheat germ oil and yeast. These observations emphasize the importance of giving optimum amounts of essential food substances to all patients.

Vitamin C Deficiency. Scurvy of the infantile or adult type is due to a lack of vitamin C. The pathologic lesions observed are increased capillary permeability with resulting hemorrhage changes in the bones causing increased fragility, and changes in the bone marrow causing anemia. The hemorrhages in scurvy may be extremely widespread. They are especially prone to appear in areas which are traumatized such as in the masseter muscles, about the gums, in the muscles of the legs, into the knee joints, and in infants and growing children into the periosteum. Hemorrhages also occur at the costochondral junctions and occasionally from the intestine or kidney. The hemorrhages into the skin are of two varieties, those resulting from trauma are large ecchymoses or sugillations appearing over the legs. The ones occurring spontaneously appear about the hair follicles and are present only in the parts of body supplied with hair. These hemorrhages may occur without an associated hyperkeratosis follicularis. Petechial hemorrhages may also be produced by applying a tourniquet test.

The changes in the blood vary with individual cases. In some cases the clinical features of scurvy may be present without anemia. In others anemia is present. Mettler, Minot, and Townsend⁹ have studied the anemia of scurvy in man and found that blood regeneration followed the feeding of food rich in vitamin C. In spite of the fact that hemorrhage is a feature of this disorder, it has not been possible to demonstrate any defects in the substances which are responsible for normal blood coagulation. The blood platelets are normal, the clotting and bleeding times are normal, and the clot retracts.

Besides the changes in the blood vessels in the resulting hemorrhage, Aub and Salter have shown that there is a disturbance of the calcium metabolism in scurvy which leads to fragility of the bones; this is reflected in the presence of fractures particularly of the "green stick" variety which are common in children with scurvy.

There are other clinical features which may be observed in patients with scurvy but they are less constant and probably are due to a lack of substances other than vitamin C. They are cardio-respiratory disturbances, polyneuritis, edema and night blindness. Inasmuch as these conditions are observed as characteristic features of other de-

ficiency disorders, it is likely that when they are present in patients with scurvy the cause is a multiple deficiency disorder.

TABLE IV
VITAMIN C DEFICIENCY

Pathologic Lesions	Clinical Features
1) Increased Capillary Fragility	Hemorrhages into skin Muscles Sub periosteum Joints
2) Fragility of Bones	Gums, if traumatized Bone marrow— <i>anemia</i> Internal organs— <i>Intestinal bleeding</i> <i>Hematuria</i>

Rickets, Osteoporosis and Osteomalacia. It is now generally recognized that these various diseases of the bone result from the lack of absorption or proper utilization of calcium and phosphorus in amounts necessary to meet the requirements of the body. Knowledge concerning these conditions has been summarized recently by Marble and Bauer¹⁰ and they point out that some of the conditions are 1) dietary insufficiency of either calcium or phosphorus, 2) deficiency of vitamin D, 3) diets containing a great excess of calcium over phosphorus or vice versa, 4) longstanding diarrhoea, 5) any disease hindering absorption from the gastro-intestinal tract, 6) longstanding biliary or intestinal fistulas and 7) excessive excretion of fat. Reference to Table V will indicate the clinical conditions in which these disorders are observed.

Tetany. What has been said regarding rickets, osteoporosis and osteomalacia also applies to tetany which results from a deficiency of calcium. It must be remembered that tetany may occur as a result of parathyroid deficiency (post-operative or hypoparathyroidism of unknown etiology), but in these instances the mechanism is different from those cited above. Increased loss of calcium from the body such as occurs in lactation, or increased demands for it such as occurs in pregnancy, may also account for some cases of tetany. In any event it is necessary insofar as it is possible to determine the mechanism by which the deficiency of calcium arises, if a satisfactory permanent therapeutic result is to be obtained.

TABLE V
VITAMIN D DEFICIENCY

Pathologic Changes	Clinical Features
Disturbed Ca and P Metabolism	Rickets Osteomalacia Osteoporosis Tetany Dental Caries

Protein Deficiency—Edema Disease—Malnutrition Edema: When the protein intake of the diet is restricted for prolonged periods of time, the proteins of the blood are reduced in amount. This change predisposes to the development of edema. Edema disease has been recognized as a deficiency disorder for many years, and in time of famine or when the protein food has been restricted, it may occur in epidemics. Moreover, it has been described in connection with deficiency diseases such as pellagra, beriberi, scurvy, and it may be observed in a variety of other clinical conditions. Reference to Table I shows that the disorders in which it may be observed are numerous.

TABLE VI

PROTEIN DEFICIENCY—NUTRITIONAL EDEMA

Decreased Total Serum Proteins	Edema
Low Basal Metabolic Rate	Bradycardia
Decreased Blood Fibrinogen	Purpura

The clinical features presented by these patients are striking. (See Table VI.) The outstanding feature is edema which varies from moderate edema of the dependent parts to a generalized anasarca with puffiness of the face, edema of the chest wall and over the back, pleural effusion, ascites and effusion into the knee joints. Ascites is more common than pleural effusion and while pericardial effusion may be observed, it is much less common than effusion into the other serous sacs.

The skin may be rough and dry and in some cases typical hyperkeratosis follicularis is observed when there is an associated vitamin A deficiency. In other cases punched out ulcers appear over the legs. Hemorrhages into the skin and sclerae are observed without other manifestations of scurvy.

The temperature in uncomplicated cases is usually normal, but inasmuch as many of these patients develop infections, it is not unusual to observe fever of mild degree. The pulse rate varies tremendously, the bradycardia described by Burger as a characteristic feature of the disease is not constant and many cases are observed with slight tachycardia. The blood pressure is either normal or low. The heart is not enlarged, and there are no signs of cardiac insufficiency. The electrocardiographic records do not show any alteration in conduction, although left ventricular preponderance, even when the diaphragm is not elevated as a result of ascites, is common. The absence of changes in the cardiovascular system, when contrasted with the changes observed in vitamin B deficiency is striking.

Considerable variations in the basal metabolic rate are observed during the course of the disease. Usually when the edema is most marked, the basal metabolic rate is reduced below normal, during recovery it returns to normal, and in many instances it is elevated 20 to 25 per cent above normal for several weeks and then returns to a normal level again. Similar changes in basal metabolic rate have been observed in patients with undernutrition following typhoid fever, and it is likely that the changes observed in malnutrition edema are in some way related to the metabolism of undernutrition.

The blood does not reveal any characteristic changes in the red blood cells or hemoglobin. In a group of patients reported elsewhere¹¹ it was found that anemia was a variable feature. It was present in some cases and not in others.

One of the outstanding characteristics of the blood is a reduction of the serum protein. In a recent study by Weech and Ling¹² it was found that when the level of serum albumin was greater than 2.9 grams per 100 c.c. edema was never observed and when the level fell below 2.5 grams per 100 c.c. edema was invariably present. They also found that the serum globulin was exceedingly variable; decreased, normal or increased values were found in association with edema. These authors also stressed factors other than the decreased serum proteins in the production of edema in these patients, and pointed out that when the serum protein was low, the administration of sodium in the form of sodium chloride or sodium bicarbonate led to a marked increase in edema and a depression of chloride excretion in the urine. It appears, therefore, that while the level of the serum protein is of importance in predisposing these patients to edema there are other factors of importance in influencing the amount of fluid retained.

The renal function in these patients is usually normal.

One clinical feature which may be observed is diarrhoea. Although the symptom results from dysentery in some of these patients, it may be observed in edema disease when dysentery cannot be demonstrated. The diarrhoea may appear after the edema.

As in all deficiency disorders infections are common. In some cases, as in those with chronic diarrhoea, the infection precedes edema. In others, the infection follows the state of undernutrition. Tuberculosis, infectious arthritis, or non-tuberculous pulmonary infections are frequent.

There are several common conditions in which edema is influenced somewhat by malnutrition and require some comment, namely, cardiac insufficiency, anemia, and cirrhosis of the liver and diabetes mellitus. Payne and Peters¹² and others have noted that the albumin deficits in patients

with cardiac insufficiency appear to be directly referable to malnutrition. I have made similar observations, and in some patients in whom the usual methods of treating congestive heart failure with digitalis and diuretics have failed to cause the edema to disappear entirely, the feeding of a high-protein diet has been followed by a disappearance of the edema and an increase of the blood proteins. The same state of affairs I find exists in patients with edema associated with anemia, and my associate, Dr. Myers, has observed a reduction of the blood proteins in some patients with cirrhosis of the liver and generalized edema. The treatment of protein deficiency is high-protein feeding with protein of good biological value. It has been demonstrated by Liu²⁴ that protein of animal origin is of better quality than that of vegetable origin, and in a patient with malnutrition edema, recovery occurs more rapidly following the ingestion of protein of animal origin than it does following vegetable protein.

It is important, therefore, when dealing with patients with edema, to determine whether or not there is a deficit of the blood serum protein, and, if so, it should be treated accordingly.

ANEMIA AS A DEFICIENCY DISORDER

For many years certain types of anemia have been considered to be due to malnutrition but it has only been since the highly important work of Whipple, Robschiet-Robbins and their associates that the value of various food substances as building stones for hemoglobin and red blood cell formation has been fully appreciated. The discovery by Minot and Murphy in showing the specific effect of liver and liver extract in pernicious anemia has emphasized the great importance of food substances in the treatment of the human anemias. The observations of many other investigators in defining the usefulness of liver, iron, and other substances in other forms of human anemia has advanced our knowledge of the anemias considerably.

In considering anemias as a manifestation of a deficiency disease, it is important to realize that it often occurs under precisely the same circumstances as other deficiency diseases, namely, inadequate diets, disorders of the gastro-intestinal tract influencing normal nutrition and excessive demands.

It should be added that since the work of Castle and his associates a deficiency disease such as pernicious anemia may develop as a result of a disorder of the stomach which prevents the manufacture of sufficient amounts of essential substance from certain food products.

In Table VII the conditions in which malnutrition or a deficiency of certain substances in the diet are responsible in part for anemia are summarized.

TABLE VII
CONDITIONS IN WHICH MALNUTRITION IS A FACTOR IN THE PRODUCTION OF ANEMIA

- (1) Inadequate diets including avitaminosis.
- (2) Chronic dysentery.
- (3) Hookworm infestation.
- (4) Pregnancy.
- (5) Tuberculosis of the intestines.
- (6) Sprue.
- (7) Celiac disease.
- (8) Malabsorption of fat.
- (9) Partial and complete gastrectomy.
- (10) Multiple intestinal structures.
- (11) Chronic alcoholism.
- (12) Chronic hypochromic anemia (achlorhydric anemia).
- (13) Some cases of cancer of stomach and intestines.
- (14) Biliary fistula (external).

The table requires little comment. It is observed that the anemia which is associated with a great variety of conditions results in part at least from malnutrition. The importance of recognizing that anemia is the result of malnutrition in the conditions mentioned is twofold, namely, that it may be prevented by providing in the diet hemoglobin and red cell building substances and secondly, if anemia be present, it can be treated adequately with the same substances. In some cases, the treatment with iron is adequate, in others it is necessary to supply liver, liver extract or other substances which are potent in blood production, if recovery is to be expected.

Multiple Deficiency Disorders: It was stated in the introduction that deficiency disorders in man were seldom, if ever, single. This, undoubtedly, accounts for the variation in the clinical picture presented by many patients with one or another deficiency disease. For example, it has been stated that many patients with scurvy have night blindness. We know now that when the two occur together it is the result of vitamin A deficiency as well as a deficiency in vitamin C. A number of cases of multiple deficiencies are given in Table VIII, and it may be seen that many combinations may be present in various patients. An appreciation of the presence of multiple deficiencies is of importance in analyzing the clinical features of a case and also from the point of view of adequate treatment. In Table VIII, there is presented a group of cases of multiple deficiency disorders, and it is observed that a great variety of multiple defects may be noticed.

TABLE VIII
CASES OF MULTIPLE DEFICIENCY DISORDERS IN ADULTS

- (1) Keratomalacia and Beriberi.
- (2) Keratomalacia and Rickets.

- (3) Keratomalacia, Rickets and Beriberi.
- (4) Keratomalacia and Edema Disease.
- (5) Keratomalacia and Hyperkeratosis Follicularis.
- (6) Hyperkeratosis Follicularis and Edema Disease.
- (7) Hyperkeratosis Follicularis and Scurvy.
- (8) Beriberi and Pellagra.
- (9) Beriberi and Scurvy.
- (10) Beriberi and Rickets.
- (11) Beriberi and Edema Disease.
- (12) Hemeralopia and Keratomalacia.
- (13) Hemeralopia and Beriberi.
- (14) Hemeralopia and Scurvy.
- (15) Hemeralopia and Edema Disease.
- (16) Scurvy and Edema Disease.
- (17) Rickets and Tetany.
- (18) Rickets and Edema Disease.
- (19) Osteomalacia and Tetany.
- (20) Tetany and Edema Disease.
- (21) Pernicious Anemia and Scurvy.
- (22) Pernicious Anemia and Pellagra.
- (23) Pernicious Anemia and Edema Disease and Osteoporosis.
- (24) Pellagra and Subacute Combined Sclerosis.
- (25) Pellagra, Osteomalacia and Tetany.

Importance of Tissue Changes Resulting from Deficiency Diseases in Predisposing to Infection: It is now generally admitted that the tissue changes resulting from vitamin deficiency and particularly vitamin A often predispose the patient to infections. These infections have been emphasized in the experimental animal, and also have an important bearing on infection in children and adults. For example, keratomalacia is frequently associated with infection of the eyelids with blepharitis, meibomitis, and hordeolum. The associated hyperkeratosis follicularis may progress so that infection occurs about the lesions, and pustules and ulcers appear. Bronchopneumonia, which is so common in the experimental animal is also common in patients with vitamin A deficiency and the fatal case recorded by Wilson and Dubois¹⁶ showed that there was a hyperplasia of the bronchial epithelium to such an extent that the smaller bronchioles were actually occluded in some areas. With the appearance of such changes in the epithelium it is not surprising to find that infection is common under these circumstances.

Of further interest are the lesions of the intestinal tract. Tilden and Miller have shown recently that monkeys fed on a vitamin A deficient diet often develop an ulcerative colitis and they

interpret these findings as due to an infection superimposed on the changes in the intestinal tract. The occurrence of dysentery in patients with vitamin A deficiency is well recognized and Pillat has described patients with vitamin A deficiency and diarrhoea in whom the diarrhoea disappeared with recovery from the deficiency. In his cases bacillary dysentery was excluded by careful bacteriologic examination of the stools. Diarrhoea and ulcerative colitis, not due to dysentery has been described as a complication of edema disease.

It has been reported by McCarrison that monkeys infected with amoebic cysts continue to carry them without developing active amoebic dysentery until they are given an inadequate diet. Following this procedure, active dysentery appeared.

Periodontal infection and dental caries have also been attributed to dietary deficiencies and the question has been studied especially by Mellanby¹⁸ and reviewed recently by Hanke.¹⁷ Mellanby is of the opinion that vitamin A deficiency predisposes to periodontal infection, whereas Hanke attributes these infections to a lack of vitamin C. Dental caries, on the other hand, have been produced in animals as a result of vitamin D deficiency.

It is seen, then, that deficiency disorders predispose patients to infections as a result of tissue changes, and as these changes may be widespread and affect all epithelial tissues, the manifestations of infection may likewise be extensive.

I have observed obscure pyrexia, arthritis, phlebitis, ulcerative colitis, bronchopneumonia, and pyoderma in patients with deficiency disorders. The precise relationship between all of these infections and deficiency disorders is not clear, and further investigations in this field are necessary before final conclusions can be made. It is essential, however, in studying obscure infections to appreciate that they may develop in tissues made susceptible by changes resulting from food deficiencies.

SUMMARY AND CONCLUSIONS

The clinical features of some food deficiency disorders in man are presented and discussed. It is evident that these conditions are observed not only following restricted diets, but also when pathological processes interfere with nutrition. Multiple dietary deficiency disorders often occur in the same patient and an appreciation of this fact is necessary to establish adequate treatment. Deficiency diseases often predispose the patients to secondary infections.

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RELATIVE ADVANTAGES OF TOXIN-ANTITOXIN AND TOXOID*

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From The Department of Health of Westchester County

DURING the past few months the Westchester County Department of Health has Schick tested 1500 children who had received three doses of toxin antitoxin during the period of 1927 to 1931. The results showed that of these only 67 per cent were immune, in contradiction to the commonly accepted statement that of children receiving three doses of toxin antitoxin 85 per cent are immune to diphtheria. In other words, these results indicate that parents and guardians of young children are being given an exaggerated sense of security as a means of persuading them to have their children immunized. Undoubtedly by giving larger doses of toxin-antitoxin or more than three doses a greater number of immunes would be obtained. Neither procedure is desirable. It is for this reason that in cooperation with the Laboratories of the State Department of Health we are making a study of three preparations of so called toxoid which is being advocated more and more by those who are not wholly satisfied with the results obtained by toxin antitoxin.

The toxoid which was used in these comparative studies was prepared by the Division of Laboratories and Research of the State Department of Health. There were three preparations (a) a veal infusion toxoid prepared according to the method of Ramon (b) an infusion free toxoid also prepared according to the method of Ramon but with the toxin described by Wadsworth and Wheeler¹ and (c) a preparation of this infusion free toxoid refined according to the present methods of Wadsworth, Quigley and Sickles².

The antigenic or flocculation unit strength of the refined infusion free toxoid was 156 units per c c. To secure an impartial test, the three kinds were numbered and known only to those supplying them at the Albany Laboratory. The dosage used with each type was the same, namely, first dose 0.5 c c, second dose 0.5 c c, third dose 0.5 c c, all being given at weekly intervals and local or constitutional symptoms recorded. The refined infusion free preparation gave the best results, as there was very little pain upon injection, no discomfort during the succeeding week, the local reactions were not encountered in the age group up to nine years and few in the ten to fifteen year group and not of a serious character, consisting of some local redness, swelling and pain about the site of injection. It was noted that intramuscular injections were less frequently followed by such reactions. In the older group the initial injection was 0.3 c c, followed by the regular 0.5 c c weekly injection. At the beginning a subcutaneous test was made, but as this type of toxoid apparently gave few reactions, this was discontinued and doses of 0.3 c c, 0.5 c c, 0.5 c c were given. The veal infusion toxoid apparently caused more pain on injection, gave more reactions. However, none of the reactions were any greater than those seen with toxin antitoxin and the resulting pigmentation from superficial doses of toxin antitoxin was not seen.

Reactions occurred in 33 cases of the 1258 treated (26 per cent), with one or other of the three preparations used. In the preschool group there were seven reactions, which gives (0.05 per cent). Reactions were as follows: redness 17 cases, swelling 1 case, red and swollen 6 cases.

* Read at the Annual Meeting of the Medical Society of the State of New York at Buffalo, N. Y., May 23, 1932.

redness and induration 8 cases, redness, swelling and induration 1 case. The age groups were respectively as follows: 1 year, 3; 5 years, 1; 6 years, 1; 7 years, 2; 8 years, 2; 9 years, 8; 10 to 15 years, 16. From this it will be seen that about one-half of the reactions occurred in the group up to ten years (.013). As most children attending clinics are under ten years, it is apparently safe to use the toxoids, especially the refined toxoid, without first testing.

All clinics for diphtheria immunization in the Westchester County Health District are using toxoid as a routine method and the use of toxin-antitoxin has been discontinued. No child is given toxoid if over ten years unless a positive Schick test has been obtained. The ages were six months to fifteen years, the majority being under eight years. At the present time the minimum age is four months. In children under one year, if the Schick was negative they were given the three doses of toxoid, it being believed they were protected by maternal immunity, and as such immunity would soon disappear, it was essential that they be protected. All cases reported in this series were given a preliminary Schick test and one dose of toxoid at the first clinic. If the result of the Schick was positive, two more doses were given at weekly intervals and within three to five months a subsequent Schick was made and the result tabulated. In the future, the preliminary Schick will be omitted, as the great percentage are positive, but in order to obtain accurate statistics it was performed in the series reported. Weekly intervals of doses were used, as it was easier to hold clinics at succeeding weeks and have a larger percentage return than would be the case at monthly ones. It also obviated considerable work, as only the original visit was made to have the child attend, whereas if held at monthly intervals two follow-up visits would be required. In some areas considerable transportation of children was necessary and this was accomplished more readily by giving treatments at weekly intervals.

The total number of cases treated with one of the three toxoids was 1258, of which 453 re-

turned for a subsequent Schick test within four months with the following results:

Negative to Schick—													
Under 1	1	2	3	4	5	6	7	8	9	10	to 15		
	38	90	49	39	39	49	51	29	16	21	21	Total	442
Under 6 years	304			Negative to subsequent Schick—									
	98.06%.												
6 to 15	138			Negative to subsequent Schick—96.5%.									
Total negative to Schick—442													
Total positive to Schick— 11									Immune—97.57%				
(a) Veal Infusion Toxoid													
Treated and Schicked										89			
Negative to subsequent Schick										86			
Positive to subsequent Schick										3		Immune 96.62%	
(b) Infusion Free Toxoid													
Treated and Schicked										210			
Negative to subsequent Schick										204			
Positive to subsequent Schick										6		Immune 97.1%	
(c) Refined Infusion Free Toxoid													
Treated and Schicked										143			
Negative to subsequent Schick										141			
Positive to subsequent Schick										2		Immune 98%	

All Schicks were made between the third and fifth month following last dose of toxoid.

It is hoped to obtain an immunity at the end of four months with the injection of two doses of refined toxoid and at the present time a series of clinics are being held in which two doses of 0.5 c.c. each are being given at weekly intervals; another group with 0.5 c.c. at monthly intervals; and one with an initial dose of 0.5 c.c. followed in four weeks by 1 c.c. These cases will be Schick tested within four months and the results reported.

Until the latter part of the year no child giving a history of asthma was treated, but as few reactions occurred, it was decided to treat a few cases with asthmatic conditions. In none of these was there any change in the child's condition.

In one instance, a child had given three series of toxin-antitoxin each year for the past three years and was still markedly Schick positive. Within four months of receiving three doses of refined toxoid it was Schick negative.

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MATERNAL MORTALITY

By ELIZABETH M. GARDINER, M.D., ALBANY, N. Y.

IT is apparent to any student of maternal mortality that from the many studies that have been published, we know a good deal about the immediate causes of puerperal deaths, a little less about the contributory

causes, and little or nothing about those disease states that may have existed closely prior to or during pregnancy which may have had a bearing on the fatal outcome.

Death certificates at best yield a paucity of

information. When the facts derived from this source are assembled and treated statistically, we do obtain some guidance for the better promotion of preventive effort, in that there is a confirmation of generally existing views as to the relation of age of mother, incidence of hospital or home delivery, the influence of illegitimacy, twin births, nationality, geographical distribution and other pertinent factors.

Without the least reference to any tomes on the subject of maternal mortality, we know that puerperal sepsis, albuminuria and convulsions, and hemorrhage are the three most important stated causes of maternal mortality accounting for practically sixty per cent of the whole number of maternal deaths. It is frequently stated that we have adequate knowledge of the means of prevention, and yet fail to succeed in this endeavor.

We are now emerging from a state of self-castigation for what has been considered a wholly indefensible position as to the maternal mortality rates for the United States as compared with those of European countries. It is quite possible, in fact probable, that the different bases of interpretation and statistical methods employed in the different countries, not to mention the wide difference in variables, make the various rates incomparable, or if they are comparable, we have not now sufficient conclusive data to prove the point. This has already been set forth in the Report of the New York State Health Commission. (See *Public Health in New York State, 1923*, page 262.)

Can we not, for the moment, forget comparative rates? It matters little, really, from the point of view of objective, whether we know New York State's maternal mortality rate, or whether it is higher or lower than that of other states, or for the whole United States, or for Denmark or England. For the goal we are trying to reach, it is convincing enough to know that between five hundred and six hundred New York State mothers die from childbirth every year, year in and year out, and to realize that this is not the whole story; that for every two mothers who die a baby dies also; that many homes are disrupted and motherless children subsequently distributed in orphanages, boarding homes, or in the homes of over-burdened relatives; some of them finally reaching the courts as delinquents or dependents to become state wards.

We have at least two good reasons for continuing our studies of maternal mortality:

1. That while it is assumed that we have knowledge of the means of prevention, we have not yet evolved a perfect plan or even a moderately efficient plan that is so practical

that it can be carried out easily with a sufficiently large proportion of expectant mothers to reduce the mortality.

2. That the volume of mortality implied in the loss of mothers and infants and the economic and social factors involved, in themselves, demand continued serious study.

The New York State Department of Health has been actively interested in the matter of maternal mortality since 1922 when, by the passage of the Davenport-Moore Act, it was specifically charged with the function of the promotion of measures for reducing the number of maternal deaths.

The late Director of the Vital Statistics Division, Dr. Otto Eichel, contributed several statistical studies dealing with this subject. Dr. O. V. DePorte, the present Director, has also published an able and exhaustive study. Dr. Matthias Nicoll, Jr., former Commissioner of Health, delivered an epoch-marking paper on maternal mortality as his presidential address before the State and Provincial health authorities of North America in May of 1929. In 1932 the New York State Health Commission, appointed by Governor Roosevelt, devoted several pages of its report to a consideration of maternal mortality and called attention to a study of fifteen hundred maternal deaths by the Ministry of Health in Great Britain in which it was shown that not less than half of the deaths studied were preventable and that the primary avoidable factors as determined were as follows:

	Per cent
Faulty ante-natal maternal care	36
Error in judgment on the part of physician, midwife, or hospital	36
Lack of facilities	10
Negligence of patient	18

In the Commission Report the recommendation is made that the State Department of Health investigate, for at least one year, every maternal death upstate by careful epidemiological methods, in cooperation with the local medical society, and endeavor to determine the primary avoidable factor in producing the fatal result.

Between 1924 and 1927 the Divisions of Vital Statistics and Child Hygiene collected confidential data, by questionnaire, from the practicing physicians of the state in which there was more than 80% voluntary return. The questionnaire study is still in the process of completion, and will, unquestionably, yield new information of a helpful character, although the very quantity, variety and complexity of the material make it difficult to arrive at conclusions without tedious and exhaustive study. Some of the findings, however may be briefly stated at this time for the rea-

son that they offer some suggestion as to the direction in which future efforts should be pointed.

Less than half of the deaths studied were associated with the birth of living infants.

In about half of the delivered cases the infants were less than full term, and in over 30% less than seven months gestation.

The mortality of mothers of twins was two and one-half times the general rate.

Abortion was a causal or associative factor in nearly one-fifth of the deaths, and a contributory factor in one-third of the deaths from sepsis.

Abortions were associated with a third of deaths of unmarried and nearly a fifth of the married mothers.

Adequate prenatal care was reported to have been had by 58% of the delivered cases, but in half of these the patients had not consulted the physician earlier than the seventh month and a fourth of them much later.

Nearly four-fifths of the delivered cases died in hospitals, but a fourth died in the hospital after having been delivered outside.

Nearly half of the deaths had had some type of interference.

In 729 operative cases there were 212 Caesareans, 151 Versions, 130 Low forceps, 97 High forceps, 15 Manual extraction of placenta.

Of 229 deaths in which labor had been induced 75 were self-induced, 71 therapeutic, 22 criminal, 61 manner of induction not stated.

Of the group in which there was interference (937), 31% died of sepsis as against 40% dying from sepsis in the non-interference group, (598).

In the latter group 23% died of albuminuria and convulsions, 9% died of hemorrhage.

In the interference group 25% died of albuminuria and convulsions, 15% died of hemorrhage.

Correlating the type of interference with the three important causes of death, sepsis, albuminuria and hemorrhage, we found that 16% of the Caesareans died from sepsis, 35% from albuminuria and convulsions, 14% of the versions, from sepsis, 26% albuminuria and 40% hemorrhage.

In the cases registering the use of low forceps, 28% died of sepsis, 28% died of albuminuria, 15% died of hemorrhage.

In the high forceps group, 28% died of sepsis, 25% albuminuria.

Eleven of the 15 deaths where there had been manual extraction of the placenta, died of sepsis. There were no deaths from hemorrhage in the Caesareans, high forceps nor in the manual extractions of the placenta.

In the induced labor group 87% of the self-

induced died from sepsis; none from albuminuria or hemorrhage.

Of the therapeutic induced 15% died of sepsis and 55% from albuminuria; none from hemorrhage.

Of the 83 deaths, comprising 22 criminal and 61 manner of induction not stated (36% of the induced labor) all died of sepsis.

More than half of the questionnaire deaths had complications of pregnancy, chiefly the toxemias, placenta praevia, malposition, abnormal pelvis and retention of dead fetus.

About 30% of the questionnaire deaths had illnesses previous to pregnancy which were thought by the attending physician to have possibly affected the outcome. In this complicated group, it was heart disease in 20% of the cases, kidney 20%, the anemias 12%, metabolic or deficiency diseases 10%, infectious cystitis 7%, respiratory disease 3%. "other infections" 6%.

These factors resolve themselves finally into a consideration of Prematurity, Loss of infant life, Twin births, Illegitimacy, Abortion as a cause and as a vitally contributory factor in sepsis, Inadequate prenatal preparation, High incidence of emergency cases, Interference as contributory to sepsis and hemorrhage and as a measure possibly too delayed of application to deal successfully with eclampsia, Complicating disease, puerperal and non-puerperal.

These items strongly suggest the need for a more comprehensive application of medical diagnosis and foresight during the whole nine months of pregnancy. To be sure there is little in the way of specific precaution that the physician can advise during the prenatal period that will insure an individual against sepsis, but it ought to be possible to energize an educational movement against abortion for other than therapeutic reasons, and by early diagnosis and intelligent care during the prenatal period reduce the frequency of the need for later operative procedures.

Notwithstanding the gloomy character of the facts just enumerated, we should not be led too hastily into making pessimistic assumptions; thousands of mothers may have had some type of interference and survived, or may have carried through their pregnancies handicapping diseases and passed through the ordeal of childbirth successfully. Until we study all pregnancies in a given area, or period, the survivors along with the fatalities, it will be impossible to gauge the degree of hazard of any of the situations that are thrown into sharp relief by studies of deaths exclusively. That such a study will be attempted eventually is certain, but our immediate duty is to improve our methods of studying mortality.

On January 27, 1932, Commissioner Parran

met with the Committee on Public Health and Medical Education of the Medical Society of the State of New York and presented a plan for the cooperation of the State and County Medical Societies in the study of maternal mortality. This plan was outlined in the annual report made by Dr. Thomas P. Farmer, Chairman of the Committee, to the House of Delegates of the State Society, (Journal, Apr. 15, 1932, p. 496) and was approved by the House on May 23, 1932 (Journal, June 15, 1932, p. 753). Dr. Farmer reported that one third of the County Societies had already approved the plan.

Dr. Farmer communicated with the secretaries of the county societies, outlining the objectives and nature of the proposed study, and suggested that the Public Health Chairman of the county societies act as local representatives of the state society in advising with local representatives of the State Department of Health concerning general methods and findings in individual cases.

The study in question is to include all deaths of women in pregnancy and childbirth occurring currently during 1932, the data to be secured as soon after the occurrence of the death as practicable by a qualified physician representative of the State Department of Health, except in those districts where there are County Health Units, when this function will be performed, or delegated by the County Commissioner of Health.

It was agreed that the information would be sought from three main sources:

1. The individual signing the birth or death certificate, or any and every physician or midwife who saw the case.
2. The hospital where death occurred, if in a hospital, for the post-mortem findings, laboratory data and pertinent facts from the case record.
3. The family, when advisable, for information as to economic status, previous illnesses, previous obstetric history or to supplement incomplete data from other sources.

The final report is to be a joint publication of the New York State Medical Society and the State Department of Health, and to be in all respects a confidential, scientific investigation which is made for the purpose of determining, as far as possible, the "primary avoidable factor" in each puerperal death. The method adopted is as follows:

As soon as the certificate of a puerperal death is received in the Albany office, which at present is the fifth of the month following the registration, the essential facts are trans-

ferred to a standard schedule, or form, and search is made for the birth, or possible death certificate for the infant. An investigation is also made to determine whether among the deaths of all women between fifteen and forty-five years of age there may be some deaths from another stated cause but in which, for one reason or another, we are led to believe pregnancy may have existed. Here again birth and death certificates of infants are searched for and matched with those of the mothers concerned.

The data from the birth, or death, certificates of the infants are also transferred to the inquiry form and questions pertaining to the listing of hospitals with the American Medical Association or the American College of Surgeons are also checked in the Albany office. In fact every effort is made to fill out as much of the schedule as possible in the department before sending it to the local representative for further attention.

Commissioner Parran's instructions require that the first call of the interviewer is to be made upon the President and Public Health Chairman of the County Medical Society to acquaint them fully with the purpose and method of conducting the study.

The results of the local inquiry and conclusions to be drawn therefrom to be discussed and agreed upon by the Chairman of the Public Health Committee of the county society and the State Department of Health representative.

All moot questions are to be submitted by the State Commissioner of Health to a Reference Committee comprising the Public Health Committee of the State Medical Society, the State Commissioner of Health, and such other members as suggested by the Reference Committee.

Needless to say the results of this study will be more valuable and indicative if the information given is as complete as possible, and because the inquiry is made within a reasonable time after the occurrence of the death, while the details are fresh in the minds of the attending physicians, it is hoped that we may secure much more conclusive information than has been obtained in our previous studies.

With the full cooperation of all parties concerned, it should be possible for the committee to give some preliminary figures at least, in the early part of 1933. It is hoped that the facts elicited may point the way toward not only a better understanding of avoidable factors, but provide practical suggestions for the better protection of expectant mothers in the State of New York and elsewhere.

MEDICAL ECONOMICS, A RENAISSANCE

By FREDERICK S. WETHERELL, M.D., SYRACUSE, N. Y.

The retiring president's address, read before the Syracuse Academy of Medicine, January 19, 1932.

IS the medical mind today undergoing a "re-birth;" is there an awakening of vital energies and intellectual powers, involving a new way of looking at the subject of economics as applied to the practice of medicine? It seems so without question, if one considers the great number of contributions on the subject by physicians, to say nothing of the opinions voiced by members of the profession in daily conversations with their fellows, and articles in the lay press.

Courage to attempt changes, which are no doubt revolutionary in character, and seem too radical to many, may be gained from the thought of Emerson, who said, "weak young men grow up in libraries believing it their duty to accept the views which Cicero, Locke, and Bacon have given; forgetful that Cicero, Locke, and Bacon were only young men in libraries, when they wrote these books." With this thought, Emerson proceeds with the elaboration of the idea that disagreement with the Past makes it incumbent upon us to break with it, no matter how great the prestige of its messengers. In no sense does he mean that we are to ignore in its entirety the work and thought of genius of other days, the heritage handed down to us; but with that work, and that thought as a guide and check, to alter our ideas and processes of thought so that they may meet the requirements of the age in which we live. Such a premise, surely, needs little affirmative argument when applied to the scientific aspects of medicine. The almost overwhelming number of contributions in the literature of Medicine bear testimony to the willingness, the desire for change and betterment in the applied science of Medicine. The Science of Medicine is secure.

The ultimate, however, in the practice of medicine is application of knowledge gained by scientific investigation to the problems of the sick individual. In the end, this means that the close relation of individual physician to individual patient must be maintained, kept intact as it has been in the past, lest both patient and physician suffer.

American ideals demand the continuation of opportunity for individual achievement. It is unthinkable that a state of affairs may come about, which will in the slightest approach European conditions of medical practice—where, in many instances, individual initiative has been entirely destroyed, and our professional colleagues reduced to penury. All of this often, because of insistence that the physician has no right to mingle in the business of State.

Who is it, pray, that is better qualified to direct the policies of the State relative to medical matters, which, naturally, in the final analysis means the continued health and the recovery from ill-

ness of the individual patient? It is difficult to keep from emotionalism when discussing this subject, but in some way the emotions of the profession at large must be stirred to the effect that interest will be aroused in the necessity of each practicing physician taking part in the official discussions, adding his counsel to the attempts at solution of the far-reaching problem of Medical Economics.

Ingrained in the medical mind, placed there by tradition, is an abhorrence of any thought which relates to matters pertaining to financial reward for service. Proper care of the sick is paramount in the physician's code, and this will never change.

Shun as we will, however, all thought of monetary matters, the fact remains that any unit, or group of units of society, functions well only in so far as its place in the community, its ability to share its burden in the upkeep of the body politic, is kept intact.

Content with things as they have been, many of the older members of our profession decry the apparent tendency of medical organizations to evaluate the doctor's place in society. They protest against the, as yet, poorly organized effort to supervise the activities of certain lay bodies who do not, and probably never will be able to, understand the manner of medical thought—they resent the attempts to see to it that the time-honored prerogatives of the medical profession are not nullified by ill-directed and meddling policies, which take no cognizance of the rights of individual practitioners of medicine. The ideas of these estimable members of the profession must not be ignored for they are a needed check, but their mode of thought must be tempered with a policy of open-mindedness.

Paramount in importance is the right of the physician, conferred upon him by the State, to protect the health of his patient and to serve him in time of sickness, so long as that service is on a par with the service delivered by fellow practitioners of the same group in his community. That there be no abrogation of this right is of prime importance to the patient. To make certain that there is none, is the duty of official medical organizations.

This means that a definite, well-directed effort must be made by the medical profession as a body, to the end that the health problems of that unit of society, the patient, may continue to receive the individual attention of his physician, and that both may retain their self-respect.

All of this involves change in time-honored customs. It is only by concerted effort that progress will be made. Widely divergent views must be made to converge. So far as we, as a group set aside, are concerned, our innate individualism

in matters of policy must be curbed, and our various thoughts thrown into a common mortar, so that the pestle of collective wisdom may grind out a medicament which, as nearly as is possible, will be a specific for the ills with which we are threatened.

After all is said and done, the ultimate benefit of a solution of the problem of Medical Economics, will be derived by the patient. The benefits accruing to the physician are incidental, and only of importance as they secure for him the means which enable him to deliver his services in an honorable and efficient manner.

Any solution of the problem must be such that in no way will State medicine supervene. There are those in our ranks, who feel that such an eventuality would not necessarily be harmful to them, which may be true to a certain extent, in that there will always be a demand for expert services by individuals able to pay for them. They must, however, be convinced that their less fortunate colleagues will be caught in a maelstrom of consequences, which they, themselves, may with difficulty keep out of, and which future generations of physicians can in no way escape. Intelligent public opinion today is not in favor of the plan, and it behooves us to substitute a better one.

What shall it be? What are the solutions? Any answer to these questions is conjectural at this time. A mass of problems is before us, and in this state at least, steps are being taken, gradually and carefully, with an ear to the opinions of the members of the profession, which it is hoped will, in time, effect a solution beneficial to all concerned.

The problems with which we are confronted, affect, to a large extent, the urban physician, and for that reason they are being brought to the attention of this body. The rural practitioner is, however, not by any means exempt from the effects of changes, which may take place. His interest in a possible solution must not lag.

A detailed discussion of the individual items involved in the general mass of the problem is here impossible. Volumes will be written before even one subdivision of the general question is answered.

Two main ideas must be considered. The first concerns the relations of the doctor of medicine, as an individual, to society, the individual members of which expect him to deliver to them, medical advice. The second concerns the relations of the physician to his confreres.

In the attempt to consider them separately, one finds a constantly recurring interdigitation of these two problems. A final solution of either demands solution of both.

Under the first heading, we find demanding attention, to mention only a few: compulsory health insurance, already on the statute books in the form of Compensation Insurance; the cost of

medical education; the cost to the physician for maintenance of his equipment and delivery of his services; care of the indigent and proper distribution of the cost of same; cost of sickness to the middle classes, which includes cost of hospitalization; court testimony; financing of sickness; public health problems; nursing problems; industrial clinics; diagnosis and treatment by irregulars; etc.; etc.; almost ad infinitum.

Already some of the attempts at bringing order out of this apparently chaotic jumble of problems, are nearing fruition in isolated instances. As aforementioned, it is not the purpose to discuss here the various intriguing angles, which present themselves during the unraveling of the tangled skein of medical economics, but to suggest the attitude, which must be assumed by the medical profession, if order is to be obtained.

First and foremost, we must demand of ourselves, as a profession, an unrelenting honesty of purpose and uprightness in our dealings with society and its component parts. The medical profession cannot expect the community to accede to its demands, or listen in a receptive mood to its suggestions, if its sincerity is open to criticism because of the unseemly activities of a few members of the profession. That instances of unprofessional conduct are isolated and are not condoned by the offender's colleagues, makes no difference to the layman—his confidence in the profession, as a whole, is undermined.

Practicing physicians are zealous in maintaining a high degree of integrity and professional conduct; and when the standards seem to be lowered, the offense is that of an individual, and may best be investigated and corrected by the county medical society whose members are familiar with local conditions. The task of straightening out difficulties is one for the older members of the society, who by their eminence, have shown themselves free from taint as is humanly possible. We will never attain a millenium, but without a beginning there can be no progress.

This State, by means of its representative medical body, in liaison with its Board of Regents, has already a functioning organization for the ironing out of alleged irregularities of medical practice. There is no reason why a local medical society should not appoint from its membership a grievance committee to hear charges of alleged misconduct of its membership. Such a group functioning in absolute secrecy could, it seems, do much toward nipping in the bud beginning irregularities. It is to be presupposed, of course, that the Organization will be of such value to the medical profession that physicians of the community will realize that they can ill afford to ignore the advantages accruing to them because of such a membership.

It should be the duty of such an organization to see that in the event of newly suggested treatments by, for example, a State agency, its mem-

bership is informed as to the *modus operandi*. This could be done under supervision of a committee on education and by means of clinics.

Usurpation of the rights of members by colleagues, or by lay bodies should be vigorously studied, and such action taken as will again show the individual member that it is well worth while to be a part of the organization.

The strength of the entire fabric of such a structure, however, rests in the willingness to accept self-imposed police power. Human frailties will come to the front repeatedly and must be handled judicially, and with human under-

standing. One cannot help believing that, until our own house is put in order, our own doorsteps swept clean and kept clean, little progress will be made in a solution of Medical Economic problems. This housecleaning will hurt no well-intentioned, honest physician, and at the same time with the only kind of paternalism that we should countenance—that from within our own ranks—will give opportunity for those who have strayed in the past, to step in line with their fellows, to the end that members of the medical profession may live as gentlemen, and the public receive the kind of medical care which it deserves.

THE PREVENTION OF COLDS

By D. F. SMILEY, M.D., ITHACA, N. Y.

From the Student Medical Service of Cornell University. Read at the Annual Meeting of the Medical Society of the State of New York, at Buffalo, N. Y., May 24, 1932.

QUESTIONNAIRE studies of our Cornell students have shown us that approximately 23% of the student body have colds four or more times a year and can, therefore, be classified as definitely "cold susceptible." Another group of 60% rarely have colds more than three times a year and these, therefore, we would call "average." A third fortunate group of 17% have colds never more than once a year and are, therefore, classified as "cold resistant."¹

When we first realized, back in 1924, that we had these two extreme "cold susceptible" and "cold resistant" groups with us, we thought that certainly it was going to be possible to demonstrate in these large numbers, significant differences between the two groups. But such did not prove to be the case. A careful study of the health habits of the two groups, "cold susceptible" and "cold resistant" yielded nothing. Those who had multiple colds ate, slept, exercised, smoked, clothed and cared for ventilation and elimination in very much the same way as did those who rarely if ever had colds. A comparison of the physical examination records of large numbers of "cold susceptibles" and normals, showed no significant differences.² Removal of tonsils and nasal obstructions did not seem to be a significant factor since 54% of our "susceptible" group had had one or more such operations while only 40% of our "resistant" group gave such a history. The "cold susceptible" group did, however, give a history of "cold susceptible" parents, and a history of past infectious diseases such as measles, mumps, pertussis, scarlet, etc., more often than did the "cold resistant" or normal group.

In the college year of 1926-27 we grouped 1625 students into "cold susceptible" (4 or more a year) and "normal" (never more than 3 a year)

groups and checked the cold incidence. In no week of the year did more than 13% of the normal group report a cold while in some weeks as high as 60% of the "cold susceptibles" reported colds. The cold epidemics were apparently a phenomenon belonging only to the "cold susceptibles" since the curve for normals, both men and women was carried thru the year without any peak of any significance.³

From all our comparisons between normals and "cold susceptibles" one fact did, then, emerge, i.e. apparently our cold epidemics were a phenomenon peculiar to our "cold susceptible" group, a group composing rarely more than $\frac{1}{4}$ of our student body.

The possibility then presented itself for making a direct attack on the incidence of colds in our student body, since the core of the problem lay right in the less than 1400 "cold susceptible" students (not an impossibly large group to handle even in its entirety). But supposing we could get our comparatively small group of "cold susceptibles" to join a "cold-prevention" class and let us put into operation all the preventive factors we could muster together, what factors would we apply? To this question there were many answers but they simmered down in our minds, to three main sets of factors—ventilation, diet, and toning up of the skin capillaries.

WINTER—THE SEASON FOR COLDS

Since 1912 when our records began, there has been no year when sometime in December, January, February or March we failed to note an epidemic of colds.⁴ At no time have these epidemics occurred in other than the dark, cold period of the year. Whatever the factors are that lower resistance to colds in our students in mid-winter, they also lower the vitality of the whole

population of New York State since the mortality curves for the State quite parallel our cold curves. These same factors also lower our working ability (see Ellsworth Huntington's graphs).

1. VENTILATION AS A FACTOR

The atmosphere of our lecture halls and recitation rooms throughout the winter months is apt to be hot, dry, quiet and considerably polluted by infective moisture droplets talked, coughed or sneezed out of the many throats. Windows are opened here and there and adequate mechanical systems of ventilation are in operation in a few of the more modern buildings, but in order to keep the feet warm and comfortable through the hour, the average lecturer or instructor has found that windows can be opened only very conservatively, if at all. Thus at the end of the hour, the student not infrequently steps out abruptly from a classroom with a temperature of 70° Fahrenheit and a relative humidity of 25 per cent into an outside atmosphere with a temperature of zero Fahrenheit and a relative humidity of 70 per cent. This marked difference in atmospheric conditions, the New York State Commission on Ventilation found results in a paling, a swelling and non-resistant condition of the mucous membrane of the nose, as well as in a decrease in the mobilization powers of the "immune bodies" in the blood stream. A charting of cold incidence at Cornell against average temperature, month for month throughout the period, 1912-1913 to 1924-1925, showed a definite reciprocal relationship between the two.⁴

2. DIET AS A FACTOR

The diet of our college students in spite of our efforts to popularize the "protective foodstuffs" such as milk, leafy vegetables and citrous fruits, is still short in these foods and as a result it is not uncommon to find the alkaline reserve at a point we would consider low or low-normal. And in mid-winter when the appetite for canned vegetables lags and the milk comes only from stalled cows, and the eggs from winter-housed chickens, a definite deficiency in vitamin intake is almost certain to occur.

Add to this deficiency the fact that many students on institutional fare frequently satisfy their craving for something tasty by over-indulging in candy, "sodas," chocolate and other confections thus leading to a frankly high or high-normal blood sugar and we can easily conceive of a general lowering of resistance to infection from faulty diet alone.

3. A "Coddled" SKIN AS A FACTOR

A skin which is but rarely exposed to cold air, sunshine ultra-violet light or cold water, becomes pale and very sensitive to changes of temperature

in the air about it. In such a skin very little vitamin D is formed from the irradiated ergosterol, but more important that that, the tone of the capillaries is so poor that in the presence of only moderate dampness or a draft, chilling of the circulation readily occurs and again a lowered resistance to infection follows. A checking of cold incidence at Cornell against average hours of sunshine, month for month through the period 1912-1913 to 1924-1925, showed a definite reciprocal relationship between the two.⁴

THE EXPERIENCE OF OTHER WORKERS

The reports of previous workers seemed to confirm our impression as to some of the important factors in preventing colds. Thus the New York State Commission on Ventilation reports a uniformly decreased incidence of colds among school children whose school rooms are ventilated by the modern modified-window method rather than by the mechanical method. Several workers report a decreased incidence of colds where the children's attention is rather continuously called through "no-cold campaigns" to such hygienic faults as sneezing or coughing with the mouth uncovered by a handkerchief. Other workers report that diets rich in the "protective food-stuffs" and particularly in butter, are very successful in reducing the incidence of colds. Dr. V. S. Cheney, of Chicago, states that it is frequently possible to prevent the occurrence of threatening colds by appropriate doses of alkali. At Cornell⁶ through two winters, 1926-1927 and 1927-1928, Dr. Geo. Maughan gave groups of cold-susceptible students weekly irradiations of ultra-violet light which corresponded roughly with the amount of ultra-violet light which the average student would obtain from the sun's rays on his neck, face, hands and wrists in ordinary clothing in mid-summer. The incidence of colds in the groups so irradiated was approximately 40 per cent less than in similar groups of cold-susceptible students which were being followed but not irradiated. Dr. Leonard Hill in England and Dr. Cecil in New York City in their texts on colds have reported favorably on the effects of sun bathing and ultra-violet light bathing in toning up the skin capillaries and thus aiding in the raising of resistance to colds.

THE "COLD PREVENTION" CLASSES

In the fall of 1929, then, with the help of Dr. George H. Maughan, we organized our first "cold prevention" classes and urged all of our "cold-susceptibles" to pay the nominal fee and register to receive the following services:

1. A fifteen-minute ultra-violet light bath given twice a week from October through May. (Solaria using Eveready Sunshine carbon arcs, General Electric Type S1 lamps, and Cooper-Hewitt mercury arcs in corex D glass tubes and

accommodating 150 students per hour have been installed.)

2. Since we found that the alkaline reserve in a group of "cold-susceptibles" was in many cases lower than that in a group of "cold-immunes," we have been issuing to the "cold-susceptibles" joining the class one-ounce packages of a powder composed of equal parts of sodium bicarbonate and magnesium carbonate flavored with oil of peppermint, with the directions to "take one teaspoonful in a glass of water twice a day for three days whenever the nose runs or the throat feels sore."

3. A sheet of specific instructions concerning diet, alkalization, ventilation, sleep and ultra-violet irradiation is given each member of the class.

4. In those persons whose colds continue to occur in spite of the above regimen (approximately 5%), a careful study of the nose, throat and sinuses is made. Where a chronic sinusitis exists with the nose structurally normal, an autogenous vaccine is made up and given subcutaneously in 1 cc doses once a week through the year. Where sinuses, nose and throat seem normal, a mixed stock catarrhal vaccine is given in 1 cc doses once a week for a varying period. Where nasal obstruction, empyema of sinuses, or chronic infection of tonsils demand it, operation is advised. Each week during the period of treatment, each member of the cold-prevention class fills out a slip printed as follows:

Date.....

Name

Have you had a cold during the past week?

Yes.....

No.....

If "yes" was it mild?.....

Severe?.....

Each week also a control group of similar "cold-susceptibles," untreated and simply under observation in a weekly hygiene class, fills out a similar slip.

THE RESULTS

From the group of 1400 students estimated to be "cold-susceptible" approximately 200 have joined our "cold prevention" class each year. Approximately one-half of these have been regular enough in their attendance at the class to make their records usable in checking results statistically.

The results in the last two years have been as follows:

	Treated group	Control group
1929-1930 Number of colds apiece	2.16	4.41
1930-1931 Number of colds apiece	2.38	4.12
Average per cent reduction for 2 years	46.7%	
Reduction from an average of 4.26 to 2.27 colds apiece per year.		

CONCLUSIONS

1. At the present time, so far as we can ascertain, there is no panacea for the prevention of colds.

2. Since epidemics of colds in student groups appear to be limited largely to the "cold-susceptible" 23%, efforts directed at that particular group should be the most fruitful.

3. The interest of at least 1/7th of these "cold-susceptible" students in the prevention of their colds can be aroused and sustained by offering "cold prevention" classes.

4. If in these classes, matters of diet, alkalization, ventilation, toning up of the skin vessels by ultra-violet or sunlight, and in special cases the correction of nose and throat abnormalities and the use of vaccines are stressed, an average reduction of approximately 46% in the incidence of colds can be prophesied.

5. Which of these various factors is the most important is a question, but the ultra-violet or sunlight bathing is, undoubtedly an essential factor in arousing and sustaining the interest of the patient in the project.

6. A definite advantage of this plan of attack is that it furnishes a means of applying a number of the principles that are now available for the prevention of colds. As new principles are evolved they can be promptly put to work and in the group where they should do the most good.

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For list of officers of County Medical Societies, see December first issue, advertising page xxvi
 Annual Meeting April 3-5, 1933 in the Waldorf Astoria New York City

THE INDEX

The annual index is an essential part of the NEW YORK STATE JOURNAL OF MEDICINE for the policy of the Committee on Publication is that every item in the Journal shall be of permanent value, and therefore shall be included in an index.

The making of the index involves two irreconcilable conditions. The index cannot be

made until the last Journal of the year is made up and that Journal cannot be made up until the space to be occupied by the index is determined. It may therefore happen, as in this issue of the Journal, that a blank page is left at the end of the index. This page (numbered 1458) is utilized for editorial comments on the scope and value of the index.

THE MEDICAL ARMY

The medical profession is an army whose object is to combat death and sickness and physical weakness, and to secure the blessings of health and vigor for all the people.

The officers of the army are the research workers,—men of vision and skill who discover the secrets of the enemy, the disposition of its forces, and its manner of destruction.

The officers also plan the lines of campaign against the enemies of health, and take the lead in the first line of the attack often to their own injury and death.

The rank and file of the regular army of health is composed of family physicians in private practice. While they conform to the standards and orders of procedures laid down by their leaders, yet, like good soldiers, they use their own judgment in regard to the details of applying the principles. The great problem of medical practice, as in the regular army of the United States, is to combine independence of action of the individual with conformity to the high standards of the leaders.

The medical profession of the United States composes an army whose number is about the same as that of the regular army of the nation, and whose devotion to the cause of health equals the loyalty of the soldier in national defense.

The soldier is called to action only in an emergency, such as the Mississippi flood; or in a time of peril, such as the presence of a destructive mob or an armed invasion. Speech-making agitators arouse enmity and illwill, and then call on the soldiers to bring back peace and concord. But when goodwill is re-established, the people ignore the plea of the soldier to make preparations for dealing with or preventing future emergencies.

The medical army is prepared to cope with the forces of ill health which invade the country from other lands, and receives the intensive support of the people when it is engaged in resisting the entrance of cholera or plague into the country. But in the presence of internal apathy and unseen danger, the medical army is wellnigh as helpless as the regular army in the presence of propagandists of anarchy. However, the weapon of popular education is valuable to both the soldier and the physician. In fact, the physician is often blamed for not using that weapon more extensively in a finance warfare against ill health.

The development of the modern army of the United States has been a gradual evolution growing out of the application of scientific facts newly discovered. It is only within the last decade that the medical profession has been able to incarnate the public health ideals of medical leaders and express their collective aspirations toward a universal health service. It is also within this same decade that public officials and the people have

been willing to give heed to the pleas of physicians for the support of their public health programs. The evidence of great progress in the development of health service by physicians is found in the descriptions of the activities of medical societies of counties, States and the nation recorded in the *NEW YORK STATE JOURNAL OF MEDICINE*, and the organs of other state medical societies.

While physicians have developed their work quietly and unobtrusively, two other groups have organized themselves for defense against ill health with the use of extensive publicity. The first group in the order of time as well as importance is composed of officials of departments of health, with whom the medical profession is cooperating with increasing harmony.

The second group of health workers is composed of voluntary health organizations, many of which are financed by great endowments, and have made studies, both intensive and extensive, into the medical needs of the people and the provision for supplying these needs. Three groups have reported having studied the last year:

1. The Governor's Health Commission of the State of New York, which recommends great extensions of public health work by the governments of the several counties and the State.

2. The Committee on the Costs of Medical Care whose majority report recommends group insurance as a means for securing medical service.

3. The Committee on Medical Education which makes recommendations for training medical students to give the forms of medical service demanded by modern economic conditions.

In all the extensive publicity and discussion which the reports of the lay groups are inspiring, two fundamental facts remain unchanged:

1. The proposed medical service must be rendered by an individual physician making contact with each individual case.

2. Every patient will demand that the privacy of one's own person and one's communications with the physician shall be maintained to the utmost degree.

It is good psychology, as well as conformity to American customs, that the individuality of the doctor and the patient shall be maintained no matter what official form the economics and finances of the professional relations may be.

The defects disclosed by the reports of the Governor's Health Commission and the Committee on the Costs of Medical Care are those relating to the public rather than the medical profession; and the remedies proposed consist largely of group actions by the people. Physicians may be trusted to analyze the reports in the light of the professional experience of the family doctor, and to adapt their own services to the needs of all the people.



MEDICAL PROGRESS



Rickets: A New Treatment.—In a preliminary report Charles James Bloom relates his experience in the treatment of rickets with secondary calcium phosphate (dicalfos) in the place of cod-liver oil or vitamin D. His published research studies on the utilization of this salt in experimental rickets in the Albino rat and the results in 31 cases described in detail in this paper demonstrate the curative value of dicalcium phosphate in rickets. The best results were obtained when this salt was added to, in the order named, (a) a mixture of unsweetened milk and a stock solution containing karo syrup and lactic acid; (b) condensed milk formulae; (c) dried milk mixtures; (d) dilutions of cows' milk. The dosage of dicalcium phosphate was usually 10 or 15 grains daily, though in some instances 20, 30 and even 40 grains were given. The preparation never caused vomiting or constipation. The reason why this salt should accomplish the results obtained are: (1) The calcium and phosphorous content of cows' milk is not available for complete metabolism due, perhaps, to the large amount of both of these elements which is encased in the curd. (2) It is more than likely that the pH of the gastric content plays a part in rickets, and that an increase in the acidity may facilitate the absorption of the calcium and phosphorus. (3) The type of milk must play a part in the utilization of dicalcium phosphate, since better results were obtained with mixtures (a) and (b). The addition of this salt may supply an excess of both calcium and phosphorus and thereby replace the calcium and phosphorus contained in the curd, which apparently is not available. Since the children in the series here reported were not given either cod-liver oil or vitamin D, it is believed that the addition of dicalcium phosphate to the diet can prevent and cure rickets.—*Southern Medical Journal*, November, 1932, xxv, 11.

The Complications of the Common Cold.—A. Lowndes Yates, writing in the *Practitioner*, November, 1932, cxxix, 773, states that the common cold is devoid of complications except in the following circumstances: (1) When the discharges are confined within a sinus or within the middle ear by reason of the swelling of the mucosa which interferes with drainage. (2) When there is a secondary infection from contact with a person carrying in his nose micro-organisms which have learned to resist the natural destructive powers of the nasal mucus. (3) When the mucus in the nose is diluted by nasal douching or by bathing, thus interfering with its bactericidal function. (4) When the common cold affects a

person who is in poor health. As the complications of a common cold arise with great rapidity and are often serious it is important to recognize the symptoms which are their precursors. These symptoms are pain, alteration in the character of the discharge, malaise, and fever. If pain comes on two days after a person has caught cold, he is suffering either from an acute and dangerous infective rhinitis implanted on a common cold, or from a chronic inflammation in a paranasal sinus, his immunity having been lowered by the cold. When the nasal sinuses are involved the diagnosis is made by the presence of pain. Relief is afforded in the early stages by cocaineization of the nose, thus effecting drainage, and in the later stages by washing out the sinuses with liquid paraffin. If the complication is an acute otitis media, it is treated by efficient myringotomy, not merely paracentesis. The sooner the operation is performed the quicker the recovery. Laryngeal and bronchial complications are treated by sprays of liquid paraffin which aid the cilia in conveying the excess of mucus through the trachea and larynx. If complications are impending, microscopic examination of the discharge will reveal lymphocytes and polymorphonuclear cells. Such an examination is useful in determining whether or not a case of complications should be treated surgically. Immunity must be established before the tissues can withstand the trauma of an operation. In every case of common cold in which the ear has become involved, the hearing should be carefully tested with tuning forks to determine the presence of subacute otitis media. This mild inflammation is important because it causes thickening in the region of the round and oval windows, which, if neglected, may result in the course of several years in irremediable loss of hearing.

A Study of Renal Infarction.—J. Dellinger Barney reports the case of a woman, aged 31, who gave a history of three miscarriages, and who stated that on each occasion there had been albumin in the urine. Phlebitis of both legs occurred after the last confinement and had recurred from time to time ever since. After considerable study a diagnosis of perinephritic abscess was decided upon, and an operation was performed. No pus was found. The kidney was partially decapsulated, exposing a dull red, dead-looking cortex. There was no bleeding. A biopsy specimen showed complete degeneration of the tubules and glomeruli. As the patient did not progress

favorably a nephrectomy was performed. After several days of stormy convalescence bronchopneumonia and empyema developed and the patient died ten days after the operation. The pathological examination showed infarction of the kidney, with complete degeneration of all its tubules and glomeruli. Autopsy revealed thrombosis of the vessels of both legs and complete occlusion of the right ovarian and right renal veins. The mistaken diagnosis in this case led the author to review the literature of kidney infarction and to study the records of 146 autopsy cases. From this study he drew the following conclusions: (1) Renal infarction occurs in either sex, and at almost any age, usually between the thirtieth and fiftieth years. (2) There may be no clinical symptoms whatever. Such symptoms as are noted may be due quite as much to the condition causing the infarction as to the infarction itself. In total infarction of one or both kidneys, pain and tenderness of definite severity are to be expected. (3) Endocarditis, acute or chronic, generally with extensive arteriosclerosis, is to be looked for in the majority of these cases. Occasionally, infarcts result from chronic or acute sepsis in the presence of a normal heart. (4) Prognosis depends largely upon the underlying condition, i.e., endocarditis, arteriosclerosis, and sepsis. Usually the patient has a poor chance of recovery. (5) No definite rule can be laid down as to treatment. The infarct which causes no symptoms will generally take care of itself. Much more important is the treatment of those conditions which favor the formation of infarcts. These, however, are generally chronic and incurable.—*New England Journal of Medicine*, November 10, 1932, ccvii, 19.

The Treatment of Fractures. — N. Ross Smith outlines certain advances in the treatment of fractures which are not applied as generally as they should be. Until shock has passed off, little but first dressing and immobilization should be attempted. Reduction in some fractures may be done immediately by the hands. Recently the Böhler method of traction for immediate reduction by means of the screw has been introduced. This requires special apparatus and skill. Complete reduction is essential to prevent subsequent osteoarthritis. In the application of continuous immobilization after reduction, great advances have been made. Wooden and nonplastic splints have been discarded. For fractures of the upper limb the Thomas arm splint, the sling, and plaster of Paris suffice. For the lower limb the Thomas and Hogdem splints are now used, not as originally, but merely as a means of supporting the limb, while traction is transmitted through them, or independently

of them, by means of an overhead frame. To avoid the need of a frame, splints such as the Hey Groves' cradle and Böhler's modification of Braun's lower leg splint are employed. Plaster of Paris is chiefly used for fractures of the spine, the joints, and certain fractures of the shafts of long bones. Fixed traction has been largely given up except for first aid and transport, in favor of mobile traction — the old weight and pulley method. Formerly this was applied by means of skin traction, the grip on the limb being taken by means of adhesive material. Skeletal traction is now used. This implies application of traction to the distal fragment by tongs or calipers which grip the bone, or by pins, nails, or taut wire driven through the bone. Skeletal traction leaves the limb free for inspection, massage, or treatment of the wound. The time allowed for fixation was formerly too short; six months is now thought desirable, but this does not necessarily imply long recumbency. It is also recognized now that for some months after apparent consolidation of the fracture protection against deformity should be provided by apparatus. If the means of fixation allows, massage at the site of the fracture and movements of the neighboring joints are employed; otherwise they are deferred. Passive movements are no longer permitted; movements should always be voluntary. If joints are involved early movements may be positively harmful. The problem of operative *versus* non-operative treatment is also more clear than formerly. A minority of fractures are best treated by operation. This, in most cases, consists merely in reduction of the fragments into accurate apposition, followed by fixation by external means. There is a general feeling against the use of plates and other metallic substances, in favor of less irritating or absorbable materials, such as beef-bone grafts, ivory, catgut, and silk. An important advance is the routine use of the x-rays in the diagnostic examination, with one or more examinations during the period of fixation. Another innovation is the use of local anesthesia in the reduction of fractures; this has many advantages over general anesthesia.—*Practitioner*, November, 1932, cxxix, 773.

Orthopedic Treatment of Acute and Subacute Poliomyelitis.—Alan H. Todd notes that the standard textbooks say little or nothing about the treatment of infantile paralysis in the acute stage, the authors contenting themselves with remarking that the treatment consists in massage, electrical stimulation, and the use of appropriate braces, but they give no indication as to the stage at which these treatments should be used or their relative values. The writer says it is therefore vital to state as emphatically as possible that in the

acute stage of poliomyelitis complete rest and relaxation of the affected muscles meet the one and only indication so far as the orthopedic treatment is concerned. A paralyzed muscle that is stretched, he says, will not recover, even though it be given electricity and massage. On the other hand, paralyzed muscles frequently recover when given relaxation and nothing else. At the beginning it is not always easy to know which muscles to relax, but when definite loss of power has appeared the proper line of treatment is obvious. It is sometimes possible, even before definite inability to make voluntary movements has appeared, to feel a flabbiness of the muscles, or of a group of muscles, foretelling the seat of the imminent paralysis. The indication is then to secure relaxation of that muscular group. As a general rule the paralysis is much more extensive in the early stages of the attack than it is eventually. Therefore when called upon to treat a patient in the early stage, when no definite signs have appeared and several limbs perhaps are paralyzed, the best course is to relax those muscles which (1) matter most from the point of view of ultimate function, and (2) are known from practical experience to be most liable to attack. In the case of the lower limbs the quadriceps and the extensor group on the front of the leg are the most important muscles and are also the group most generally affected. The indication is obvious: the foot must be supported at a right angle with the leg and the knee must be kept straight. If, however, the calf is affected more than the extensor group, the reverse treatment would be necessary, that is to say, the foot would have to be placed in plantar flexion. If the abductors of the hips seem to be at all weak, or if both abductor and adductor groups be paralyzed and one does not yet know which group will ultimately prove to be the more severely affected, the lower limbs should be widely separated to relax the glutei. It is impossible to lay down any fixed rules with regard to the position to be enjoined in a case of paralysis of the trunk muscles. It is fundamental, however, that any paralysis or suspected paralysis of the trunk muscles necessitates complete and prolonged recumbency. Three months' complete rest and relaxation are the very minimum, and in most cases a year or even more of complete recumbency will be necessary. In the upper extremity the deltoid muscle is often severely paralyzed, but that is because it is inadequately treated. It is so often affected that it might almost be laid down as a standard rule that the arms should be fixed in elevation to a right angle and maintained there for some length of time. How long rest and relaxation of a paralyzed muscle should be maintained is difficult to say, but as a general rule it should be a month at the least. Manual massage, to stimulate the circulation, should be the first method of adjuvant treatment, but electrical stimulation should be resorted to with extreme caution in the earlier

stages of the disease. *The Lancet*, November 12, 1932, ccxxiii, 5698.

The Nutritive and Medicinal Properties of Glucose and Honey.—In the course of studies, pursued for a number of years, of the ideas and practices of Hippocrates, Arnold Sack became impressed with the large amount of glucose and levulose present in genuine bees' honey, the use of which was strongly recommended by the medical school of Cos. Recent analyses of honey in Europe and America give as its constituents approximately 34 per cent glucose, 40 per cent levulose, and only 0.40 to 6 per cent cane sugar, with 17 to 24.50 per cent of water. An average of 70 per cent of invert sugar is not to be despised. Other substances present in too small amounts for percentage are wax, dextrin, and gummy substances; pollen grains, organic acids, such as malic and acetic, and possibly formic acid; mineral substances, such as manganese, magnesium, phosphorus, calcium, iodine, iron, etc.; derivatives of chlorophyll pigment, such as carotin, xanthophyll, and also a black pigment of unknown composition; and, in addition, enzymes, vitamins, and aromatic substances, the latter including rosin, turpentine, volatile oils, certain perfumes, aldehyde, the higher alcohols, mannitol, dulcitol, etc. There is no possibility of any laboratory substitute being invented that can satisfactorily replace natural honey. It possesses nutritive and medicinal properties all its own, that cannot be counterfeited. Sack brought about a clinical cure of a case of cholecystitis and pyelitis of 25 years' standing, with bacteriuria and pyuria, the urine being extremely foul, by giving honey in doses of, at first, 100 gm., and later, 50 gm., daily. Honey is one of the few foods—perhaps the only one besides glucose—that is assimilated without rests or dregs left in the intestinal canal. The trace of cane sugar is converted into glucose by the honey enzyme. The common view that enzymes cannot survive the destruction to which they are subjected in the stomach by the action of hydrochloric acid is questionable in its application to the honey enzyme, since Holtz found the alkalizing effect of concentrated glucose solution so powerful that it could be used in the treatment of gastric ulcer. That author also used it in many diseases of the liver, for the destruction of fat and for the treatment of diabetes, etc. A diuretic effect has been noted in honey, and Sack has used it effectively in this capacity. Applied externally upon septic wounds it has been observed to have a bactericidal effect and also to promote granulation.—*Münchener medizinische Wochenschrift*, October 14, 1932.

The Treatment of Laryngeal Tuberculosis.—In addition to the inhalation of such powders as anesthesin and orthoform, the application of the galvanocautery and alcohol injec-

tion into the superior laryngeal nerve, James Dundas-Grant calls attention to two practical points in the treatment of laryngeal tuberculosis. The patient may suffer from a painful "burning" stiffness of the pharynx caused by the drying and inspissation of mucus on the back wall, experienced chiefly on awaking. This can be removed by gargling with a little bicarbonate of soda in water, warm if possible. Such a solution may be put in a thermos flask at night so as to be ready for use when the patient awakens. This condition is often overlooked while deeper sources of pain are sought for. The second point is that pain is one of the strongest indications for the use of the galvanocautery, and by no means a contraindication, as has been suggested. The typical tearing pain is almost invariably caused by a spot of ulceration. If the spot can be localized the application of a fine galvanocautery point destroys the exposed nerve endings and removes the pain. A laryngeal probe coated with cotton-wool should be applied to various parts of the larynx until the patient makes known that the pain-producing spot has been touched. After cocainization of the part the fine point of the galvanocautery should be applied to the spot, and in the absence of other sensitive spots pain is usually removed. Those who attempt to practise such manipulations should always hold the laryngeal mirror in the left hand, leaving the right one free for the handling of instruments.—*The Lancet*, November 5, 1932, ccxxiii, 5697.

The Prevention of Renal Complications Following Scarlet Fever.—As the use of scarlet fever antitoxin has not had any appreciable effect in reducing renal complications, B. A. Peters attempted to control the after-effects of diphtheria and scarlet fever by the following method. He administered an alkaline mixture containing sodium bicarbonate 30 grains, potassium bicarbonate 5 grains, calcium carbonate $7\frac{1}{2}$ grains, in 1 ounce of metholated peppermint. This was given in ounce doses until the urine was alkaline to litmus. In addition, weak tincture of iodine was administered in minim doses for each year of age up to a maximum of 20 minims, in 2 ounces of milk, every four hours; and also 2 to 4 grains of fresh thyroid gland daily for fourteen days after admission. The large doses of iodine were well borne and did not cause gastric irritation. In order to assess the value of this method Peters compared the incidence of renal complications in a series of 1,050 control cases with those in 930 cases in which the medication was employed. In the control series the total number of renal complications was 120, or 11.2 per cent, while in the test cases it was 21, or 2.2 per cent. Thus it is

seen that by this method of treatment the incidence of complications was reduced by 80 per cent, and no fatality due to renal affection occurred. The method is simple in application, free from danger and not too obnoxious to the patient.

The author discusses the theory upon which the medication above described is based, namely, the changes which occur in the colloid particles visible in the serum when viewed by a dark ground condenser, as demonstrated by McDonagh. From his observations, which have been confirmed by Peters, it would appear that in toxin-producing diseases, such as diphtheria and scarlet fever, these particles tend to be reduced in number and to form larger aggregates. On recovery with suitable drugs the picture reverts to normal. Whether these phenomena are due to alteration in the state of dispersion of proteins or lipoids, or possibly both, in disease is still undetermined.—*Practitioner*, November, 1932, cxxix, 773.

Radiographic Investigation of Lumbar and Sciatic Pain.—James P. Brailsford, writing in the *British Medical Journal*, November 5, 1932, ii, 3748, reminds us that no symptom or group of symptoms as those known to the lay public under the terms "lumbago" or "sciatica" may be due to such a diversity of causes. In the investigation of cases of lumbar and sciatic pain, antero-posterior and lateral radiographs of the lumbar and sacral spine, pelvis, and hip-joints should always be made. These may give an immediate clue to the cause of the symptoms. The lesion of the skeletal tissues or viscera which gives rise to the pain may be due to (a) congenital or developmental abnormalities; (b) trauma; (c) toxemia; (d) acute or chronic inflammatory conditions; (e) tumors. Congenital or developmental irregularities occur in a large percentage of cases; Brailsford found them in about 25 per cent of his cases. They should not, however, be ascribed as the cause of the symptoms until all other possible lesions have been excluded. In cases of injury to the back or pelvis, radiographs should be taken as soon as possible after the injury and the films kept for reference. It is possible to give some idea of the age of a bone injury from the radiograph, and this may be of great importance before the courts for compensation. Changes indicative of injury may be shown on radiographs taken subsequently which were not present in the first radiographs. Acute lumbar and sciatic pain is most frequently associated with toxemia from some focus of septic absorption, such as teeth, colon, genito-urinary system, appendix, gall-bladder, sinuses. Radiographs will often arouse suspicion of septic absorption from teeth, though local symptoms may be absent.



LEGAL



DRUGGIST'S LIABILITY IN FILLING PHYSICIAN'S PRESCRIPTION

By LORENZ J. BROSNAN, ESQ.

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Recently an interesting case was carried to the highest court of one of the nearby states in which the question involved was the liability of a druggist in compounding a prescription. An action was brought against a drugstore to recover damages for injuries alleged to have resulted from taking three capsules containing strychnine which were compounded in the drugstore of the defendant, upon the prescription of a regularly licensed physician.

The facts as developed from the testimony at the trial were quite clear. The plaintiff caused to be filled at the drugstore a prescription calling for certain capsules, each containing $\frac{1}{4}$ grain of strychnine and other ingredients. The box in which the said medicine was put up was not labeled "poison" or "strychnine." Following the instructions of the physician the plaintiff took three of the capsules at intervals of two hours. After the third had been taken the "plaintiff became stiff and could not get up from his chair or sit down." There was medical testimony to the effect that he thereafter sustained a weakened and nervous condition attributable to an overdose of strychnine. The testimony of the experts for the plaintiff was to the effect that ordinarily a dose of strychnine is no greater than $\frac{1}{30}$ of a grain, and that as low as $\frac{1}{20}$ of a grain has been known to be fatal. However, the same witnesses testified that ordinarily $\frac{1}{2}$ grains was considered a fatal dose, but that there had been a reported case where 15 grains was not fatal. It was also testified that the effects of strychnine are usually eliminated from the body in about four hours, and that the amount to be given as a safe dose varies greatly according to the individual, and his condition at the time.

No claim was made by the plaintiff that the prescription was inaccurately filled. The contention was, however, that the druggist should have refused to fill the doctor's prescription as calling for too large a dose. In addition it was contended that the druggist having failed to comply with the law with reference to the labelling of poison was by reason of that fact alone liable for any damage that might follow.

The case was sent to the jury and a verdict for the plaintiff was rendered, and from the judgment entered thereon an appeal was taken.

The Appellate Court reviewed the case and concluded that the testimony was such as to require the trial court to grant the defendant druggist's motion for a directed verdict.

The court considered and disposed of very briefly the contention that there had been a violation of the law by the druggist. The court stated that an examination of the testimony failed to show that the failure to mark the prescription as "poison" or "strychnine" had any bearing on the damages sustained. It was ruled that when there is a violation of a statute proved and damages follow, there can be no recovery unless it be also shown that the violation of the statute was the proximate cause of the injury complained of.

The court then considered the circumstances in the case generally and ruled that the dose called for in the prescription was not such an unusual one as to make the druggist liable for not refusing to fill the prescription. The opinion of reversal stated in part:

"The question here is under what circumstances should a pharmacist set up his judgment against that of a licensed physician?

"No witness has undertaken to say that ordinary care would have required any pharmacist to decline to fill the prescription in this case; and ordinary care, in view of the nature of the business, is the test. Of course, if a druggist is negligent in filling a prescription, he cannot escape liability because the doctor who wrote the prescription is also liable.

"But it does not follow because a physician in a given case is liable, that the druggist who filled the prescription is also liable. It would be a dangerous principle to establish that a druggist cannot safely fill a prescription merely because it is out of the ordinary. If that were done, many patients might die from being denied unusual remedies in extreme cases.

"Of course this does not mean that pharmacists can safely fill prescriptions calling for doses that are obviously fatal; or that where the doses prescribed appear to be unusual the prescription can be safely filled without inquiry of the physician to make sure there has been no error.

"There is no evidence that this precaution was not taken in the present case, but, even if it was not, that would be immaterial here, because the result of such inquiry would have

been to confirm the prescription, as the physician who wrote it testified that it was his usual prescription in such cases."

The rule enunciated in said case with respect to the liability of a druggist or pharmacist is a reasonable one and seems to be completely in accord with the law of this State. The similarity of this doctrine to the law of malpractice is quite apparent. When a druggist undertakes to fill a prescription he is legally assumed to possess the ordinary skill of a druggist and it is required that he exercise due and proper care in putting up the required medicine, the degree of care required being proportionate to the gravity of the injury that would result necessarily from a want of care. The druggist is not an insurer, and a recovery in a damage suit against him must be based upon proof of negligence. As was stated by the highest court in this State:

"The basis of the action is the sale of a poison to a person who called for a harmless drug; and the law is well settled that in such a case evidence of negligence is necessary in order to make out a cause of action. Mere proof of the mistake is not enough in and of itself to charge the vendor with liability."

The court in said opinion said:

"The negligence which must be established to render a druggist liable in such a case as this is measured by his duty; and while this is only to exercise ordinary care, the phrase ordinary care in reference to the business of a druggist must be held to signify 'the highest practicable degree of prudence, thoughtfulness and vigilance, and the most exact and reliable safeguards consistent with the reasonable conduct of the business in order that human life may not constantly be exposed to the danger flowing from the substitution of deadly poisons for harmless medicines.'"

Some years before this same Court was confronted with an action arising out of a person having received a dose of calomel where the

drug intended to be dispensed was quinine. In its opinion the court stated:

"The rule of liability applicable to a druggist in cases of this character is the same as that which governs the liability of professional persons whose work requires special knowledge or skill, and a person is not legally responsible for any unintentional consequential injury resulting from a lawful act when the failure to exercise due and proper care cannot be imputed to him, and the burden of proving such lack of care, when the act is lawful, is upon the plaintiff."

The New York Court of Appeals quoted with approval from the opinion of a famous Michigan Judge as follows:

"The question is whether the delivery at a drug store of a deleterious drug to one who calls for one that is harmless, and a damage resulting therefrom, of themselves, give a right of action even though there may have been no intentional wrong and the jury may believe there is no negligence. That such an error might occur without fault on the part of the druggist or his clerk, is readily supposable. He might have bought his drugs from a reputable dealer, in whose warehouse they have been tampered with for the purpose of mischief. It is easy to suggest accidents after they come to his own possession, or wrongs by others, of which he would be ignorant and against which a high degree of care would not give a perfect protection. But how misfortune occurs is unimportant if, under all circumstances, the fact of occurrence is attributable to him as a legal fault. The case is one in which a high degree of care may justly be required. . . . It is proper and reasonable that the care required shall be proportionate to the danger involved. But we do not find that the authorities have gone so far as to dispense with actual negligence as a necessary element in the liability when a mistake has occurred."

NEEDLE BREAKING DURING ADMINISTRATION OF TOXIN-ANTITOXIN

A certain City had undertaken to hold a series of free diphtheria toxin-anti-toxin clinics at its public schools and certain physicians were appointed to administer the serum. The clinics were crowded with applicants for the inoculation, and the health officer found it necessary to call upon the defendant doctor to assist in administering the injections. The children were brought into a room and directed to stand in two lines, and after having had their arms sterilized by a nurse they received the inoculation from the defendant and another doctor. There was con-

siderable confusion and congestion in the room. An eight-year-old boy was being inoculated by the defendant when the mother of one of the children who was standing nearby suddenly bumped into the doctor, shoving the doctor's arm and causing the needle to break off. The doctor noticed that the point was not protruding from the child's arm so that it was impossible for him to pull out the fragment of needle immediately. He, therefore, requested the mother to take the child to one side and wait until the rush of patients was over when he would see about

removing the needle. The child and his mother waited for some time for the rush of patients to clear up and then told the doctor that they could not wait any longer. The doctor gave them his card and told them to come to his office during his office hours, stating to the woman that at his office he would have available suitable instruments to attempt to remove the needle.

Sometime later in the day the child was brought to the doctor's office and an x-ray was taken of his arm. The doctor attempted to remove the needle under a local anaesthesia but was unable to do so. He then took the child to an x-ray laboratory and attempted to remove the needle under a fluoroscope, which attempt was likewise unsuccessful. The doctor then communicated with the City Health Officer and notified him of the occurrence and asked what further should be done. The Health Officer advised the doctor that he should arrange to have the child report at a certain hospital the next morning and he (the Health Officer) would try to remove the needle. Further attempts were made at the said hospital, both by the Health Officer and the defendant doctor, to remove the needle which were unsuccessful.

The mother was informed of the difficulty that had been encountered with the needle and she was advised that the needle probably would do no harm in the boy's arm, but she was told that if she wanted some other doctor to try and remove the needle, arrangements would be made for such an attempt. She requested a further attempt be made to remove the needle and the next day another surgeon put the child under a general anaesthesia and with the use of x-rays and the fluoroscope the said surgeon probed further

for the needle, but this attempt was also unsuccessful. Therefore, no other attempts were made to remove the foreign body. The child's arm was dressed in the hospital and at his home by the defendant doctor. The wound healed promptly without any infection.

The next the doctor heard of the case was that he indirectly received word that the child's mother was going to sue the City for negligence in not providing proper facilities for the inoculation of school children and in permitting dangerously large crowds in the rooms where the injections were being made.

An action was brought against the defendant doctor by the child's father, as his guardian ad litem, charging that the defendant was negligent in permitting the needle to break in the child's arm and in failing to remove the fragment from the said arm.

The case was tried before a Judge and Jury and upon the trial the testimony of the witnesses on behalf of the plaintiff emphasized the fact that after the needle had broken in the child's arm instead of immediately endeavoring to remove the broken needle the defendant caused the child to wait until he had treated a number of other children. At the close of the testimony introduced on behalf of the plaintiff a motion was made by the counsel for the doctor for a dismissal of the complaint on the ground that the cause of action had not been proved. This motion was granted by the Trial Judge.

An appeal was taken to the Appellate Division by the attorneys for the plaintiff. The Appellate Court, however, affirmed the decision of the Trial Judge and the matter was thereby finally terminated in favor of the doctor.

INJURIES RECEIVED BY HEAT LAMP BURSTING

The defendant in this case was a doctor whose practice included a considerable amount of industrial surgery which was handled by him at a clinic conducted for the purpose of treating compensation cases.

A certain workman claimed to have been injured by being struck on the back by a falling object. His employer sent him to the clinic where the doctor examined him. His complaints were of soreness in the back but the doctor was unable to find any objective symptoms. After an examination the doctor determined to administer to the patient a heat treatment by exposure to a so-called Burdick lamp. The doctor adjusted the lamp at a point of about fifteen inches above the patient's back and gave the patient instructions to notify him if it became too warm. After the lamp had been turned on for about five minutes the doctor heard a loud explosion and

looking at the patient saw that the bulb of the lamp, which was of 1,500 watt intensity, had burst into small particles and that the patient's back had been scratched in numerous places by the hot flying glass.

The doctor cleaned up the condition and applied unguentine and bandages and sent the patient home.

The patient never returned for further treatment, but instituted suit against the doctor and the insurance carrier, charging the doctor with negligence in his treatment of the patient. The doctor's answer set up the defense that the injuries for which the patient was suing the doctor were included in the claim which the plaintiff had pending for workmen's compensation. The attorney for the plaintiff, after discussing the matter with your Society's Counsel, agreed to discontinue the case against the doctor.



NEWS NOTES



COMMITTEE ON THE COSTS OF MEDICAL CARE

An all-day meeting of the National Committee on the Costs of Medical Care of the American People was held on Tuesday, November 29, 1932, in the building of the New York Academy of Medicine. The object of the meeting was the formal presentation of the Committee's report and a discussion of the general attitude of the public toward the recommendations. There were present over two hundred persons—members of the Committee and their guests consisting of practising physicians, public health officers and teachers, social workers, and investigators—who had come from all over the United States to meet the distinguished leaders in medical administration and appraise their personalities and arguments.

Advance copies of the findings, plans, and recommendations of the Committee had been distributed to members of the Committee and invited guests several days in advance of the meeting, in the form of a printed volume of 214 pages. Even the principal addresses that were given at the meeting had been mimeographed and copies were available for the press and officials of medical societies. The meeting was therefore eminently satisfactory from the point of view of those whose duty it was to report the meeting and inform the public in regard to the work of the Committee.

The program consisted of sessions in the morning, afternoon, and evening, with a social luncheon at noon and a dinner at early candlelight, both served in the Academy building. All the events passed off in a pleasing way, and to the satisfaction of the Committee members and their guests.

The Committee on the Costs of Medical Care has been in existence for five years. It was the development of a series of informal conferences and consultations at meetings of the American Public Health Association and the American Medical Association, which finally resulted in a voluntary organization of forty-eight leaders representing the following five groups of persons:

1. Private practice of medicine and dentistry, with 17 members. New York is represented in this group by Dr. N. B. Van Etten, Past President of the Medical Society of the State of New York, and Dr. William Darrach.

2. Institutions and special interests, with 10 members including nurses, pharmacists, and administrators, and also Dr. Olin West, Secretary of the American Medical Association.

3. Public Health, with 4 health officers and 2 statisticians and teachers.

4. Social sciences, with 5 doctors of philosophy.

5. The Public, with 9 business men and public health workers, including the chairman of the Committee, Ray Lyman Wilbur, M.D., former president of the American Medical Association, and now Secretary of the Interior in President Hoover's Cabinet.

The Committee is primarily a fact-finding organization, whose purpose is to secure data regarding all phases of health service to the people, including the practice of medicine and dentistry, hospitalization, pharmacy, cults, self-medication, and quackery. Its work of investigation was financed principally by eight organized endowments which are listed in the report volume as follows:

- The Carnegie Corporation
- The Josiah Macy, Jr., Foundation
- The Milbank Memorial Fund
- The New York Foundation
- The Rockefeller Foundation
- The Julius Rosenwald Fund
- The Russell Sage Foundation
- The Twentieth Century Fund

The cost of the investigations was about one and one-half millions of dollars.

The report also gives credit to the following organizations concerned with public health, for assistance in the studies and the compilation of the statistics:

- The American Medical Association
- The American Dental Association
- The Metropolitan Life Insurance Company
- The National Bureau of Economic Research
- The National Tuberculosis Association
- The United States Public Health Service
- Departments of Health of the States
- Visiting Nurses Association

The facts and statistics collected by the workers employed by the committee were published from time to time in twenty-five volumes ranging in size from 54 pages to 340, with an average of 183 pages per volume. These studies are sold at a price of from 25 cents to a dollar and a half each. Three more volumes—perhaps the most important of all—are in preparation on the following subjects:

- The ability to pay for medical care.

- The incidence and costs of illness in representative families.

The costs of medical care, including the economic aspects of the prevention and care of illness.

The official report of the Committee forms a volume of 214 pages, and was formally released at the meeting on November 29. The report first deals with the facts disclosed by the investigators and devotes 102 pages to their findings. These pages summarize the facts which are set forth in detail in the individual publications of the Committee. They constitute the broadest and most reliable study of the problem of sickness and ill-health that has ever been made; and its facts are generally accepted as accurate and truthful.

The Committee devotes pages 103 to 150 to recommendations for future action. It analyzes the data as a physician would study the evidence disclosed by the history and the physical examinations of his patient; and on the basis of its analysis, it makes a diagnosis of *neglected opportunities* by both the medical profession and the people.

The report then prescribes a line of treatment for the patient—the public—advising group action by the people to secure an organized medical service by means of health insurance.

Pages 151 to 183 contain a minority report signed by Dr. N. B. Van Etten and eight other members, seven of whom are practising physicians, and one, Dr. Olin West, is secretary of the American Medical Association. This report tacitly accepts the facts disclosed by the investigation, but changes the diagnosis to that of *opportunities for development*, referring to the great advances that have already been made by practising physicians during the last decade in bringing all forms of medical service within the reach of all classes of people.

The treatment suggested by the minority is the active development of measures which

medical groups have already tried and adapted to public needs in favorable localities. The minority report emphasizes the belief that physicians will evolve their practice into a form which will retain the present general plan of practice, with additions and modifications to suit the progress in medical research, and the education and economic condition of the people.

Speakers in the afternoon session at the Academy on November 29 explained the contrasting recommendations of the two groups with which the Committee is divided. Dr. Van Etten explained the minority report and showed that its plans have been consistently advocated and supported by the medical societies of the counties, States, and nation.

Dr. Van Etten emphatically protested against governmental invasion of the private practice of medicine through any health insurance schemes, and objected to the unsatisfactory administration of our present workmen's compensation laws and to the plans of the majority for large medical centers on the ground of restraint of opportunity for all reputable physicians by oppressive competition and big business technique which would eliminate personality and destroy personal relations by factory methods.

The civic importance of the meeting on November 29 is indicated by the amount of space given to it by the newspapers. Nearly every leading Metropolitan daily gave it a front page position, and some devoted an entire inside page to extensive abstracts from the reports of both the majority and the minority groups, and outlines of their recommendations.

The newspapers have also printed editorial comments on the two reports. It is a noteworthy fact that the editors generally support the retention of the supremacy of the individual family doctor (see page 1438).

COMMITTEE ON PUBLIC RELATIONS

The Committee on Public Relations met at the Mark Twain Hotel in Elmira at 10 A.M. on November 29th, 1932. Present Drs. Sadlier, Johnson, Fisher, Hambrook, Cunningham, Mitchell, and Ross; also Dr. Lawrence, the Executive Officer, and Dr. Farmer, Chairman of the Committee on Public Health and Medical Education.

Dr. Fisher, the Sub-Committee on the physician's relation to the administration of the Institute for Malignant Diseases in Buffalo, reported that no answers had been received to his letters sent to physicians in Buffalo and that, therefore, he had nothing to report. The

report was received and the committee continued.

The Committee on prison physicians engaging in the private practice of medicine reported that it had had a conference with the Deputy Commissioner of Correction in Albany on November 28th, and that the agreement had been reached that a statement of the facts regarding full time prison physicians engaging in private practice, with a request for the discontinuance of the practice, should be submitted to the Department of Correction for consideration. Dr. Sadlier reported that the Executive Committee of the State Society had au-

thorized the committee to consult the Counsel of the State Society before sending the letter. After discussion it was decided to continue the study of other departments of the state government employing full time physicians and their engaging in the private practice of medicine. This matter was placed in the hands of the same sub-committee, Drs. Ross and Johnson.

The sub-committee on better facilities for physical examination of school children, consisting of the chairmen of the Public Health and Public Relations Committees reported that it had held a conference with the Division of Medical Inspection of the Department of Education, and that Dr. Howe, Chief Medical Examiner, favored the request of the State Society. The conference reached the conclusion that a letter should be drafted by the chairman of the Public Health Committee, the chairman of the Public Relation Committee, Dr. W. A. Howe of the Department of Education, and Dr. Lawrence, Executive Officer, regarding standards of examinations by school physicians and the provision for better facilities for examinations; and that it should be sent to superintendents of schools, boards of education, school physicians, and to officers and committees of the Medical Society of the State; and that it should be published in the *Journal of the State Society*. It was stated that the problem was with the eight thousand one-room schools in the state. The Department of Education agreed with the committee that school examinations should be done as much as possible by the family doctor. It was decided that, before this letter was sent out, it should be submitted to the full committee on Public Relations.

There was a long discussion of the project of giving a talk again this year to the fourth year students in the nine medical schools of the state. There was considerable discussion as to whether the need for this talk arose from the omission of some basic principle of instruction, and if it had, then the lecture should be done as a part of the curriculum. It was the opinion of several that the talk was an effort on the part of the profession of medicine to establish a link between the teaching of medical students and the practice of medicine, and that this could be done only by physicians engaged in the practice of medicine. Dr. William H. Ross, who had given the talks last year, was selected to give these talks again this year.

There was a long discussion of the administration of the Welfare Law. The administration is satisfactory in some of the counties of the state, as in Oneida and Suffolk and Steuben. In some counties there is not much enthusiasm about paying the doctor, and the

welfare service is considered rendered when the patient is hospitalized. In some counties the administration shows no improvement over the old town overseer system. The long discussion on welfare administration brought out many reports and many opinions.

The afternoon session was attended by Drs. Booth, Lewis, Howland, and Cosgrove of Chemung County, and Dr. O'Brien of Steuben County.

Dr. Arthur W. Booth reported for the Medical Society of Chemung as follows:

1. A good working relationship with the governmental and lay health organizations is maintained.

2. The profession is now cooperating with the Health Department in a study of undulant fever and a better controlled milk supply.

3. Broadcasting health activities is being carried on by the physicians.

4. The Board of Supervisors of Chemung County has always been generous in promoting health activities and the profession had no fault to find.

5. The Board of Supervisors is paying bills for the hospitalization of the indigent, and the doctors are voluntarily charging nothing for their services in the hospitals of Elmira, but are paid for their calls to indigent patients in their homes.

6. Physicians are assuming more and more leadership in health activities.

7. X-ray examinations have been made of all high school pupils this year.

8. There is no friction between the profession and other health organizations.

9. No organization starts anything in Chemung County without seeking advice of the medical profession.

10. Doctors are on every health committee of all organizations.

Dr. Howland, the Health Officer of Elmira, reported the following details:

1. Twenty-seven per cent of children are immunized against diphtheria, while it would be thirty-five per cent if the doctors were a little more active.

2. Elmira has a medical center where a dental clinic is maintained three days a week, a venereal clinic two days a week, and there is an orthopedic clinic, a prenatal clinic, a children's clinic, and a mental hygiene clinic. All of these are under the Board of Health. Insanity has diminished since venereal clinics were established.

3. Physicians in Elmira do free work in hospitals because the charters of the hospitals require it.

Dr. Howland further detailed health work in Elmira, discussing such things as the nursing association, and it all indicated that there

was good cooperation between the medical profession and health organizations.

Dr. O'Brien of Steuben County reported as follows:

1. The county is large in area and has a scattered population.

2. The old Health Committee, made up of representatives of the Board of Supervisors, health agencies, fraternal organizations, and the medical profession, did not seem to be functioning well.

3. The health activities were under the Public Relations and the Public Health Committees of the County Society.

4. The greatest need in Steuben County is to create a proper public attitude of mind by educating the public in health matters. The County Society has seven speakers each with seven speeches, covering the county, speaking before clubs, churches, and chambers of commerce, etc., and that it was accomplishing the results expected.

5. Newspaper articles had criticized the work of school physicians. Physicians had prepared other articles for the purpose of putting before the public the viewpoint of the physician without entering into any controversy.

6. The Board of Supervisors had been per-

suaded to maintain their three county laboratories instead of reducing the number to one in the center of the county, but in order to accomplish it, the Public Relations Committee had to educate its own committee and to get its own society to be more active.

7. Clinics are carried on in the county, but they operate with difficulty because of the scattered population.

8. The Public Welfare Law is being administered satisfactorily to the medical profession; doctors are being paid for their work to the indigent in the hospital as well as in the homes, and there is good cooperation between all the lay organizations and official organizations.

9. There is a good system of public nursing under the direction of the Board of Supervisors.

It was brought out by many speakers during the day that medical publicity by speaking before clubs of people such as churches, parent-teacher associations, and luncheon clubs, is a better plan than radio broadcasting. The talks are superior in health education value, especially if the local papers carry the reports.

JAMES E. SADLER, *Chairman*.

W. H. ROSS, *Secretary*.

VETERANS HOSPITALS' ADMINISTRATIONS

Many hundreds of physicians gladly served the country in the World War. Many of these are active participants in the work of organized medicine. These and all of the members of the Medical Society of the State of New York should be interested in the problem of what should be done with the Hospitals of the Veterans Administration. We feel that there has been an excessive dispensing of national bounty in the form of hospitalization. We believe that organized medicine should speak vigorously in opposition to the use of these hospitals in direct and indirect competition with the practicing physicians of the United States many of whom are the same men who volunteered at considerable sacrifice to care for the soldiers during the War.

Our tenets in regard to the use of Administration Hospitals are as follows:

1. Use should be free and generous to all those who were disabled during the War or are suffering from any disability which is of such nature as to make it at all likely that it originated during their term of service.

2. The use of the Veterans Administration Hospitals should be available for all service men whose physical and financial need of such

hospitalization is certified by their attending physician or surgeon or any physician or surgeon who is qualified to so certificate the veteran. Such physician's certificate should be a definite requirement.

Veterans who are self-sustaining and solvent and who suffer from ills not connected with service should not be hospitalized or treated at the expense of the Government any more than they should receive groceries, or clothing, or housing, or coal, or light at the Government's expense. If they do, the Federal Government is entering into direct and ruinous competition with physicians licensed to practice medicine in the various States composing the Federation.

3. The use of Veterans Administration Hospitals to hospitalize other than veterans is morally, and perhaps legally, a wrong to the Government, to all tax-payers and causes the Government to enter into the same type of competition with physicians as referred to in paragraph 2.

We recognize while uttering the above that mistakes have been made in building some veterans hospitals so large as to provide several times the need of the veterans now or

ever in that section. Such hospitals should be disposed of by the Government, a moderate capital loss being more sensible than a huge loss from caring for those who will be better citizens if they care for themselves.

4. After the same manner the Government in the excessive inclusion of other citizens among those eligible for admission, is entering into competition with many hospitals organized and maintained by the tax-payers of the county, town, city or village, or organized and maintained by benefactors, or by the action and co-operation of generous citizens. In this way the Government is abolishing the usefulness of institutions set up by citizens who again have to pay taxes to support the veterans hospitals. Is the Government to succeed if it unjustly abolishes the usefulness of citizens or institutions who should be supporting it? Will the citizenry long accept excessive repeated taxation for the same item?

We hope that all of our members will use all of the influence which they can possibly summon to promote the abolition of these nefarious practices which are inimical to the interests of millions of high type citizens. Plans

should be made to close veterans hospitals as rapidly as is possible. None should be necessary after 25 to 30 years. In all probability the number of beds can at present be justly reduced to one eighth of present capacity and still serve the disabled veterans well.

The most important consideration in connection with this question is the growing policy of Government pauperization of heretofore self respecting and self-supporting people. A taste of free hospitalization, free coal, free light, free provisions, rapidly deposes the sense of responsibility in the majority of minds. The chief concern of the individual thus affected is not how to contribute to his day and civilization all he possibly can, but how he can get as much as he possibly can for nothing, without work. The development of this spirit means either socialism or communism.

We exhort all our members to write their opinions in this important matter to our Senators and Representatives and to just as many other Senators and Representatives as they see fit.

Committee on Economics.

LIVINGSTON COUNTY

The annual meeting of the Livingston County Medical Society was held at the Big Tree Inn, at Geneseo, N. Y., on Tuesday, October 4, 1932, at 7 P.M.

After a turkey dinner, the meeting was called to order by the Vice-President, G. E. Murphy. The minutes of the last meeting were read and approved. The Secretary-Treasurer's report was read. Dr. L. A. Damon acted as secretary in the absence of Dr. G. M. Doolittle.

The following officers were elected for the coming year:

President, Dr. G. E. Murphy, Mt. Morris, N. Y.

Vice-President, Dr. L. A. Damon, Sonyea, N. Y.

Secretary-Treasurer, Dr. G. M. Doolittle, Sonyea, N. Y.

Delegate to State Society, Dr. W. T. Shanahan, Sonyea, N. Y.

Alternate Delegate, Dr. G. E. Murphy, Mt. Morris, N. Y.

Censors, Drs. Preston, Burt, Newton, Shanahan, and Lauderdale.

The scientific program consisted of a paper by Dr. G. E. Murphy of Mt. Morris, on "Infections of the Hand." Dr. Murphy ably covered the subject of infections, including felon, synovitis and bursal infections, giving many differential diagnostic points and outlining various methods of treatment. The paper was discussed by Doctors Smith, Driesbach, Martin, Bowen and Klostermeyer.

Dr. B. R. Wakeman of Hornell, N. Y., outlined the program of the State Department of Health in regard to venereal diseases. He stated that the County Board of Supervisors was considering establishing a venereal disease clinic in Livingston County and suggested that the society be prepared to furnish a list of physicians available for such work.

GEORGE M. DOOLITTLE, *Secretary*.

JEFFERSON COUNTY

The annual meeting of the Medical Society of Jefferson County was held on Thursday evening, November the tenth, at the Jefferson County Sanatorium, Watertown, N. Y. The members and visitors were guests of Dr. James C. Walsh, the superintendent, at a turkey dinner. The following officers were elected for the year:

President, Dr. W. S. Atkinson.
Vice-President, Dr. E. E. Babcock.
Treasurer, Dr. W. F. Smith.
Secretary, Dr. C. A. Prudhon.
Censors: Dr. D. G. Gregor, Chairman; Dr. F. J. Lawler, Dr. G. F. Bock, Dr. F. R. Calkins, Dr. Harlow Ralph.
Delegate to State Society, Dr. M. M. Gardner.
Alternate, Dr. J. E. McAskill.
Delegate to District Branch, Dr. J. C. Walsh.

Dr. Edmond Suss, Philadelphia, N. Y., was elected to membership.

Dr. James C. Walsh presided at the scientific session, whose program he had prepared.

The first paper was on "The Surgical Treatment of Pulmonary Tuberculosis from the Physician's Standpoint," by Dr. Edward N. Packhard, Saranac Lake.

"The Role of Surgery in the Treatment of Pulmonary Tuberculosis" was the subject of the second paper, by Dr. Edward S. Welles of Saranac Lake.

An interesting discussion was led by Dr. LeRoy Hollis, superintendent of the Oswego County Sanatorium, and Dr. J. R. Patton, superintendent of the St. Lawrence County Sanatorium.

CHARLES A. PRUDHON, *Secretary*.

DUTCHESS-PUTNAM COUNTY

A regular meeting of the Dutchess-Putnam Medical Society was held on Wednesday, November 9, 1932, at 8.55 P.M. at St. Francis Hospital, Poughkeepsie, N. Y., with the president, Dr. W. A. Krieger in the Chair, and thirty members present.

The following were elected to membership:

Martin J. Poppo, Rhinebeck, N. Y.; Helen P. Langner, Vassar College, Poughkeepsie, N. Y. (transferred from the Medical Society County of New York); Lewis Saiken, Pawling, N. Y. (transferred from Medical Society County of New York).

The following nominating committee was appointed to report at the December meeting: Drs. Sobel, Breed and Rivenburgh,

The scientific program was as follows:

"Encephalography and Ventriculography—Their uses in general medicine and the specialties." Lantern slides and X-ray pictures; by Dr. Rubin A. Gerber, Assistant Professor of Neurology, Post-Graduate Hospital, New York.

The meeting adjourned at 10.30 P.M. for refreshments.

Present: Drs. Borst, Buckley, Benson, Carpenter, Davison, Deutch, Deyo, Gerlacker, Harron, James, Krieger, Leonidoff, Marks, McGrath, Neighbors, Peuse, Rosenberg, Rivenburgh, Rosenthal, Sobel, Smith, Toomey, Thomson, Voorhees, and Warner.

H. P. CARPENTER, *Secretary*.

BRONX COUNTY

A regular meeting of the Bronx County Medical Society, held at Elsmere Hall on November 16, 1932, was called to order at 9 p.m. with the President, Dr. Klein, in the Chair.

The following doctors were elected members: Drs. William Belinkin, Joseph H. Crawley, Frederick Gordon, Louis H. Klinger, Jacob M. Leavitt, Hugh A. Riley, and Murray Sheftman.

Dr. L. A. Friedman, Chairman of the Committee on Public Health, reported on the progress being made in the work of the Committee relative to the examinations of high school students under the auspices of the County Society. He emphasized that the matter has finally been brought to a successful conclusion.

Dr. George E. Milani was nominated and elected an alternate delegate to the State Society.

The scientific program consisted of a paper on "Nephritis and Nephrosis: Etiology, Treatment and Prevention" by Dr. Albert A. Epstein.

The paper was discussed by Drs. Samuel Gitlow, Edward P. Flood, Emil Koffler, Joseph Golomb, and Isidore H. Goldberger.

At the conclusion of the scientific session, Dr. Klein referred to the Gibson emergency unemployment relief committee drive, and asked the members to assist in making the drive on the part of the doctors of the Bronx a success.

The President appealed for the cooperation of the members in the matter of the beefsteak dinner, to be held on January 25th, for the benefit of the relief fund of our society.

I. J. LANDSMAN, *Secretary*.



THE DAILY PRESS



COST OF MEDICAL CARE

The report of the Committee on the Costs of Medical Care, which was released at a meeting on November 29, in the New York Academy of Medicine, has received front page publicity in the New York Metropolitan dailies, and many columns of popular explanation in the inside sheets, especially the Sunday editions. In addition the papers have frequently carried editorial comments, which generally support the principle of an extension of a further development of individual practice by family doctors. The New York *Times* of December 1 says editorially:

"At whatever costs, both the majority and the minority reports of the Committee on Medical Costs agree, the general practitioner should be restored to his place—the central place—in medical practice, and the personal relations between patient and practitioner should be maintained. This is of first importance. It must be the *religio medici*. But there must be a group organization of some sort in order to bring such professional service within the reach of every man, woman and child. A society that does not recognize the obligation to make its skills in protecting and saving human life available for all has not reached or even approached its ideal. How that is to be done there may be and is disagreement.

"It is difficult to think of any boon to mankind that would be more welcome to the millions of heads of families than the guarantee of competent medical attendance within the range of modest incomes. With this should be given not only the honor which from earliest civilization has been accorded the physician, but also a deserved tangible reward, for soon or late we all have need of him. Then, as Achilles said of Machaon, the Homeric doctor, 'he is worth a host of us.'"

An editorial in the New York *Herald Tribune* of December 4 opposes the principle of mass insurance advocated in the majority report of the Committee, and supports the minority report in the following editorial:

"The recommendations of Dr. Ray Lyman Wilbur's committee for the partial socialization of medicine are certain to inspire more confusion and doubt than confidence. The promise that is extended of the elimination of incompetents, exorbitant charges by special-

ists, 'fee splitting' and the further promise of making medical attention available to other than the very rich and the very poor in return for reasonable insurance charges will not dispel the layman's natural repugnance to the idea of making something like a fireman or a policeman of the man with whom his family has its most intimate relations outside the family circle.

"The theory of the contract system is that when the family man voluntarily agrees to pay a doctor or group a small sum annually for treatment, he and his dependents go to the physician with symptoms instead of advanced ailments. Logically this should result in more preventive work, less serious illness, better fixed incomes for doctors and less cost per capita among all classes. So it has indeed worked out in isolated communities, here and abroad. But, as the minority report shows, no such voluntary system has gone far in Europe without becoming compulsory; while in this country it has usually bred 'loss of personal relationship of patient and physician, demoralization of the professions' and numerous abuses. Such testimony does not, however, stand in the way of an experiment which the Wilbur committee and its supporters can make anywhere by getting financial support for a medical center and popular patronage, and by proving then that the system can pay its way without sovietizing the profession.

"The imposition of such a system on the public by propaganda and legislative action cannot be too strongly discounted. There is no use saying that the Wilbur committee's system would not go this far, for bureaucracies are never satisfied with small degrees of control over individual liberties. The time to check the growth of such ideas is at their inception, which in this case is the immediate present, and we sincerely hope that the orthodox medical bodies will succeed in doing so."

The New York *Herald Tribune* of December 6 refers to the report of the Commission on Medical Education, of which President Lowell of Harvard was chairman, and says:

"The grounds on which the Lowell Commission rejects the thought of socialized medicine are that voluntary medical insurance systems tend to become compulsory and these result in mediocre professional service.

RESEARCH AND RELIEF

In these days of depression, when the emphasis is placed on immediate relief, it is encouraging to read of the progress that has been achieved through scientific research. The *New York Times* of October 31 has the following editorial on the work done by the Rockefeller Foundation:

'The sum of \$18,737,967.90 which the Rockefeller Foundation has appropriated 'toward the advancement of knowledge' would not have gone far in mere relief. It has been spent largely in seeking the causes of physical, social and economic ills in many parts of the globe, and in preparing young men and women of promising qualifications to help in carrying on programs of human benefit in the five fields of its philanthropic interest: public health, medical, social and natural sciences, and the humanities. It undertakes very little research itself, it makes grants to universities and other agencies competent to inquire into the fundamental aspects of things touching human life.

It gave more in 1931 to the social sciences than to any one of the other fields, but has ministered more directly to the well being of the peoples of the earth through the International Health Division. It has made a distinct advance in the campaign against yellow fever. It is still fighting malaria, hookworm and other diseases, with encouraging returns from every front. Forty seven countries throughout the world were given as

assistance in their laboratory and field work, and thirty seven of our own States were likewise aided. Even in the present depression, it is stated public health work throughout the world is being maintained.'

'The Foundation also gave subventions to studies of the earth itself and its heavens—the sky-roofed habitation of man, perhaps the only spiritual tenant of the universe. On the one hand it has made liberal grants for inquiring into the depths of the oceans and fresh-water lakes, to learn what further contributions they can make to man's nourishment; and on the other has set watch upon the aurora. It has not only given support to the Institute of Pacific Relations in the hope of bringing about 'a truer and more sympathetic understanding of the problems of the Pacific,' but has brought to light again the sinanthropic dweller in prehistoric Peking.

Two gifts that show the 'illocality' and diversity of its interest are: one of more than a million to McGill University for the maintenance of the Neurological Institute; the other of more than two millions to the famous Bodleian Library in Oxford University, thus lengthening its life by as many centuries as it has already endured, thanks to Sir Christopher Wren, and giving scholars through generations leave to sit 'in the lap of eternity.'

THE MISSING LINK

The *New York Herald Tribune* of November 14, commenting editorially on the death of Professor William Patten of Dartmouth College, refers to Dr. Patten's studies in the remote ancestry of man and says:

'The missing links in the evolutionary story are not in the traditional location between man and the apes, but enormously farther back. Man's animal ancestry can be traced with an approach to perfection back as far as the primitive fish, which means the Cambrian Period, or something like 500,000,000 years. Then comes the bridge, less gap to earlier forms, no one of which can be identified certainly as man's ancestor. That this gap must have been bridged somehow is indubitable. There are too many similarities between the earlier creatures and the later ones to be considered accidental. The mystery is by what path the gap was crossed, which of the earlier creatures was nature's jumping off point for the leap to the backbone and further evolution. Three earlier creatures are candidates for this honor. One might be called a shrimp. Another is a baby sea cucumber. The third is a worm.

Professor Patten's candidate was the shrimp, also related to the modern scorpions and probably ancestral to the insects. His evidences for this were similarities between the nervous system, the mouth parts and other features of these ancient sea shrimps and of certain equally ancient fish indubitably provided with backbones. The details are technical, but experts, admitting the skill of Professor Patten's argument, remain prevailing among the skeptics.

'Advocates of the worm ancestor for the vertebrates follow the late Professor T. C. Chamberlin in imagining an effect of the running water of streams in stiffening the backs of previously spineless worms that needed to ascend them—a plausible theory, but lacking direct evidence either from fossils or otherwise.

The third candidate the baby sea cucumber has more facts behind its claims since there still exist a few primitive vertebrates whose babies closely resemble the sea cucumber infants imagined to represent the joint ancestral forms. Yet this theory, too, lacks confirmation from actual fossils. It is any candidate's race in the search for man's ancestor.'



BOOK REVIEWS



HUMAN STERILIZATION. By J. H. LANDMAN, Ph.D., J.D., J.S.D. Quarto of 341 pages, illustrated. New York, The Macmillan Company, 1932. Cloth, \$4.00.

The interest aroused in any issue becomes more fascinating when it faces strong opposition. That there is already a liberal Catholic movement, independent of the Roman Catholic Church, which has recently permitted human sterilization for therapeutic and even for eugenic purposes, is especially significant.

Eugenics is still in its infancy even though 27 States of our Union have introduced sexual sterilization legislation and over 12,000 people have already been sterilized. When one considers that the number of morons and imbeciles and criminals run into the many thousands we can readily understand that very little has as yet been accomplished in this field.

The law offers us a weapon to deal with abnormal society. That prevention of the spread of undesirables is quite as important is unfortunately not appreciated by our lawmakers.

To convince the reader of the need for sterilization, the author offers statistics showing the actual increase of mentally incompetent year by year. There are chapters dealing with the laws and court decisions, the sociology, psychology, heredity and eugenics of mental ailments; also the surgery of sexual sterilization. And, finally, there is an extensive bibliography on this increasingly important problem.

EMANUEL KRIMSKY.

MATERIA MEDICA PHARMACOLOGY THERAPEUTICS AND PRESCRIPTION WRITING. By WALTER A. BASTEDO, Ph.G., M.D., Sc.D., F.A.C.P. Third edition. Octavo of 739 pages, illustrated. Philadelphia, W. B. Saunders Company, 1932. Cloth, \$6.50.

As in previous revisions, the author in this fourth edition presents the view that experimental data obtained from normal health animals should not be applied in the treatment of disease in man without first having their practical value tested under controlled conditions. He implies that the information derived from this source should not be discussed in such detail as to necessitate curbing the space allotted to those established facts, both laboratory and clinical, which are of more importance to the practicing physician.

The text has been extensively revised and brought up-to-date, new articles having been added on suprarenal, cortex, ephedrine, quinidine, the barbiturates, insulin, the mercury diuretics and a number of other drugs. The discussion on digitalis has been enlarged, the subject matter, both experimental and clinical, being presented in a manner readily understood by the medical student and physician. On the other hand, such drugs as camphor and strychnine are given too much space in comparison with their relative importance. The plates depicting skin lesions of drug idiosyncrasy, the tables and the charts are of especial interest.

As a text-book of materia medica and therapeutics, rather than one of pharmacology, is this fourth edition recommended.

DAVID I. ABRAMSON.

BAILEY'S TEXT-BOOK OF HISTOLOGY. Eighth edition. Revised and rewritten by ADOLPH ELWYN, A.M., and OLIVER S. STRONG, A.M. and Ph.D. Octavo of 746 pages, illustrated. Baltimore, William Wood & Company, 1932. Cloth, \$5.50.

The authors of the eighth edition of Bailey's Text-Book on Histology have made it an excellent reference book. It serves as an aid to students because of its

simplicity, clarity, arrangement of the subject matter, and the numerous illustrations.

The chapters on the organs are thoroughly modernized and more extensively illustrated with microphotographs.

Because of the authors' personal efforts in the field of neurology, the chapters on nerve tissues, nervous system, and sense organs are very complete and commendable. They have incorporated many of their own laboratory findings which extend over many years of conscientious efforts.

A chapter of special interest in this volume is devoted to the "living cell." It is believed that the subject matter included in this additional feature will eventually help to bridge the gap between histology and pathology.

NATHAN REIBSTEIN.

PAIN IN THE PLEURA PERICARDIUM AND PERITONEUM. A Clinical Study. By JOSEPH A. CAPPS, M.D., Octavo of 99 pages, illustrated. New York, The Macmillan Company, 1932. Cloth, \$3.00.

This volume presents a clinical study in which physiological methods are applied to human beings. It is a study of pain reflexes of the pleura, diaphragm, pericardium, and peritoneum. While in a general way clinicians were familiar with these reflex pains they had not been definitely established experimentally. Animals do not make good subjects for experiments on pain. Based on an accidental contact of a trochar with the diaphragm during a pleural paracentesis which produced referred pain to the neck these clinicians were stimulated to further investigations by a method of their own which has definitely established these pain reflexes. This is another contribution by clinicians to scientific medicine.

HENRY JOACHIM.

MINOR SURGERY OF THE URINARY TRACT. By HERMAN C. BUMPUS, JR., Ph.B., M.D., M.S. in Urology, F.A.C.S. Octavo of 124 pages, illustrated. Philadelphia, W. B. Saunders Company, 1932. Cloth, \$3.00.

This little volume covers in a concise and extremely practical manner the subject presented. There are chapters on anesthesia, urethral caruncle, stricture of the urethra, cystoscopic resection of the bladder neck, vesical calculi, tumors of the bladder, bladder infections, ureter calculi and post-operative care.

Dr. Bumpus speaks with the authority of an extensive experience and has packed a tremendous amount of valuable information and advice in a small volume.

This book should be in the library of every practicing urologist, particularly those in the younger group.

N. P. R.

ESSENTIALS OF PEDIATRIC NURSING. By RUTH ALICE PERKINS, R.N., B.S. Second edition, revised and enlarged. Octavo of 467 pages, illustrated. Philadelphia, F. A. Davis Company, 1932.

A small volume of a time subject. The subject matter is treated in a manner that speaks for extensive nursing experience on the part of its author. Best are the chapters on Hygiene of Babyhood and of the Older Child. Nutrition is treated very ably and interestingly.

Some of the therapeutics and differential diagnoses, notably on intussusception and that of croup, were best omitted from a book such as this—one cannot do justice to the subject matter. The nurse student might fail to see their importance with devastating consequences to her patients.

HARRY APPEL.

THE ANATOMY OF THE HUMAN ORBIT. By S. ERNEST WHITNALL, M.D. 2nd edition. Octavo of 467 pages, illustrated. New York, Oxford University Press, 1932. Cloth, \$6.25.

To those acquainted with the first edition of Whitnall's *Anatomy*, it hardly seems possible that there would ever be occasion to write a second edition, the first being so thorough and complete. The author has, however, added much valuable material to the original text, thus creating a work which, without doubt, will always maintain a first place among the classics of anatomy. This volume is strongly recommended not only for the ophthalmologist but also for the otorhinologist, the plastic surgeon, the neuro surgeon and the internist. It seems almost a pity that the field which it covers cannot be expressed in the title. Professor Whitnall has covered most completely practically every aspect of the anatomy of the whole head. Its very lucid style and interesting manner of presentation is very evidently but the written form of his own verbal pronouncements. To one who has heard him lecture on a number of occasions, the book vibrates with an animation which one would think impossible in a study dealing with dead tissues. The illustrations are particularly remarkable and a happy selection of drawings and photographs has resulted in an ideal picturization of complicated structures most difficult to visualize. It would seem almost inconceivable how any ophthalmologist could contentedly practice his specialty without constant reference to this wonderful work.

JOHN N. EVANS.

THE HEALING CULTS. By LOUIS S. REED, Ph.D. Octavo of 139 pages. Chicago, The University of Chicago Press, [c.1932]. Cloth, \$2.00. (Publications of the Committee on the Costs of Medical Care: No. 16.)

There are 142,000 licensed and trained physicians in active practice in the United States, and 36,000 other individuals or Cultists who hold themselves out as able to cure disease and treat the sick. The public spends \$125,000,000 annually for the services of Osteopaths, Chiropractors, Naturopaths, Christian Science, and New Thought healers. The United States is essentially the only country which has this problem to contend with.

Each sect was founded by a person who possessed a religious fervor combined with a new conception of disease. Andrew T. Still, who founded Osteopathy, was an unpolished and eccentric frontiersman and farmer. He tried out his theories on the Shawnee Indians of Kansas, convinced himself that God had a particular visitation. D. D. Palmer, a grocer whose attention was attracted by the wonderful power of some magnetic healers. He found his own body to be surcharged with animal magnetism, went about practicing, and after many cures, which seemed miraculous, proceeded to discover Chiropractic. Naturopathy is essentially an outgrowth of Chiropractic. Christian Science and New Thought both owe their origin to a magnetic healer, one "Doctor" Phineas Parkhurst Quimby of Portland, Maine, who was convinced that his was the very method used by Christ in performing His miracles of healing. Quimby cured Mrs. Mary Baker Eddy, who had been an invalid for forty years. Based upon his theories she founded Christian Science, wrote her book, *Science and Health*, which those of her persuasion consider inspired, and spread the gospel of religion and truth versus disease and error to the world. Her maxims are examples of complete radical idealism.

So much for what the cults are. Economically, they extract \$125,000,000 a year from those of the public who are evidently dissatisfied with their experience with "regular physicians." The Medical Profession is somewhat to blame for this state of affairs. Osteopathy and Chiropractic could have been "nipped in the bud" if

medical men had embraced and emphasized the value of massage; but this modality never came into its own, as far as the profession is concerned, until a decade or so ago—almost eighty years after the advent of Osteopathy Still, and twenty-five years after D. D. Palmer and his son B. J. showed what salesmanship could make of an idea. *Divorce the philosophical and religious side of Christian Science Healing from the argument, and it is clearly seen that our neurologists fell down in their opportunity to heal and care for functional nervous disorders in an intimate enough manner to convince thousands of nervous patients of the soundness of their theories.* Even within our immediate memory, the standing of a doctor of medicine practicing psychology was not to be mentioned in the same breath with his neurological colleague, in whose soul reposed a sincerity of purpose founded on scientific, concrete medical knowledge, rather than on abstract, metaphysical theories.

From this report your reviewer is of the impression that the profession owes itself a rebuke for fostering a "holier than thou" attitude towards these various movements. We have neglected to realize that the atmosphere of American life is charged with a spirit of optimism, hope, progress, success, and prosperity, which cannot be suppressed by pessimism, ultra-conservatism, watchful waiting, and indifference.

We are not advancing the argument that modern medicine should become fadistic, but we do say that such movements as foster the tolerance of 36,000 irregular practitioners who collect \$125,000,000 a year for their services from the same public to which we cater, must have some good features worthy of adaptation. The text of this report proves that we gradually absorb the good features of these cults, but it is by the slowest kind of osmosis. Barnum was right—the American people like to be fooled. Organized medicine must protect its public from cultists with the same vigor that it guards the community against contagious diseases. This protection should, if we are to profit by past performances, embrace an active interest in every new movement of this kind. After a careful, unbiased estimation of the new cult, we should hasten to our public with the facts. If the facts show that the movement has some therapeutic merit, accept its good points at the time, not eighty years afterwards.

D. E. McKENNA.

QUANTITATIVE CLINICAL CHEMISTRY. By JOHN P. PETERS, M.D., M.A., and DONALD D. VAN SLYKE, Ph.D., Sc.D. Vol. 2, *Methods*. Octavo of 957 pages, illustrated. Baltimore, Williams & Wilkins Company, 1932. Cloth, \$10.00.

The authors have written a fitting supplement to their masterful first volume on interpretations. This book presents methods for the determination of those substances, found in the body and its excreta, which are of importance for clinical medicine. Thus most of the methods used in the clinical and research laboratory are included. Wherever available the authors give gravimetric, titrimetric, colorimetric and gasometric methods for the quantitative analysis of bio-chemical substances.

The book opens with two extensive chapters on technique in the laboratory describing the important basic requirements of making accurate estimations and producing reliable results. Then follow chapters describing recognized methods for estimating organic and inorganic constituents of the body. There are also chapters on the analysis of gas mixtures, respiratory metabolism, lung volume, blood volume and acid base metabolism.

Each chapter opens with a critical analysis of the principles employed in the analyses, and closes with a bibliography of the original papers describing the methods. It is thus more than a manual. Every biochemical laboratory should find the two volumes invaluable additions to its library.

WILLIAM S. COLLENS,



OUR NEIGHBORS



CHIROPRACTIC IN MASSACHUSETTS

The New England Journal of Medicine during the Fall has frequently printed notices of an initiative ballot by the voters of Massachusetts on the subject of legalizing the practice of chiropractic in that state. (See N. Y. State Jour. of Med., Nov. 15, 1932, page 1338.) The Massachusetts State Legislature has consistently voted against the legalization of the cult; and so the chiropractors resorted to the initiative petition to be submitted to the voters on Election day. The State Medical Society conducted an aggressive campaign of educating the voters, with the following result, as announced editorially in the New England Journal of Medicine of November 17, 1932:

"The petition of the chiropractors of Massachusetts for endorsement of this cult by the appointment of a separate board of registration of their practitioners, as it appeared on the ballot before the voters of this Commonwealth at the last election, was rejected by a plurality vote of well over one hundred thou-

sand. The result was secured by a united profession which carried on a campaign of instruction reaching to almost all the communities of the state. This shows that organization and enthusiasm is effective when inspired by a purpose to protect the people from definite dangers.

"A campaign of this character requires the expenditure of considerable sums of money which were provided by local groups supplementing appropriations by medical societies.

"The appeal to the voters to vote No was founded on the advantages of the single standard of education and experience required to meet the examinations of the Board of Registration in Medicine and was not a defensive movement by physicians. The more general understanding of the state requirement will strengthen appeals for state recognition of higher standards for registration of all who may wish to assume the responsibilities of caring for illness."

SCIENTIFIC EXHIBIT AT THE INDIANA MEETING

The November issue of the Journal of the Indiana State Medical Association discusses the scientific exhibits at the annual meeting of the State Society in the following editorial:

"Medical meetings come and go and in the main are much alike. The scientific papers, the politics, the visiting with old friends, the smokers and the banquets are much alike from year to year. In recent years, however, there has been a major new development that bids fair to become the most instructive part of the whole session if it is not already that. We refer to the scientific exhibits. As short a time as six years ago the writer prepared one of the first scientific exhibits which has been displayed, in recent years at least, in the Indiana State Medical Association assembly. It was nearly the only one shown that year. This year at Michigan City there must have been thirty or more exhibits and many of them of considerable interest. A careful study of all of them would have taken a half day and would well have repaid the ambitious delegate or member for his trouble.

"We were fortunate at the meeting just past in having a place where the booths could be reached easily. When meetings are held in hotels and the exhibits are housed in hotel

rooms on the mezzanine floor, the attendance at the exhibits is not so good and the persons preparing them are somewhat inclined to wonder whether the attention received has warranted the time and expense that has been taken.

"It is no small matter to prepare something that will be worthwhile. These demonstrations commonly represent far more effort than the presentation of a paper and they are given more attention than a paper. Such being the case we feel that more attention should be given to this phase of the work.

"The exhibits should be described perhaps in this Journal, the author of the description being the exhibitor himself. Not unlikely these descriptions should be published by the Journal a month or so before the meeting so that members might have some idea of the subject matter and be the more able to ask intelligent questions concerning them. Certificates of merit also might be granted by a committee appointed for the purpose of evaluating the displays. The awarding of such certificates adds much interest to the scientific exhibit of the American Medical Association; it makes the hard-working demonstrator feel that his

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THE CURRENT INDEX

Editorial Comments

THE NEW YORK STATE JOURNAL OF MEDICINE is the organ of the Medical Society of the State of New York, and is the ordinary source to which a historian would go for a record of its activities and those of its constituent county societies. These records are on subjects as varied and diversified as are the activities of the societies.

The interests of the readers are also diversified, and what deeply interests one member may have no special appeal for another; but an index should contain references to all the items in the Journal.

There are two systems of arranging an index:

1. A continuous alphabetical record of the entire volume.
2. A departmental index.

For five years the Journal has followed the departmental system in making an index, for the following reasons:

1. Each of the eight departments is a unit, and deals with its subjects in a distinctive manner. The scientific department contains original papers on topics relating to the practice of medicine by individual doctors on individual cases. The greater proportion of the papers in this department have been prepared for reading before medical societies and are therefore strictly medical and technical. A separate index of these articles will be comparatively short, and any item may be found readily.

2. A reader nearly always knows the character of an article for which he searches, and will turn to the department in which it would most likely be found.

3. A departmental index indicates the nature of the article. A scientific article may deal with the scientific principles of an individual case of a disease; or it may refer to an administrative method for dealing with the public health phases of a group of persons. For example, an article on how diphtheria antitoxin is made and how it acts belongs in the scientific department; but a description of an administrative method adopted by a county society for giving toxin-antitoxin to a roomful of school children would go naturally in the news department in which the activities of the societies are recorded.

The administrative activities of the medical societies are indexed in one group which includes not only the activities of the official socie-

ties of New York State, but also the societies of other States as recorded in their official State journals. Outside of these State journals and those of county societies, there is only a small amount of literature and records of the public health and administrative activities of the official medical societies. Even the public health journals carry but few references to the State journals. It was for the purpose of abstracting these records and publishing them in available form that the department of "Our Neighbors" was established in the *New York State Journal*. These records are fully indexed, and are listed with the records of the societies of New York State.

The activities of the medical societies of the several States are remarkably similar to those of one another, and anyone wishing to introduce a new public health activity in New York State would do well to consult the index to see what other State societies are doing in the same activity. Since the NEW YORK STATE JOURNAL OF MEDICINE is now indexing those activities for the sixth consecutive year, the amount of information which it carries regarding these activities is greater than that in any other source. An example is that a research worker, seeking all available records on graduate medical education, doubled the number of references when the NEW YORK STATE JOURNAL'S indexes were called to her attention.

Why are the records of the civic activities of the official medical societies ignored? The answer is probably that those activities are in a stage of development, and have not yet reached a stage of standardization; but the time is rapidly approaching when the medical society of every State and county will follow a standard program in activities in public health and civic lines. The medical societies are entering upon civic activities, and are trying new methods whose record is available in only the State journals.

Physicians are observing what the medical societies are undertaking, and are supporting them in surveying present services and outlining new ones adapted to the needs of their own communities. A perusal of the seven pages of the index of the year's activities of the medical societies contained in this Journal will reveal the great and growing extent of the civic activities of the official medical societies of New York and other States.

Relative Values of Carbohydrates

New Findings → Confirm Old Truths

Recent scientific investigations in rats (tabulated at the right) are in accord with many years of clinical observations on babies, as shown by the following excerpts from authoritative medical literature reflecting the consensus of three decades of pediatric experience.

CHART OF CARBOHYDRATE HYDROLYSIS¹

MILK SUGAR GROUP	MALT SUGAR GROUP
Lactose** (Milk Sugar)	Starch
	Amylodextrin***
Dextrose*	Erythro-dextrin***
Galactose*	Achro-dextrin***
	Maltose**
CANE SUGAR GROUP	Dextrose*
Saccharose** (Cane Sugar)	Dextrose*
	Note—The end product of maltose is all dextrose, which means quicker assimilation than end products from other carbohydrates
Dextrose*	Levulose*

*Monosaccharide **Disaccharide ***Polysaccharide
Maltose splits into two molecules of dextrose. Sucrose and lactose split into one molecule of dextrose and one of levulose or galactose respectively. It is no doubt due to the simpler structure of maltose that it is more readily absorbed than other sugars. It must also be considered that after assimilation the levulose of sucrose and the galactose

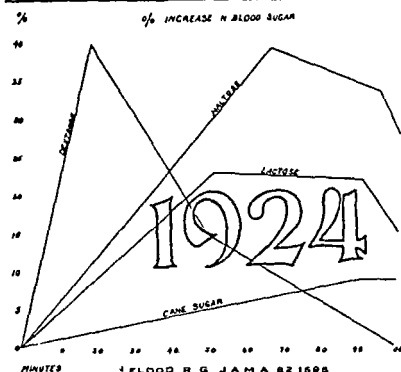
RELATIVE ASSIMILATION VALUES OF VARIOUS CARBOHYDRATES¹

	Average per 100 gms body weight
1 MALTOSE	1.50
2 DEXTRIN + MALTOSE	1.32
3 Glucose + dextrin	1.32
4 Glucose + sucrose	1.32
5 Glucose...	1.04
6 Sucrose + maltose	0.98
7 Fructose + glucose	0.98
8 Sucrose + dextrin	0.76
9 Sucrose.....	0.76
10 Fructose	0.5
11 Glucose + lactose	0.26
12 Lactose -	0.16
13 Galactose	0.1

These authors have also stated: Maltose fructose glucose starch and dextrin feed infants more value than galactose mannose arabinose xylose lactose sucrose and glycogen.

¹H Anyama and K Takahashi *Biochem Z* 216 269 (1929) and ²J Agr Chem Soc Japan 5, 674 (1929)

RATE OF SUGAR ABSORPTION IN NEWBORN²



³Morse J L & Talbot F B *Boston Med & Surg J* 159 852.

MALTOSE OR LACTOSE IN INFANT FEEDING³

amount it is necessary to add carbohydrates to some form. Admitting that lactose is the sugar assimilated in human milk it does not follow that it is the sugar best tolerated in another medium, such as cow's milk. It is generally believed that lactose is more laxative than sucrose—that it must be fed with a certain amount of caution as fermentative upsets are likely to follow if amounts approximating that found in human milk are fed. There is cause for disagreement among clinicians as to it is important to consider the other food elements, i.e. the amounts of fat and protein fed as well as the medium in which they are fed. For example, when lactic acid milk is used more added carbohydrate seems to be tolerated than when sweet milk mixtures are fed. Sucrose has the advantage of being much cheaper and is always available. Evidence has not been presented that it should

not be used in infant feeding. With its general use in large infant welfare clinics where supervision is a matter of routine there is less to be said against it as far as clinical results are concerned. The complaint that it is too sweet is not often encountered when the usual amounts are fed. The dextrin maltose preparations possess certain advantages. When they are added to cow's milk mixtures, we have a combination of three forms of carbohydrates: lactose, dextrin and maltose, all having different reactions in the intestinal tract and different absorption rates. Because of the relatively slower conversion of dextrin to maltose and then to dextrose fermentative processes are less likely to develop. Those preparations containing relatively more maltose are more laxative than those containing a higher percentage of dextrin (unless alkali salts such as potassium salts are added). It is common experience clinically that larger amounts of dextrin maltose preparations may be fed as compared with the simple sugars. Obviously, when there is a lessened sugar tolerance such as occurs in many digestive disturbances dextrin maltose compounds may be used to advantage. ⁴Queries and Minor Notes *J A M A*, 88 266

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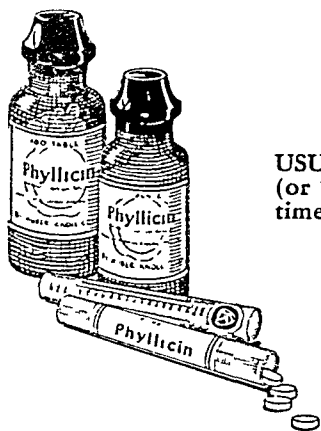
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(Continued from page 1442)

efforts are appreciated; and it calls the attention of the members of the display.

"The physicians of Indiana may well take pride in the fact that scientific exhibiting largely had its origin in the efforts of Dr. Frank B. Wynn, of Indianapolis. It was he who in the late nineties took pathological specimens to the annual sessions of the American Medical Association. From this small beginning has grown the great exhibit that would take days even to observe in a careful way, and might serve as a basis of weeks of study if one had the time and the exhibits were kept up so long."

MALPRACTICE IN NEBRASKA

The medical malpractice situation in Nebraska was described briefly in this Journal of November 1, page 1281. A further discussion is found in the November number of the *Nebraska State Medical Journal*, as follows:

"August 30, 1932, Dr. R. B. Adams, secretary of the Nebraska State Medical Association, received official notification that the Group Policy, carried by the State Medical Association with the United States Fidelity & Guaranty Company of Baltimore, would be cancelled October 1st.

"However, the company was prevailed upon to re-consider this question, and they later decided to continue these policies in force until they had expired. A few physicians, who had had previous law-suits or threats, had their policies cancelled or the company refused to renew their policies. Other insurance companies, which formerly wrote this type of insurance, have discontinued writing it. The Medical Protective Company, who formerly had a full time agent in this part of the country, has discontinued the agency. As a result of this action, some men are finding it difficult or impossible to obtain insurance at this time. Those who may obtain it, do so at an increase in premium of 25% to 200% over the price paid for the former Group Policy.

"It would seem that we are now reaping the reward of some of our former indiscretions, namely, being too ready to criticize the treatment or result of treatment by another physician; failure to disabuse the mind of the disgruntled patient of another physician when opportunity affords; or what is sometimes done, the patient is actually encouraged to believe that his former treatment was improper.

"We now find ourselves confronted with the highest cost of malpractice insurance of any state in the Union, and some of our members finding it difficult or impossible to obtain insurance. During the term of the Group Policy, the rate charged was reasonable and yet was 25% higher than some other states carrying a similar policy. Now it has been increased 25% to 200% by this insurance company, and the general atti-

(Continued on page 1461—adv. xiii)

(Continued from page 1460—adv. xii)

tude would appear to be that they are not eager for this class of business.

"This increase in rate will no doubt cause many to drop their insurance protection. This, we believe, to be unwise, and yet we are convinced that the fact the doctor is insured, makes it more profitable for both the designing patient and the unscrupulous lawyer, who would institute an action of this kind. Since a decision was handed down by the Nebraska Supreme Court, November, 1926, to the effect that it was proper to ask the defendant doctor if he carried insurance, there have been more suits for malpractice than in all our previous history. I have not known of a single case coming to trial in the past five or six years, where the physician carried no insurance. This is not advanced as an argument against insurance; however, the fact that he carries insurance increases his liability of being sued, cannot be denied.

"Several times during the past few weeks I have heard physicians make the statement that 'The economic stress of the past few years has rendered them execution proof, and they expected to remain so,' thereby practically precluding the possibility of a malpractice law-suit. This method may be one solution.

"Another solution would be to secure some legislative enactment declaring the question of insurance to be no point of issue in the case. I am informed on good authority that such legislation would be constitutional and in all probability could be enacted.

"Until every physician awakens to a realization that he, too, is just human, and as such should be more tolerant of the alleged acts of his brother physician, so long as we are given to make disparaging remarks about the other fellow and his work, and until every physician has learned that to foster or aid and abet in any way a malpractice suit against another is only inviting trouble for himself in the future; then, and not until then, will this problem be solved."

GROUP MEDICAL CARE IN NORTH CAROLINA

A concise description of a group-purchase system of medical care in Roanoke Rapids, an industrial town of 10,000 people, is contained in the November issue of the *Nebraska State Medical Journal*, which quotes from a report made by the Committee on the Costs of Medical Care, and says:

"The report describes the organized medical service in Roanoke Rapids which furnishes medical care to two population groups of approximately the same size: one group through a plan involving fixed periodic payments, by the participants; the second group, through the conventional fee-for-service system of payment.

(Continued on page 1462—adv. xiv)

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(Continued from page 1461—adv. xiii)

"Small fixed periodic payments, supplemented by funds from employers which pay the salaries of physicians and visiting nurses, have enabled the first group, mill workers and their dependents, with an average income of \$1,274 per family, to obtain more medical service than is ordinarily obtained by families with incomes of \$10,000 and over, according to the report.

"Through economies resulting from this group-purchase plan, the report brings out the participating mill workers and their families received medical service worth \$129,889, based on prevailing local rates, at an actual cost of \$92,083, a saving of 29 per cent. This computation is based on figures for 1930, the year studied by the authors of the report.

"During the year of the survey, the salaries of five physicians and three visiting nurses were paid by the employers, and each of the workers participating in the plan contributed 25 cents per week, which was deducted from their wages. Through the payments from these two sources, the workers and their families were entitled to medical attention at the doctors' offices or at home, toward accommodations in the local hospital for such periods as might be necessary, and to the services of the visiting nurses, who provided both nursing care and health instruction.

"The group of the population not participating in this system of group-purchase of medical care were served by the same practitioners and the same hospital, but paid for the services they obtained on an individual fee basis.

"Those eligible to medical care under the group-purchase plan received a far greater volume of medical service than did those who paid for their medical care individually. Families eligible under the group-purchase plan used the local hospital five times as frequently as those in the non-participating group; received four times the number of office treatments; three and a half times the number of home treatments; and the benefits of the services of the visiting nurses, who were scarcely called upon by the non-participating group.

"Among the non-participating group, the costs of medical care to the individual varied enormously, while among those benefiting from the group-purchase system the costs were evenly distributed. Two per cent of the non-participating families paid nearly 40 per cent of the total cost of illness in their entire group, while a small number of families, comprising less than five per cent of the group were forced to bear approximately 68 per cent of the total burden of medical costs for their group.

"Although the services are rendered at low cost, physicians were well compensated. The net incomes of the Roanoke Rapids physicians averaged \$8,409 for the year of the study, compared with net incomes of \$5,400 to \$6,300 for physi-

(Continued on page 1464—adv. xvi)

4 New Concentrated Vitamin Products



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Package. 15 c.c. dropper top protectively colored bottles, in special cartons to shield it from the light.

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Description. This product is Natural Vitamin D, being a highly potent extract of the antirachitic principle of cod liver oil.

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Color. Nearly colorless.

Potency. Ten drops are equal in vitamin D potency to three teaspoons of standard potent cod liver oil.

Dosage. Average prophylactic dose, ten drops daily. Average curative dose, fifteen to thirty drops daily, depending on severity of case.

Package. 5 c.c. and 50 c.c. protectively colored bottles.

Cost. Approximately the same as that current for equivalent vitamin D dosages of plain cod liver oil.

Indications. For the prevention or cure of rickets and spasmophilia, and where ever vitamin D therapy is required, such as tetany and osteomalacia.

Vitamins A and D together

Name. Smaco Vitamins A and D Product No. 525

Description. Smaco Caritol and Smaco Concentrated Vitamin D are combined in this product, providing both vitamins A and D in concentrated form for therapeutic use.

Taste. Palatable and free from objectionable taste.

Color. Red, due to carotene.

Potency. Ten drops are equivalent to one thousand International Units of vitamin A plus the vitamin D potency of three teaspoons of standard potent cod liver oil.

Dosage. Ten drops or more daily, depending upon individual requirements.

Package. 5 c.c. and 50 c.c. protectively colored bottles.

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Indications. Wherever vitamins A and D are required together in palatable form and small dosage.

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Name. "Smaco Cod Liver Oil (with Carotene and Concentrated Vitamin D) Product No. 510

Description. A high grade cod liver oil fortified with vitamin A of vegetable origin (carotene) and natural vitamin D described in the second column.

Taste. Although carotene is not a flavoring agent, nevertheless the addition of carotene noticeably improves the flavor.

Color. Deep red, due to carotene it contains.

Potency. One teaspoon is equivalent in vitamin D potency to three teaspoons of standard potent cod liver oil plus 1,000 International Units of vitamin A per teaspoon in addition to the original vitamin A potency of the oil.

Dosage. One teaspoon daily for average individual needing vitamins A and D.

Package. Four ounce protectively colored bottles packaged in special cartons to shield from light.

Cost. Approximately one half as much as the equivalent amounts of vitamins A and D when purchased as plain cod liver oil.

Indications. Wherever a more palatable, concentrated cod liver oil is indicated (Only one third as much is required as plain cod liver oil).

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(Continued from page 1462—adv. xiv)

cians in cities of similar size in other parts of the United States.

"Medical care in that community was highly regarded by the population served and by physicians in the surrounding territory.

"Favorable personal observations were made by both the field workers who made the survey and the medical and surgical authorities consulted. "The desirable personal relation between physician and patient has been scrupulously and completely sustained," the report states."

THE COUNTY SOCIETY IN PENNSYLVANIA

The leading article in the October issue of the *Pennsylvania Medical Journal* is the President's address before the State Society on October 4, 1932, by Dr. Charles Falkowsky, Jr., who discussed county societies as follows:

"The activities of the *medical profession* can be carried on only through medical *organization*. This provides the only proper contact of the profession with the public. The smaller and more cohesive the medical organization seeking this contact, the quicker and more satisfactory will be the result. The means to

this prompt and efficient end is the County Society unit. The State Society can only correlate results which the County Society alone can obtain.

"The medical unit as exemplified by the County Society should be the first to sense the beginning of these efforts at usurpation of our rewards and recompense, and hold itself in readiness to dictate the procedure and form which they may adopt and follow. To allow the layman to start something and then oppose, criticize, and object to it, when his intentions were of the best, comes with poor grace. He was of course both innocent and ignorant of any usurpation of medical privilege and responsibility because the profession had shown no interest. It naturally follows that we receive no cooperation and they simply carry-on without us, usually to our considerable detriment.

"The Committee on Public Relations of the County Society should be the most active, busy, and useful part of the organization. The members should be carefully selected from among those who are willing to sacrifice time and thought, and give action to this work. They must make every endeavor to keep in-

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formed as to the various welfare, social, and charitable agencies in their communities, whose basis for existence involves medical aid in any form. They must be properly represented at the various meetings by having representatives on the boards of these agencies, or if that be not practical by having meetings at which the mutual problems can be frankly discussed. These organizations always welcome our suggestion and support and are therefore easily controlled.

"When once started the volume of this work will increase so rapidly that it will become necessary to employ some type of full-time, paid executive to manage the details. He or she, I take it, should be preferably a layman of a considerable degree of education, intelligence, and diplomacy, who could, after a survey of conditions, be able to visualize the requirements of both the public and the doctor in his particular area. He could immediately take under consideration and solve the constant vexations, which will occur, to the best interest of all concerned and with a minimum of friction. In some of our larger county units such men are now employed and the results thus far have been most satisfactory."

PATIENTS OR CASES IN WISCONSIN

The November issue of the *Wisconsin Medical Journal* has an editorial discussion on the personal relation of the doctor to his patient, which is a strong argument against impersonal clinics and state medicine:

"It has always been the glory of clinical teaching in America to see a patient not merely as a 'case' but as a personality, a human being, as well. The best clinical teachers in America, and there have been a host of such men, have always stressed this point of view. To mention only a few there have been Flint, Forstheimer, James Jackson, F. C. Shattuck, Billings, Faville, Weir Mitchell, and among living clinicians are Thayer, Barker, Morris and McCrae. No one has expressed the tradition of American medicine better in this regard in recent years than did Francis Peabody just before his untimely death.

"Osler was the embodiment of this idea in theory and in practice, and his influence has been very great.

"It has always been a shock to our sensibilities to observe some of the great clinicians of Europe at work in the wards of their great hospitals, where seemingly the patient was only a 'case.' I remember well going through the wards with Van Noorden and hearing him

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(Continued from page 1465—adv. xvii)

say, 'Send this woman home, we cannot use her any more.' The general attitude seemed cold and scientific with an absence of the human touch we were accustomed to.

"The continental mind is persistent and thorough and will eventually arrive at its goal by pure science if not by intuition and natural feeling.

"It was through the 'Individual psychology' of men like Freud, Jung, and Adler, that the light first began to dawn abroad.

"Now by means of the endocrines an approach is offered which makes the clinician aware that he is dealing not with a simple 'case' but a very complex interacting combination of forces some of them chemical, some of them neurogenic which results in a peculiar physical and mental make-up, the constitution of the individual and his peculiar psyche. In other words the prophet from Vienna comes to America to disclose to us that a patient is a person after all, not simply a 'case.'"

ANNUAL REGISTRATION IN KANSAS

The November issue of the *Journal of the Kansas Medical Society* contains the following editorial on the annual registration of physicians:

"The Kansas Board of Medical Registration and Examination is supported wholly by fees paid by applicants for examination or reciprocity. Funds, therefore, of the board are necessarily limited and only a small sum remains after payment of the expenses of the two meetings.

"Dr. F. J. Engberg, Secretary, Minnesota State Board of Medical Examiners, has recently completed an analysis of laws in regard to the annual registration of physicians in the various states.

"The enactment of an annual registration law with a small fee would be beneficial in many ways:

"The board would have a record of those who were actually licensed to practice in the state.

"A directory could be published and furnish each physician as well as law enforcement agencies. If a physician located in a community reference to the directory would determine if he were licensed to practice his profession.

"The enactment of such a law would not protect the public but the practicing physician as well.

"A fund would be provided for the use of medical board in discovering unlicensed practitioners and enforcing the medical practice act.

"Seventeen states and the Territory of Alaska now require the annual registration of practitioners of the healing art. California was first state to adopt an annual registration effective in 1917; Louisiana in 1918; Connecticut and Idaho in 1919; Iowa in 1924; New York and Pennsylvania in 1926; Nebraska, Oregon and Florida in 1927; Minnesota, Nevada, Wyoming in 1928; Colorado in 1929; North Dakota in 1931; Alaska, Georgia and Texas in 1932.

"Nine states have some form of occupational tax in connection with which an annual registration of physicians is effected. These states: Alabama, California, Delaware, Florida, Georgia, Mississippi, North Carolina, Utah and Virginia. In reality, therefore, twenty-two states have laws requiring physicians to register annually.

"Fees for medical board registration vary from \$1.00 to \$10.00. Occupational taxes range from \$3.00 to \$75.00."

BENEFITS OF THE STATE SOCIETY OF WISCONSIN

Dr. R. H. Jackson, on the President's part of the *Wisconsin Medical Journal* for November, sets forth the accomplishments of the Wisconsin State Society as follows:

"1. Prevented imposition of a wholly unnecessary annual state narcotic tax of \$10

"2. Aided the American Medical Association

(Continued on page 1467—adv. xix)

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(Continued from page 1466—adv. xviii)

to secure reduction of the annual federal narcotic tax from \$3 to \$1.

3. Prevented the licensing of lay assistants as independent x-ray experts and prevented the licensing of numerous unqualified and incompetent to treat the sick.

"4. Secured rulings and interpretations on federal and state income tax laws affecting the profession so as to secure proper and justified savings of thousands of dollars annually. Issues an annual review listing this information for the members.

"5. Promoted the establishment of the Medical Library Service at the Medical School of the University. Commercial service of like nature costs upwards of \$10 annually.

"6. Secured an investigator for the State Board of Health to weed out gross forms of quackery. In most states this is, to our minds, unjustly financed by charging physicians an annual registration fee of from \$1 to \$5.

"7. Defeated a bill proposed by compensation insurance companies designed to license industrial nurses to treat the injured except for narcotics and major surgery. Established Standing Orders for Nurses in Insutry since approved by the State Licensing Board and enforced for protection of the injured.

"8. Prevented legislation which would have cost the profession in excess of \$60,000 annually (twice the State Society budget) for tests now made at the State Laboratory of Hygiene."

EX-PRESIDENTS IN COLORADO

The November issue of *Colorado Medicine* has the following editorial on the proposal for continuing the services of the past-presidents of the State Medical Society:

"In reference to the recently proposed amendment to the constitution of our Society to create a Society of Past-presidents, we are interested to note a custom of the Medical Society of the State of New York. Its past-presidents accept appointments as chairmen or members of committees. They thereby continue to give their services to the profession and public. As their years increase, an active rather than a passive professional interest is maintained. The profession profits by a great deal of wisdom and experience which would otherwise be lost.

"Our own contemplated Society of Past-presidents and its representation in the House of Delegates should contribute the same, or even a greater, benefit to the profession in Colorado"

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Saratoga Hathorn No. 2, mildly purgative, and Saratoga Coesa, mildly laxative, are naturally carbonated saline waters possessing valuable catalytic activity. They have proven beneficial in hyperacidity occurring in cases of acid catarrh of the stomach and atony of the stomach, and in cases of dyspepsia due to mental over-exertion. Because of the sodium chlorid in these waters they are not recommended for patients with nephritis.



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ANNOUNCEMENT

Geo. W. Merck, President of Merck & Co. Inc., recently announced the appointment of Dr. Hans Molitor, of the University of Vienna, to the research staff of the company. Dr. Molitor will assume the direction of research work in pharmacology. In announcing the appointment, Mr. Merck stated:

"The addition of Dr. Hans Molitor, of Vienna, to the staff of Merck & Co. Inc., results from the decision of the management to adopt a policy of intensive research in pure and applied chemistry and allied subjects. To provide adequate facilities for this research work, Merck & Co. Inc., despite the depression, is constructing at Rahway, N. J., at the present time, a research laboratory to cost in excess of \$200,000, which will house a staff of 25 research chemists. Dr. Molitor will take over the supervision of the details of equipping and staffing the laboratory to be devoted to research in pharmacology. See page iv.—*Adv.*

PNEUMONIA

The most recent statistics dealing with pneumonia indicates its successful control in a large number of cases. In 707 cases of pneumonia in which Type I Antipneumococcic Serum was used, the death rate was 18.5% as compared with the untreated cases, in which the death rate was 30% in 553 cases. When serum was used within 72 hours after the onset, the death rate was 10.7% in 177 cases.

Its refinement, as well as its standardization in units, gives the physician adequate information, so that the dosage can be correctly estimated from the results achieved.

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the country. Whole groups of undernourished children show substantial gains in weight after taking this food-drink regularly. During the recent drought in Arkansas, for example, health officers fed Cocomalt to youngsters for 40 days. At the end of that time, gains of from 4 to 16 pounds were noted (depending largely on age). The average gain for the 40-day period was 8½ pounds—more than a pound a week. Children who missed the Cocomalt clinic or attended irregularly *showed no substantial gain*. Cocomalt is a delicious chocolate flavor food-drink that is almost twice as nourishing as plain milk, adding 110 extra calories to every glass. It contains 30 steenbock (300 ADMA) units of vitamin D per ounce—the quantity recommended for one drink. Samples sent to physicians on request. Write to R. B. Davis Co., Hoboken, N. J. See page xiii.—*Adv.*

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Butter Fat56%
Milk Solids not Fat	10.09%
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Total Protein	9.87%
Dextrin and Other Carbo- hydrates	7.36%
Mineral Ash	3.99%
	100.00%

The ash contains:

Sodium Chloride	0.84%
Iron	0.09%
Calcium Oxide	0.52%
Phosphates as P ₂ O ₅	1.41%
Calories per Pound:	1830

See page xii.—*Adv.*

WARNS AGAINST PROMISCU- OUS DOSING WITH VITAMINS

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have been interested in proper appreciation and application of the vitamins, particularly A and D.

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As another result of this research, S.M.A. Corporation was recently able to announce the availability of Primary Vitamin A (Carotene) for therapeutic use at moderate prices.

This is not only a boon to physicians in making possible the prescribing of Vitamin A alone, as well as Carotene for its own virtues, but it will also make possible further research on the properties of Vitamin A. Such an important announcement could not long remain a secret from the press of the country, and about two weeks after the announcement to the medical profession, an interview was printed in which W. O. Frohring, Vice President and Director of Laboratories, was quoted as follows:

"We are offering carotene to the medical profession in three convenient forms,—Crystalline carotene for research purposes; Caritol, which is carotene in bland oil, and cod liver oil with carotene.

"While it is confidently expected that these products will prove to be of immense value to the public, they are not intended for use by the public except under the direction of a physician."—See page xv.—*Adv.*

VICHY CELESTINS

The American Agency of French Vichy, Inc., sole American agents of "Vichy Célestins" water bottled at the Spring at Vichy, France, owned by the French Government. There are other Springs at Vichy also owned by the French Government such as Grande Grille and Hôpital which are imported by these Agents but these are not sent here in as large quantities as the "Vichy Célestins." This Agency also imports the Vichy Salts and Vichy Pastilles which are called Products of Vichy-Etat because they are made from the Salts extracted from the waters of these government-owned Springs. Medical Profession of the United States annually sends many patients for the treatment of diseases of the stomach, liver, etc.—See page v.—*Adv.*

